

# Up From Kitty Hawk

A Chronology of Aerospace Power Since 1903

*A more comprehensive chronology can be found on our Website: [www.afa.org](http://www.afa.org).*

## 1903

**March 23, 1903.** First Wright brothers' airplane patent, based on their 1902 glider, is filed in America.

**Aug. 8, 1903.** The Langley gasoline engine model airplane is successfully launched from a catapult on a houseboat.

**Dec. 8, 1903.** Second and last trial of the Langley airplane, piloted by Charles M. Manly, is wrecked in launching from a houseboat on the Potomac River in Washington, D.C.

**Dec. 17, 1903.** At Kill Devil Hills near Kitty Hawk, N.C., Orville Wright flies for about 12 seconds over a distance of 120 feet, achieving the world's first manned, powered, sustained, and controlled flight in a heavier-than-air machine. The Wright brothers make four flights that day. On the last, Wilbur Wright flies for 59 seconds over a distance of 852 feet. (Three days earlier, Wilbur Wright had attempted the first powered flight, managing to cover 105 feet in 3.5 seconds, but he could not sustain or control the flight and crashed.)

## 1904

**April-May, 1904.** On Huffman Prairie, a 100-acre farm near Dayton, Ohio, the Wrights erect a launch rail and a hangar for a new airplane, Flyer II. It is the world's first airport and site of today's Wright-Patterson Air Force Base.

**May 26, 1904.** First flight of Flyer II on Huffman Prairie. Orville Wright pilots the aircraft a distance of 25 feet at an altitude of eight feet.

**Sept. 20, 1904.** Wilbur Wright, piloting Flyer II, flies history's first controlled circle in one minute and 36 seconds.

## 1905

**Jan. 18, 1905.** The Wright brothers open negotiations with the US government to build an airplane for the Army, but nothing comes of this first meeting.

**Feb. 5, 1905.** T.S. Baldwin takes part in a 10-mile race between his dirigible and an automobile. The dirigible and its pilot win by a three-minute margin.

**June 23, 1905.** The first flight of the Wright Flyer III is made at Huffman Prairie. The Wright brothers' first fully controllable aircraft is able to turn and bank and remain aloft for up to 30 minutes.

**Oct. 5, 1905.** Orville Wright flies 24.2 miles in 38 minutes, three seconds at Dayton, Ohio, establishing a world distance and duration record.

## 1906

**May 22, 1906.** After turning down two previous submissions, the US government issues the Wright brothers the first patent on their flying machine.

**Nov. 12, 1906.** Brazilian Alberto Santos-Dumont sets the first recognized absolute speed record of 25.66 mph in the Santos-Dumont Type 14-bis at Bagatelle, France. However, this speed is slower than speeds posted by the Wright brothers in the United States.

## 1907

**Aug. 1, 1907.** The Aeronautical Division of the US Army Signal Corps, forerunner of US Air Force, is established.

**Dec. 5, 1907.** Wilbur Wright appears before the Board of Ordnance and Fortification and offers the US government an airplane capable of carrying two people, for \$25,000.

**Dec. 23, 1907.** The Army's Chief Signal Officer, Brig. Gen. James Allen, issues the first specification (Signal Corps Specification No. 486) for a military airplane.

## 1908

**May 14, 1908.** The first passenger flight takes place in the Wright airplane at Kitty Hawk in preparation for delivery of a government airplane. Wilbur Wright pilots the machine, with Charles Furnas, an employee, as the first passenger.

**May 19, 1908.** Signal Corps Lt. Thomas E. Selfridge becomes the first soldier to fly a heavier-than-air machine.

**July 4, 1908.** Glenn H. Curtiss wins the *Scientific American* trophy with his *June Bug* biplane by flying for more than a mile over Hammondsport, N.Y. Speed for the trip is 39 mph.



*Lieutenant Selfridge and Orville Wright on the 1908 flight.*

**Aug. 28, 1908.** The Army accepts its first dirigible at Ft. Myer, Va. Built by Thomas Baldwin in Hammondsport, N.Y., at a cost of \$6,750, the dirigible is designed to carry a crew of two and a payload of 450 pounds (which includes 100 pounds of ballast). The airship is designated Signal Corps Dirigible No. 1.

**Sept. 3, 1908.** First test flight of an Army flying machine is made at Ft. Myer, Va., by Orville Wright.

**Sept. 17, 1908.** Lt. Thomas E. Selfridge becomes the first person killed in a powered aircraft accident when a Wright Flyer crashes at Ft. Myer, Va. Orville Wright, at the controls, suffers a broken hip.

## 1909

**April 24, 1909.** Wilbur Wright pilots a Wright biplane at Centocelle, Italy, from which the first aerial motion picture is taken.

**June 3, 1909.** Orville Wright makes the first demonstration flight of the 1909 Military Flyer for the Army at Ft. Myer, Va.

**July 25, 1909.** Louis Bleriot, of France, becomes the first person to fly across the English Channel.

**July 27, 1909.** Orville Wright, with Army Lt. Frank P. Lahm as passenger, flies the 1909 Military Flyer from Ft. Myer, Va., for one hour, 12 minutes, and 40 seconds and covers 40 miles. This first official test flight meets the Army's endurance requirement as stated in Signal Corps Specification No. 486, which is the order for the first military airplane.

**July 30, 1909.** The second test of the Army Wright airplane is completed: a 10-mile cross-country flight over a stipulated course from Ft. Myer, Va., to Alexandria, Va., and back, at a speed of 42.583 mph, for which the Wrights receive a bonus of \$5,000 (10 percent of the base price of \$25,000 for each mile per hour over 40), making the purchase price \$30,000.

**Aug. 2, 1909.** The Army accepts its first airplane, bought from the Wright brothers.

**Aug. 23, 1909.** At the world's first major air meet in Reims, France, Glenn H. Curtiss becomes the first American to claim the recognized absolute speed record as he flies at 43.385 mph in his Reims Racer biplane.

**Aug. 25, 1909.** Land for the first Signal Corps airfield is leased at College Park, Md.

**Oct. 23, 1909.** Army Lt. Benjamin D. Foulois takes his first flying lesson from Wilbur Wright at College Park, Md.

**Oct. 26, 1909.** Lt. Frederick E. Humphreys becomes the first Army pilot to solo in the Wright Military Flyer, US Army Aeroplane No. 1, at College Park, Md. A few minutes later, Lt. Frank P. Lahm becomes the second.

**Nov. 3, 1909.** Lt. George C. Sweet becomes the first Navy officer to fly, as a passenger in the Wright Military Flyer. Army Lt. Frank P. Lahm was the pilot.

## 1910

**Jan. 19, 1910.** Army Signal Corps Lt. Paul Beck, flying as a passenger with Louis Paulhan in a Farman biplane, drops three two-pound sandbags in an effort to hit a target at the Los Angeles Flying Meet. This is the first bombing experiment by an Army officer.



Max Morehouse and pilot Phillip Parmalee in 1910.

**March 2, 1910.** Lt. Benjamin D. Foulois makes his first solo flight in Army Aeroplane No. 1 (the Wright 1909 Military Flyer) at Ft. Sam Houston, Tex.

**March 19, 1910.** At Montgomery, Ala., Orville Wright opens the first Wright Flying School, on a site that will later become Maxwell Air Force Base.

**May 25, 1910.** In Dayton, Ohio, Wilbur and Orville Wright fly together for the first time.

**Aug. 20, 1910.** Army Lt. Jacob Fickel fires a .30-caliber Springfield rifle at the ground while flying as a passenger in a Curtiss biplane over Sheepshead Bay Track near New York City. This is the first time a military firearm has been discharged from an airplane.

**Sept. 2, 1910.** Blanche Scott becomes the first American woman to solo, flying a Curtiss pusher at the Curtiss company field in Hammondsport, N.Y. She is not granted a pilot's license, however.

**Oct. 11, 1910.** Former President Theodore Roosevelt becomes the first Chief Executive to fly. He goes aloft as a passenger in a Wright biplane over St. Louis.

**Nov. 7, 1910.** Phillip O. Parmalee, in a Wright B-10 aircraft, performs the world's first air cargo mission, flying a bolt of silk from Dayton to Columbus, Ohio, on contract for the Morehouse-Martens Co.

## 1911

**Jan. 18, 1911.** Civilian Eugene Ely, flying a Curtiss pusher, makes the first landing on a ship. He touches down on a 119-foot-long wooden platform on the stern of the cruiser USS *Pennsylvania*, riding at anchor in San Francisco Bay. He then takes off and flies to Selfridge Field in San Francisco.

**Feb. 1, 1911.** The first licensed aircraft manufacturer in the US, the Burgess and Curtis Co. (no relation to the company founded by Glenn Curtiss), of Marblehead, Mass., receives authorization from the Wright Co.

**March 31, 1911.** Congress makes the first appropriation for Army aeronautics, \$125,000 for Fiscal Year 1912, with \$25,000 to be made available immediately. Chief Signal Officer James Allen quickly orders five new aircraft at a cost of approximately \$5,000 each.

**April 11, 1911.** The Army's first permanent flying school is established at College Park, Md.

**May 4, 1911.** After a number of crashes and reconstructions leave Signal Corps Aeroplane No. 1 (the Wright 1909 Military Flyer) unfit to fly, the War Department approves restoration to its original condition and transfer to the Smithsonian Institution for permanent display.

**May 8, 1911.** The first Navy airplane, the amphibian A-1, is ordered from Glenn Curtiss.

**Sept. 17-Dec. 10, 1911.** Calbraith Perry Rodgers, in the Wright EX biplane *Vin Fiz*, makes the first trans-continental flight, from Sheepshead Bay, N.Y., to Long Beach, Calif. He makes 76 stops and crashes 20 times.

## 1912

**Feb. 22, 1912.** Jules Vedrines pushes the recognized absolute speed record past the 100 mph barrier, as he hits 100.22 mph in a Deperdussin racer at Pau, France.

**Feb. 23, 1912.** First official recognition of the rating “Military Aviator” appears in War Department Bulletin No. 2.

**May 30, 1912.** Wilbur Wright dies of typhoid fever at his home in Dayton, Ohio. He was 45.

**June 5, 1912.** Lt. Col. C.B. Winder of the Ohio National Guard becomes the first National Guard pilot.

**June 7, 1912.** At College Park, Md., Army Capt. Charles deForest Chandler becomes the first aviator to fire a machine gun from the air.

**June 14, 1912.** Cpl. Vernon Burge becomes the Army’s first enlisted pilot.

**July 5, 1912.** Capt. Charles deForest Chandler and Army Lts. T.D. Milling and Henry H. “Hap” Arnold become the first fliers to qualify as “Military Aviators.”

**Nov. 5, 1912.** First artillery adjustments directed from an airplane begin at Ft. Riley, Kan., by Army Lts. H.H. “Hap” Arnold, pilot, and Follett Bradley, observer.

**Dec. 8, 1912.** The Army’s first permanent flying installation is established at North Island, Calif.

## 1913

**Feb. 11, 1913.** The first bill for a separate aviation corps, H.R. 28728, is introduced in Congress by Rep. James Hay of West Virginia. It fails to pass.

**March 2, 1913.** First flight pay is authorized: 35 percent over base pay for officers detailed on aviation duty.

**March 5, 1913.** Field Order No. 1, Hq. First Aero Squadron, in the field near Texas City, Tex., states: “The First Aero Squadron is hereby organized.”

**May 10, 1913.** US aerial bombing is inaugurated when Didier Masson begins a series of bombing raids for Mexican Gen. Alvarado Obregon against Mexican federal gunboats in Guaymas Bay, Mexico.

**May 13, 1913.** The first flight of the world’s first four-engine airplane, *The Russian Knight*, affectionately called “Le Grand,” takes place in Russia. The aircraft is designed by Igor I. Sikorsky.

**May 30, 1913.** The Massachusetts Institute of Technology begins teaching aerodynamics.

**Nov. 30, 1913.** In late November or early December, the first known aerial combat takes place over Naco, Mexico, between Phil Rader, flying for Gen. Victoriano Huerta, and Dean Ivan Lamb, with Venustiano Carranza.

## 1914

**Jan. 1, 1914.** America’s first regularly scheduled airline starts operation across Tampa Bay, Fla.

**Jan. 20, 1914.** The Navy’s aviation unit from Annapolis, Md., arrives at Pensacola, Fla., to set up a flying school.

**April 25, 1914.** Navy AB-3 flying boat from the battleship USS *Mississippi* makes the first US operational air sortie against another country when it searches for sea mines during the Veracruz incident.

**July 18, 1914.** The Aviation Section of the Army Signal Corps is created by Congress. Sixty officers and students and 260 enlisted men are authorized.

**Dec. 1-16, 1914.** Two-way air-to-ground radio communication is demonstrated in a Burgess-Wright biplane by Army Signal Corps Lts. H.A. Dargue, pilot, and J.O. Mauborgne over Manila, Philippines.

## 1915

**March 3, 1915.** Congress approves the act establishing the National Advisory Committee for Aeronautics (later, the National Aeronautics and Space Administration).

**April 1, 1915.** French Lt. Roland Garros shoots down a German Albatros two-seater with a Hotchkiss machine gun fixed on the nose of his Morane-Saulnier Type L monoplane.

**Nov. 5, 1915.** Lt. Cmdr. Henry C. Mustin, in an AB-2 flying boat, makes the first airplane catapult launching from a vessel, USS *North Carolina*, in Pensacola Bay, Fla.

## 1916

**March 15, 1916.** The First Aero Squadron begins operations with Gen. John J. Pershing in a punitive expedition against Mexico and Pancho Villa.

**March 21, 1916.** The French government authorizes the formation of the Escadrille Americaine. The unit, made up of American volunteer pilots, is later renamed the Lafayette Escadrille.



*American volunteer pilots in France in World War I.*

**June 18, 1916.** H. Clyde Balsey of the Lafayette Escadrille is shot down near Verdun, France, the first American-born aviator shot down in World War I.

**Sept. 2, 1916.** Airplane-to-airplane radio is demonstrated at North Island, Calif., when radiotelegraph messages are sent and received a distance of about two miles between the airplanes of Lt. W.A. Robertson and A.D. Smith and Lt. H.A. Dargue and Capt. C.C. Culver.

## 1917

**Feb. 28, 1917.** For the first time in the US, the human voice is transmitted by radiotelephone from an airplane to the ground at San Diego.

**April 30, 1917.** Maj. William “Billy” Mitchell becomes the first American Army officer to fly over the German lines.

**May 26, 1917.** Maj. T.F. Dodd, Army Signal Corps, is appointed aviation officer on the staff of commander in chief, American Expeditionary Forces (AEF), the beginning of an overseas organization of the Aviation Section.

**June 5, 1917.** The first US military air unit sent to Europe in World War I, the 1st Aeronautic Detachment, arrives in Pauillac, France.

**June 26, 1917.** In a concentration of German airpower, the first *Jagdgeschwader* (fighter wing) is formed.

**Aug. 13, 1917.** The First Aero Squadron sails for Europe under command of Maj. Ralph Royce, the first squadron to report for flying duty in the AEF.

**Oct. 18, 1917.** McCook Field in Dayton, Ohio, is established. This field will be the center of military aviation research and development in the United States.

**Nov. 27, 1917.** Brig. Gen. Benjamin D. Foulois takes over as chief of the Air Service for the American Expeditionary Forces in Europe.

**Nov. 30, 1917.** The Vickers Vimy heavy bomber, the first true strategic bomber, makes its first flight at Joyce Green, England.

## 1918

**Feb. 5, 1918.** While flying as a substitute gunner with a French squadron, Lt. Stephen W. Thompson becomes the first American to record an aerial victory while in a US uniform.

**Feb. 18, 1918.** The first American fighter unit proper, the 95th Aero Squadron, arrives in France.

**Feb. 28, 1918.** Regulation of the airways begins with an order by President Woodrow Wilson requiring licenses for civilian pilots or owners.

**March 11, 1918.** Lt. Paul Baer becomes the first AEF Air Service member awarded the Distinguished Service Cross.

**March 12, 1918.** Capt. Phelps Collins of Alpena, Mich., becomes the first member of the Air Service to lose his life on a combat mission. Collins, a pilot with the 103rd Aero Squadron, was on a combat patrol near Paris, when, for some unknown reason, his Spad XIII crashed.

**March 19, 1918.** The 94th Aero Squadron makes the first US operational flights across the front lines in France.

**April 1, 1918.** Britain takes the historic step of creating the world's first formally recognized, independent air arm, with its own governmental ministry and its own uniform and rank structure. The Royal Air Force is formed as an amalgamation of the Royal Flying Corps and the Royal Naval Air Service.

**April 14, 1918.** Army Lts. Alan Winslow and Douglas Campbell, flying Nieuport 28s of the 94th Aero Squadron, down two German fighters in a 10-minute battle. Winslow is the first pilot in the American sector of the front to down an airplane; Campbell is the first US-trained pilot to score a victory.

**April 21, 1918.** *Rittmeister* Manfred von Richthofen, the "Red Baron," is shot down in action over France. Capt. A. Roy Brown, a Canadian, is credited with the victory. The German ace, killed in the battle, had 80 aerial victories.

**May 7, 1918.** Flying a Nieuport 28, Army 1st Lt. Edward V. Rickenbacker, who would go on to be the leading American ace of World War I, records his first solo victory, downing a German Pfalz. Flying with the 94th Aero Squadron, he had recorded a half victory, his first, on April 29.

**May 24, 1918.** US Army Air Service is organized.

**June 12, 1918.** The 96th Aero Squadron bombs the Dommary-Baroncourt railway yards in France in the first daylight bombing raid carried out by the AEF.



*Eddie Rickenbacker with his Spad XIII in France.*

**Sept. 7, 1918.** The first US demonstration of troop transport by air occurs when several airplanes carry 18 enlisted men from Chanute Field, Ill., to Champaign, Ill.

**Sept. 12, 1918.** Army Lt. Frank Luke shoots down his first enemy balloon. By the time he is killed 17 days later, he has shot down 16 balloons and airplanes.

**Sept. 12-16, 1918.** The largest air fleet ever committed to battle establishes the Air Service as a fighting command in the St. Mihiel offensive in France.

**Sept. 24, 1918.** Lt. (j.g.) David S. Ingalls becomes the Navy's first ace.

**Sept. 25, 1918.** Army Capt. Edward V. Rickenbacker of the 94th Aero Squadron attacks seven enemy aircraft, shooting down two of them near Billy, France. For this, he later receives the first Medal of Honor (Sept. 25, 1918).

**Oct. 2, 1918.** The first test flight of the Kettering Aerial Torpedo is carried out at Dayton, Ohio. Nicknamed "Bug," the Aerial Torpedo is the world's first guided missile and is a precursor to modern day cruise missiles.

**Oct. 30, 1918.** Flying a Spad VII, Army Capt. Edward V. Rickenbacker, "America's Ace of Aces," records his last two aerial victories. Rickenbacker finishes the war with 26 victories (24.33 victories using later counting rules).

**Nov. 7, 1918.** Robert H. Goddard demonstrates tube-launched solid-propellant rockets at Aberdeen Proving Ground, Md.

**Nov. 11, 1918.** World War I comes to an end at 11 a.m. At that time, the US had 45 squadrons consisting of 767 pilots, 481 observers, and 23 aerial gunners, on the front in France.

**Dec. 4-22, 1918.** Under the command of Maj. Albert D. Smith, four JN-4s fly from San Diego to Jacksonville, Fla., to complete the Army's first transcontinental flight.

## 1919

**April 28, 1919.** First successful test jump with a free-fall parachute is made at McCook Field, Ohio.

**May 16-27, 1919.** Lt. Cmdr. Albert C. "Putty" Read and a crew of five fly from Trepassey Bay, Newfoundland, to Lisbon, Portugal, via the Azores, in the Curtiss NC-4 flying boat, spending 53 hours, 58 minutes aloft. This is the first crossing of the Atlantic Ocean by air.

**June 14-15, 1919.** Capt. John Alcock and Lt. Arthur

Whitten Brown of the United Kingdom make the first nonstop flight across the Atlantic in 16 hours, 12 minutes.  
**Sept. 1, 1919.** Dive bombing is demonstrated at Aberdeen Proving Ground, Md.  
**Oct. 30, 1919.** The reversible-pitch propeller is tested for the first time at McCook Field near Dayton, Ohio.

## 1920

**Feb. 25, 1920.** Establishment of an Air Service School is authorized at Langley Field, Va.  
**Feb. 27, 1920.** Army Maj. R.W. “Shorty” Schroeder sets a world altitude record of 33,114 feet in the Packard-LePere LUSAC-11 biplane over McCook Field, Ohio.  
**June 4, 1920.** The Army Reorganization Bill is approved, changing the title from Director to Chief of Air Service and endowing the Army Air Service with 1,514 officers and 16,000 enlisted men.  
**June 5, 1920.** A provision in the Fiscal Year 1921 appropriations bill restricts the Army Air Service to operating from land bases.

## 1921

**Feb. 22, 1921.** American transcontinental airmail service begins. The route between San Francisco and Mineola, N.Y., is flown in 14 segments.  
**June 8, 1921.** The first flight of an Army Air Service pressurized cabin airplane occurs.  
**July 13-21, 1921.** In a series of tests off the mouth of Chesapeake Bay, Army crews from the First Provisional Air Brigade at Langley Field, Va., flying Martin MB-2 bombers, sink three ships, including the captured German battleship *Ostfriesland*, demonstrating the vulnerability of naval craft to aerial attack.  
**Aug. 3, 1921.** Lt. John A. Macready, flying a Curtiss JN-6 “Jenny” fitted with a 32-gallon hopper tank filled with insecticide dust, performs the world’s first successful aerial crop dusting.  
**Sept. 26, 1921.** Sadi Lecointe pushes the recognized absolute speed record past 200 mph, as he hits 205.223 mph in the Nieuport-Delage Sesquiplane.  
**Nov. 12, 1921.** Wesley May, with a five-gallon can of gasoline strapped to his back, climbs from one aircraft to another in the first “air-to-air” refueling.

## 1922

**March 20, 1922.** USS *Langley* (CV-1), the Navy’s first aircraft carrier, is commissioned in Norfolk, Va.  
**Sept. 4, 1922.** AAS Lt. James H. “Jimmy” Doolittle, flying a deHavilland DH-4B, takes off from Pablo Beach, Fla., and lands at Rockwell Field, Calif., 21 hours and 20 minutes later, marking the first flight across the US in a single day. Doolittle makes one refueling stop.  
**Oct. 17, 1922.** The first aircraft carrier takeoff in US Navy history is made by Navy Lt. V.C. Griffin in a Vought VE-7SF from USS *Langley*, at anchor in the York River in Virginia.  
**Oct. 18, 1922.** Army Brig. Gen. William “Billy” Mitchell becomes the first US military pilot to hold the recog-

nized absolute speed record, as he sets a mark of 222.97 mph in the Curtiss R-6 at Selfridge Field, Mich.  
**Oct. 20, 1922.** Army Lt. Harold R. Harris becomes the first American pilot to save himself by use of a parachute, bailing out over McCook Field, Ohio.  
**Dec. 18, 1922.** Col. Thurman H. Bane makes the first flight of the Army Air Service’s first rotorcraft at McCook Field, Ohio. Bane reaches an altitude of six feet, covers nearly 300 feet, and hovers for one minute and 42 seconds.

## 1923

**May 2-3, 1923.** Army Lts. Oakley G. Kelly and John A. Macready complete the first nonstop transcontinental flight. The trip from Roosevelt Field, N.Y., to Rockwell Field, Calif., takes 26 hours, 50 minutes, and 38 seconds.  
**Sept. 18, 1923.** The first midair hookup of an airplane to



Lieutenants Macready and Kelly with a Fokker T-2.

an airship takes place over Langley Field, Va., as a pilot flying a Sperry M-1 Messenger, with its top-wing mounted trapeze, hooks on to a rig suspended below the Goodyear D-3 airship and shuts the engine down.  
**Sept. 28, 1923.** At Cowes, on the Isle of Wight, off England’s southern coast, Navy Lt. David Rittenhouse claims the Schneider Cup for the United States for the first time.

## 1924

**March 4, 1924.** The Army Air Service takes on a new mission: aerial icebreaking. Two Martin bombers and two DH-4s bomb the frozen Platte River at North Bend, Neb., for six hours before the ice clears.  
**April 6-Sept. 28, 1924.** The Army Air Service completes the first circumnavigation of the globe. Four crews in Douglas World Cruisers begin the voyage in Seattle, but only two aircraft and crews (*Chicago*, with pilot Lt. Lowell Smith and Lt. Leslie Arnold aboard; and *New Orleans*, with pilot Lt. Erik Nelson and Lt. Jack Harding) complete the 175-day trip.  
**June 23, 1924.** Army Lt. Russell L. Maughan makes the first dawn to dusk flight across the US. Taking off at first light in a Curtiss PW 8 from Mitchel Field, N.Y., Maughan races the sun across the continent and, after five refueling stops, lands in San Francisco.

## 1925

**Feb. 2, 1925.** President Calvin Coolidge signs the Kelly Act, the first major legislative step toward the creation of a US airline industry.

**July 15, 1925.** The A. Hamilton Rice Expedition, the first group of explorers to use an airplane, returns to the US. The expedition, which used a Curtiss Seagull floatplane, discovered the headwaters of the Amazon River.

**Dec. 17, 1925.** Airpower pioneer Billy Mitchell is found guilty of violating the 96th Article of War (“conduct of a nature to bring discredit on the military service”) and is sentenced to a five-year suspension of rank, pay, and command. Already demoted from brigadier general, Colonel Mitchell decides instead to resign from the Army.

## 1926

**March 16, 1926.** Robert H. Goddard launches the world’s first liquid-fueled rocket at Auburn, Mass.

**May 20, 1926.** President Calvin Coolidge signs the Air Commerce Act, the cornerstone of the federal government’s regulation of civil aviation. The act charges the secretary of commerce with fostering air commerce, licensing pilots, issuing and enforcing air traffic rules, certificating aircraft, establishing airways, and operating and maintaining aids to navigation.

**July 2, 1926.** US Army Air Service becomes US Army Air Corps as the Air Corps Act of 1926 goes into effect.

**July 2, 1926.** Congress establishes the Distinguished Flying Cross (made retroactive to April 6, 1917).

**Dec. 21, 1926-May 2, 1927.** Five Air Corps crews, led by Capt. Ira C. Eaker and Lt. Muir S. Fairchild, make a 22,000-mile goodwill tour of 25 Central and South American countries in Loening OA-1A amphibians.

## 1927

**May 20-21, 1927.** The first solo nonstop trans-Atlantic flight is completed by Charles A. Lindbergh in *Spirit of St. Louis*: New York to Paris in 33 hours, 32 minutes.



**Charles Lindbergh in Spirit of St. Louis.**

**May 25, 1927.** AAC Lt. James H. “Jimmy” Doolittle flies the first successful outside loop.

**June 28-29, 1927.** AAC Lts. Albert Hegenberger (navigator) and Lester Maitland (pilot) make the first flight from the US mainland to Hawaii.

**Oct. 12, 1927.** Wright Field in Dayton, Ohio, is formally dedicated as the Army Air Corps’ new test center.

## 1928

**Feb. 15, 1928.** President Calvin Coolidge signs a bill authorizing acceptance of a new site near San Antonio to become the Army Air Corps training center. This center is now Randolph Air Force Base.

**April 15-21, 1928.** Brit George Hubert Wilkins and American Carl B. Eielson fly from Point Barrow, Alaska, across the Arctic Ocean to Spitsbergen, Norway—first west-to-east trip over the top of the world.

**May 12, 1928.** Lt. Julian S. Dexter of the Army Air Corps Reserve completes a 3,000-square-mile aerial mapping assignment over the Florida Everglades. The project takes 65 hours of flying, spread over two months.

**Nov. 11, 1928.** In a Lockheed Vega, George Hubert Wilkins, who was knighted for his previous feat on April 15-21, 1928, and Carl B. Eielson make the first flight over Antarctica.



**Question Mark during aerial refueling.**

## 1929

**Jan. 1-7, 1929.** *Question Mark*, a Fokker C-2 commanded by AAC Maj. Carl A. “Tooney” Spaatz, sets an endurance record for a refueled aircraft of 150 hours, 40 minutes, 14 seconds. The crew includes AAC Capt. Ira C. Eaker, Lts. Elwood R. Quesada and Harry A. Halverson, and Sgt. Roy W. Hooe.

**Sept. 24, 1929.** AAC Lt. Jimmy Doolittle makes the first blind, all-instrument flight at Mitchel Field, N.Y., in a completely covered cockpit (accompanied by check pilot).

**Sept. 30, 1929.** At Frankfurt, Germany, Fritz von Opel travels just over a mile in the world’s first flight of a rocket-powered airplane. The Rak-1 tops 85 mph but crashes.

**Nov. 23, 1929.** Charles A. Lindbergh arranges a grant of \$50,000 to support Goddard’s work with rockets.

**Nov. 29, 1929.** Cmdr. Richard E. Byrd, Bernt Balchen, Army Capt. Ashley McKinley, and Harold June make the first flight over the South Pole.

## 1930

**April 12, 1930.** Led by Capt. Hugh Elmendorf, 19 pilots of the 95th Pursuit Squadron set an unofficial world record for altitude formation flying over Mather Field, Calif. The P-12 pilots reach 30,000 feet.

**May 3, 1930.** Laura Ingalls performs 344 consecutive loops. Shortly afterward, she tries again and does 980. In another flight during 1930, she does 714 barrel rolls, setting a pair of records that few people have cared to challenge.

**May 15, 1930.** Ellen Church becomes the world's first airline stewardess as she serves sandwiches on a flight between San Francisco and Cheyenne, Wyo.

**June 20, 1930.** Randolph Field, Tex., the "West Point of the Air," is dedicated.

**Oct. 25, 1930.** Transcontinental commercial air service between New York and Los Angeles begins.

## 1931

**May 9, 1931.** The A-2 leather flight jacket is approved for production.

**July 31, 1931.** Air Corps Tactical School begins moving from Langley Field in Virginia to Maxwell Field in Alabama.

**Sept. 26, 1931.** The keel of USS *Ranger*, the first aircraft carrier designed and built as such, is laid down at Newport News, Va.

**Sept. 29, 1931.** Royal Air Force Flt. Lt. George Stainforth pushes the recognized absolute speed record past 400 mph as he hits 407.001 mph in the Supermarine S.6b at Lee-on-Solent, England.

**Oct. 3-5, 1931.** Americans Clyde "Upside Down" Pangborn and Hugh Herndon Jr. make the first non-stop trans-Pacific flight from Japan to America, in a Bellanca monoplane. The trip takes 41 hours, 13 minutes.

**Dec. 29, 1931.** The Grumman XFF-1 prototype makes its first flight at Valley Stream, N.Y. The FF-1 is the US Navy's first aircraft with an air-cooled radial engine, enclosed cockpits, and fully retractable landing gear.

## 1932

**March 20, 1932.** Company pilot Les Tower makes the first flight of the Boeing XP-26 at Boeing Field in Seattle. The P 26, nicknamed "Peashooter," is the first monoplane fighter produced for the Army Air Corps, the first all metal fighter, and the last AAC fighter with an open cockpit.

**Aug. 25, 1932.** Amelia Earhart becomes the first woman to complete a nonstop transcontinental flight, Los Angeles to New York City.

**Nov. 19, 1932.** National monument to Wilbur and Orville Wright is dedicated at Kitty Hawk, N.C.

## 1933

**July 15-22, 1933.** Famed aviator Wiley Post, flying the Lockheed Vega *Winnie Mae*, becomes the first person to fly around the world solo. The flight takes seven days, 18 hours, 49 minutes, 30 seconds at an average speed of 134.5 mph.

**Dec. 31, 1933.** The prototype Soviet Polikarpov I-16 Mosca is flown for the first time. When the type enters service in 1934, it is the first monoplane fighter to have fully retractable landing gear.

## 1934

**May 1, 1934.** Navy Lt. Frank Akers makes a blind landing in a Berliner-Joyce OJ-2 at College Park, Md., in a demonstration of a system intended for aircraft carrier use.

**May 19, 1934.** The first flight of the Ant-20 *Maxim Gorki*, at this time the world's largest aircraft, is made in the Soviet Union. The aircraft was designed by Andrei Tupolev.

**June 18, 1934.** Boeing begins company-funded design work on the Model 299, which will become the B-17.

**July 19, 1934.** Under the command of Lt. Col. H.H. "Hap" Arnold, 10 crews flying Martin B-10s leave Bolling Field, D.C., to prove the feasibility of sending an aerial force to Alaska in an emergency and to provide training for personnel flying across isolated and uninhabited areas. The crews arrive in Fairbanks on July 24.

## 1935

**March 1, 1935.** General Headquarters (GHQ) Air Force is created at Langley Field, Va. It is a compromise for those seeking a completely independent Air Force and the War Department's General Staff, which wants to retain control.

**March 9, 1935.** *Reichsmarschall* Hermann Goering announces the existence of the Luftwaffe in an interview with London *Daily Mail* correspondent Ward Price.

**April 1, 1935.** First flight of the North American NA-16, the prototype of the AT-6 Texan and BC-1 trainer, at Dundalk, Md.

**July 28, 1935.** First flight of the Boeing Model 299, the prototype of the B-17 bomber, at Seattle. The airplane was given the nickname Flying Fortress.

**Aug. 15, 1935.** Famed pilot Wiley Post and humorist Will Rogers are killed in a crash near Point Barrow, Alaska.

**September 1935.** The Messerschmitt Bf-109a fighter prototype makes its first flight at Augsburg, Germany.

**Nov. 6, 1935.** The Hawker F.36/34, the prototype of the Hurricane, makes its first flight. It is the first Royal Air Force monoplane fighter and the first to exceed 300 mph. During the Battle of Britain in 1940, Hurricane pilots would carry the brunt of the fighting.

**Nov. 11, 1935.** Capts. Albert W. Stevens and Orvil A. Anderson soar to 72,395 feet enclosed in the gondola the Explorer II, surpassing all previous altitude records.

**Nov. 22, 1935.** First trans-Pacific airmail flight takes



place from San Francisco to Honolulu, Midway Island, Wake Island, Guam, and Manila, the Philippines.

**Dec. 17, 1935.** First flight of the Douglas Sleeper Transport, the first of 10,654 DC-3s and derivatives, takes place at Clover Field, Calif. The US military will use the military version, the C-47, in three wars. A number of civilian and foreign “Gooney Birds” were still in use in the late 1990s.

## 1936

**Feb. 19, 1936.** Airpower advocate Billy Mitchell dies in New York City at the age of 57.

**March 5, 1936.** First flight of the Supermarine Type 300 takes place. The brainchild of designer R.J. Mitchell, this prototype is the first of 18,298 Merlin-powered Spitfires of all marks to be built by 1945.

**June 15, 1936.** The Vickers Wellington medium bomber prototype makes its first flight at Brooklands, England.

**Sept. 4, 1936.** Louise Thaden and Blanche Noyes become the first women to win the Bendix Trophy transcontinental race from New York to Los Angeles.

**Dec. 21, 1936.** The prototype of Junkers Ju-88 V1 medium bomber makes its first flight at Dessau, Germany.

## 1937

**April 12, 1937.** Frank Whittle bench-tests the first practical jet engine in laboratories in England.

**May 21, 1937.** Amelia Earhart and Fred Noonan leave from San Francisco in a Lockheed Electra on a round-the-world flight that ends on July 2, 1937, when they disappear in the Pacific.

**July 20, 1937.** First shoulder sleeve insignia authorized for an independent American air unit—for GHQ Air Force.

**Aug. 23, 1937.** The first completely automatic landing of an aircraft occurs at Dayton, Ohio.

**Sept. 2, 1937.** The Grumman XF4F-2 monoplane fighter makes its first flight at Bethpage, N.Y. Officially nicknamed Wildcat in 1941, the F4F series would become the US Navy’s most important fighter in the first half of World War II.

**Oct. 15, 1937.** The Boeing XB-15 makes its first flight at Boeing Field in Seattle.

## 1938

**Feb. 17, 1938.** Six Boeing B-17 Flying Fortresses, under the command of AAC Lt. Col. Robert Olds, leave Miami on a goodwill flight to Buenos Aires, Argentina.

**April 6, 1938.** First flight of the Bell XP-39 Airacobra at Wright Field, Ohio.

**April 22, 1938.** World War I ace Edward V. Rickenbacker buys a majority stake in Eastern Air Lines.

**July 17-18, 1938.** Ostensibly aiming for California, Douglas “Wrong-Way” Corrigan, flying a Curtiss Robin, lands in Dublin, Ireland, after a nonstop 28-hour flight from Floyd Bennett Field in N.Y.

**Aug. 22, 1938.** The Civil Aeronautics Act goes into effect. The Civil Aeronautics Authority will now coordinate all nonmilitary aviation.

**Sept. 29, 1938.** Brig. Gen. H.H. “Hap” Arnold is named Chief of Army Air Corps, succeeding Maj. Gen. Oscar Westover, killed in an airplane crash.

**Oct. 14, 1938.** First flight of the Curtiss XP-40 takes place at Buffalo, N.Y. Almost 14,000 P-40s will be built before production ends in 1944.

**Oct. 26, 1938.** First flight of the Douglas Model 7B, the prototype of what would become the A-20 Havoc, takes place at El Segundo, Calif.

**Dec. 12, 1938.** At the Nakajima factory near Ota, the Ki-43 *Hayabusa* (Peregrine Falcon) fighter rolls out. It flies for the first time a few weeks later. The Ki-43 was the Japanese Army’s workhorse fighter.

**Dec. 31, 1938.** The Boeing Model 307 Stratoliner, the first passenger airplane to have a pressurized cabin, makes its first flight.

## 1939

**Jan. 12, 1939.** President Franklin D. Roosevelt delivers a special message to Congress calling for strengthening the Army Air Corps. Congress then authorizes \$300 million for 5,500 new airplanes.

**Jan. 27, 1939.** First flight of the Lockheed XP-38 takes place at March Field, Calif.

**Feb. 10, 1939.** First flight of the North American NA-40, the prototype of the B-25 Mitchell medium bomber, takes place at Inglewood, Calif.

**April 1, 1939.** The prototype for the Mitsubishi A6M1 *Reisen*, or Zero Fighter (Allied code name “Zeke”) makes its first flight at Kagamigahara, Japan.

**April 3, 1939.** Roosevelt signs the National Defense Act of 1940, which authorizes a \$300 million budget and 6,000 airplanes for the Army Air Corps and increases personnel to 3,203 officers and 45,000 enlisted troops.

**May 20, 1939.** Regularly scheduled trans-Atlantic passenger and airmail service begins.

**June 20, 1939.** The German Heinkel He-176, the first aircraft to have a throttle-controlled liquid-fuel rocket engine, makes its first flight at Peenemunde, Germany.

**Aug. 27, 1939.** The first jet-powered aircraft, the Heinkel He-178, makes its first flight.

**Sept. 1, 1939.** At 4:34 a.m., German Lt. Bruno Dille leads three Junkers Ju-87 Stuka dive bombers in an attack against the Dirschau Bridge, beginning the Ger-



The XP-38 in 1939.

man invasion of Poland, the first act of World War II.

**Sept. 2, 1939.** “Nothing Will Stop the Air Corps Now,” the new official Army Air Corps song, is performed in public for the first time at Cleveland Air Races.

**Dec. 29, 1939.** The prototype Consolidated XB-24 Liberator makes a 17-minute first flight. More than 18,100 B-24s will be built in the next 5.5 years, the largest military production run in US history.

**Dec. 30, 1939.** The Ilyushin Bsh-2, the prototype of the Il-2 *Shturmovik* (Armed Attacker), makes its first flight. Total production will top 36,000 aircraft, making it the most produced aircraft of all time.

## 1940

**Feb. 21, 1940.** Henry A.H. Boot and John T. Randall, working at the University of Birmingham, England, create the first practical magnetron, vital in the development of airborne radar.

**May 16, 1940.** President Franklin D. Roosevelt calls for 50,000 military airplanes a year.

**July 10, 1940.** The Luftwaffe attacks British shipping in the English Channel and docks in South Wales. These actions are the first in the Battle of Britain.

**Aug. 13-Oct. 5, 1940.** Against overwhelming odds, Royal Air Force pilots fend off the Luftwaffe during the Battle of Britain and ward off German invasion of the British Isles.

**Sept. 17, 1940.** Adolf Hitler announces that Operation Sea Lion, the German invasion of Great Britain, “has been postponed indefinitely.” This effectively marks the end of the Battle of Britain.

**Oct. 8, 1940.** The Royal Air Force announces formation of the first Eagle Squadron, a Fighter Command unit to consist of volunteer pilots from the US.

**Oct. 26, 1940.** First flight of the North American NA-73, the prototype for the P-51 Mustang, takes place at Inglewood, Calif.

**Nov. 25, 1940.** First flight of the Martin B-26 Marauder medium bomber (there was no prototype) takes place at the company’s Middle River, Md., plant.

**Nov. 25, 1940.** The prototype for the deHavilland DH-98 Mosquito, developed in just 11 months, flies for the first time at Hatfield, England.

## 1941

**January 1941.** War Department announces establishment of the 99th Pursuit Squadron and the Tuskegee training program for black pilots at Tuskegee, Ala.

**Jan. 9, 1941.** The Avro Lancaster heavy bomber prototype makes its first flight at Woodford, England.

**March 22, 1941.** The first black flying unit, the 99th Pursuit Squadron, is activated. It becomes one of three squadrons of the 332nd Fighter Group—known as the Tuskegee Airmen.

**April 11, 1941.** The Army Air Corps invites Consolidated and Boeing to submit design studies for a bomber capable of achieving 450 mph at 25,000 feet, a range of 12,000 miles at 275 mph, and a payload of 4,000 pounds of bombs at maximum range. This study results in the Convair B-36.



*Pilot Officer William Dunn in an RAF Spitfire.*

**May 6, 1941.** First flight of the Republic XP-47B Thunderbolt takes place at Farmingdale, N.Y. The P-47, the heaviest single-engine fighter ever built in the US, will see action in every theater in World War II.

**June 20, 1941.** The Army Air Forces, with Lt. Gen. H.H. “Hap” Arnold as Chief, is established.

**July 8, 1941.** The RAF makes a daylight attack on Wilhelmshaven, Germany, using Boeing Fortress Is. This is the first operational use of the B-17 Flying Fortress.

**Aug. 27, 1941.** Pilot Officer William R. “Wild Bill” Dunn is the first US citizen to become a World War II ace when he records his fifth and sixth aerial victories. Dunn is flying with 71 Squadron, one of three RAF Eagle Squadrons that are composed of American volunteers.

**Oct. 20, 1941.** Japan’s Mitsubishi Ki-46, the first truly high-performance reconnaissance aircraft, makes its first operational sortie over Malaysia.

**Dec. 1, 1941.** Civil Air Patrol is established.

**Dec. 7, 1941.** At 7:55 a.m. local time, the Imperial Japanese Navy air force strikes military facilities at Pearl Harbor, Hawaii (including Hickam and Wheeler Fields), in a surprise attack. The first wave consists of 183 aircraft (91 dive bombers, 49 torpedo bombers, and 43 fighters). The second wave begins 45 minutes later and consists of 170 aircraft (80 dive bombers, 54 torpedo bombers, and 36 fighters). In less than two hours, crews flying the 274 aircraft drop 152.7 tons of bombs and



*A P-40 fighter destroyed in the attack on Pearl Harbor.*

torpedoes. Only 25 AAF fighter pilots get into the air, mainly against the second wave. Damage to the US forces in Hawaii, however, is devastating: 2,403 are killed and 1,178 injured (including civilians, roughly 4,500 casualties). Five battleships are sunk and three more are damaged; two other ships are sunk; and three cruisers and three destroyers are damaged. Of the 231 US Army aircraft in Hawaii, only 79 are usable; of 169 US Navy aircraft, 82 survive the attack; and 47 of 48 US Marine aircraft are destroyed.

**Dec. 7, 1941.** 2nd Lt. George S. Welch gets a P-40 into the air over Pearl Harbor and shoots down four Japanese aircraft.

**Dec. 10, 1941.** Five B-17s of the 93rd Bomb Squadron, 19th Bomb Group, carry out the first heavy bomb mission of World War II, attacking a Japanese convoy near the Philippines and also sinking the first enemy vessel by US aerial combat bombing.

**Dec. 16, 1941.** Lt. Boyd "Buzz" Wagner becomes the first American AAF ace of World War II by shooting down his fifth Japanese airplane over the Philippines.

**Dec. 20, 1941.** Led by Claire L. Chennault and flying old shark-mouthed P-40 fighters, the American Volunteer Group—the legendary Flying Tigers—begins combat operations over China against the Japanese invaders.

## 1942

**Feb. 22, 1942.** First American air headquarters in Europe in World War II, US Army Bomber Command, is established in England, with Brig. Gen. Ira C. Eaker, commanding.

**March 7, 1942.** The first five African American pilots graduate from training at Tuskegee Army Air Field in Alabama. By the end of the war, the Tuskegee Airmen would include 950 pilots and open the door to the armed forces for other African Americans.

**March 9, 1942.** The US Army is reorganized into three autonomous forces: Army Air Forces, Ground Forces, and Services of Supply.

**March 26, 1942.** First flight of the Douglas C-54 takes place at Clover Field, Calif. This long-range heavy transport will gain fame in World War II, the Berlin Airlift, and the Korean War.



*Doolittle Raiders in a B-25 taking off from USS Hornet.*

**April 8, 1942.** The first flight of supplies takes place over "The Hump"—a 500-mile air route from Assam, India, over the Himalayas, to Kunming, China, where the Chinese continue to resist Japanese forces.

**April 18, 1942.** Sixteen North American B-25s, commanded by Lt. Col. James H. "Jimmy" Doolittle, take off from USS *Hornet* and bomb Tokyo.

**April 27, 1942.** The first contingent of 1,800 Army Air Forces personnel to be sent to Europe sails from Boston, headed for Liverpool, England. The first crews, flying 18 Boeing B-17s, will leave the US on June 23.

**May 4-8, 1942.** The Battle of the Coral Sea becomes the first naval engagement fought solely by aircraft.

**May 26, 1942.** First flight of the Northrop XP-61 Black Widow takes place at Hawthorne, Calif. The Black Widow is the Army Air Forces' first purpose-designed night fighter.

**May 30, 1942.** The Sikorsky XR-4 Hoverfly, the prototype of the world's first production helicopter and the only US helicopter to see action in World War II, is officially accepted by the Army Air Forces.

**June 3-4, 1942.** In the Battle of Midway, three US carriers destroy four Japanese carriers while losing one of their own.

**June 12, 1942.** In the first mission against a European target, 13 B-24s of HALPRO Detachment fly from Egypt against the Ploesti, Romania, oil fields.

**June 26, 1942.** The Grumman XF6F-1 prototype makes its first flight at Bethpage, N.Y. In two years of combat, naval aviators flying Hellcats would account for the destruction of 5,216 Japanese aircraft.

**July 4, 1942.** US crews of the 15th Bombardment Squadron, operating British Boston IIIs (the RAF version of the Douglas A-20 Havoc), fly the first Army Air Forces bomber mission over western Europe. Four aerodromes in the Netherlands are attacked.

**July 10, 1942.** First flight of the Douglas XA-26 Invader prototype takes place at El Segundo, Calif.

**July 18, 1942.** The all-jet powered Messerschmitt Me-262 *Schwalbe* (Swallow) prototype makes its first flight at Leipheim, Germany. The Me-262 is the world's first jet to enter operational service.

**Aug. 17, 1942.** The first American heavy bomber mission in western Europe in World War II is flown by B-17s of the 97th Bombardment Group against the Rouen-Sotteville railyards in France.

**Sept. 9, 1942.** The three Royal Air Force squadrons (Nos. 71, 121, and 133), which are composed of American volunteers, are transferred to the Army Air Forces and reformed into the 4th Fighter Group.

**Sept. 21, 1942.** First flight of the Boeing XB-29 Superfortress in Seattle. It is designed as a replacement for the B-17 and B-24.

**Oct. 1, 1942.** The Bell XP-59A lifts off from Rogers Dry Lake, Calif. It is the first flight of a jet airplane in the United States. The next day, Col. Laurence C. "Bill" Craigie becomes the first AAF pilot to fly a jet when he makes the type's "official" first flight.

**Oct. 25, 1942.** In two missions over Guadalcanal, Capt. Joe Foss shoots down five Japanese aircraft, becoming the Marine Corps' first "ace in a day."

**December 1942.** The first issue of the AAF's *Air Force Magazine* is published.

**Dec. 27, 1942.** 2nd Lt. Richard I. Bong, who would later



**A B-24 on Ploesti, Romania, bomb run.**

go on to be America's leading ace of all time, records his first aerial victory.

## 1943

**Jan. 27, 1943.** The first American air raid on Germany is made by Eighth Air Force B-17 crews against Wilhelmshaven and other targets.

**Feb. 18, 1943.** First class of 39 flight nurses graduates from AAF School of Air Evacuation, Bowman Field, Ky.

**March 1-3, 1943.** In the Battle of the Bismarck Sea, land-based airplanes sink every ship in a Japanese convoy en route to resupply and reinforce the Japanese garrison on New Guinea.

**March 2-4, 1943.** A Japanese attempt to reinforce Lae, New Guinea, is foiled by aircraft of the Southwest Pacific Air Forces during the Battle of the Bismarck Sea. Modified B-25s are used for the first time in low-level skip-bombing techniques. More than 60 enemy aircraft are destroyed, and some 40,000 tons of Japanese shipping are sunk.

**March 5, 1943.** The Gloster F.9/40, the prototype of the Meteor jet fighter, makes its first flight at Gloucestershire, England. The Meteor is the Royal Air Force's first operational jet and is the only Allied jet fighter to see combat in World War II.

**March 10, 1943.** Fourteenth Air Force is formed under the command of Maj. Gen. Claire L. Chennault.

**March 19, 1943.** Lt. Gen. H.H. "Hap" Arnold is promoted to four-star rank, a first for the Army Air Forces.

**April 8, 1943.** The Republic P-47 enters combat, as Thunderbolt pilots escort B-17s over Europe.

**April 18, 1943.** P-38 pilots from Henderson Field, Guadalcanal, intercept and shoot down two Mitsubishi "Betty" bombers over Bougainville. The aerial ambush kills Japanese Adm. Isoroku Yamamoto, who planned the Pearl Harbor attack.

**May 6, 1943.** AAF Capt. H. Franklin Gregory, flying the Sikorsky XR-4 Hoverfly, makes the first helicopter landing on a ship as he touches down on SS *Bunker Hill* riding at anchor in Long Island Sound, N.Y.

**May 17, 1943.** Eleven crews flying Martin B-26s take off from England for a low-level bombing mission in Holland. One turns back because of mechanical difficulty. The remaining 10 aircraft are all shot down. This mission

results in a change in tactics, as from that point on, Marauder crews bomb from medium altitudes of 10,000 to 15,000 feet.

**May 18, 1943.** An aerial bombing offensive is opened against the island of Pantelleria, off the coast of Italy, to weaken it for invasion. On June 11, its defenders surrender, completely exhausted from weeks of being bombed. This marks the first time a major military objective had been taken because of airpower.

**June 15, 1943.** The world's first operational jet bomber, the German Arado Ar-234V-1 Blitz, makes its first flight.

**July 2, 1943.** AAF Lt. Charles Hall shoots down a German FW-190 over Sicily, becoming the first black US flier to down an Axis airplane.

**Aug. 1, 1943.** Staging from Benghazi, Libya, 177 B-24s drop 311 tons of bombs from low level on the oil refineries at Ploesti, Romania, during Operation Tidal Wave. Forty-nine aircraft are lost, and seven others land in Turkey. This is the first large-scale, minimum-altitude attack by AAF heavy bombers on a strongly defended target.

**Aug. 5, 1943.** The Women's Auxiliary Ferrying Squadron is merged with the Women's Flying Training Detachment. The new organization, the Women Airforce Service Pilots is led by famed aviatrix Jacqueline Cochran.

**Aug. 17, 1943.** Eighth Air Force bombers attack the Messerschmitt works at Regensburg, Germany, and ball-bearing plants at Schweinfurt in a massive daylight raid. German fighters down 60 of the 376 American aircraft.

**Sept. 27, 1943.** P-47s with belly tanks go the whole distance with Eighth Air Force bombers for a raid on Emden, Germany.

**Oct. 14, 1943.** Eighth Air Force conducts the second raid on the ball-bearing factories at Schweinfurt, Germany. The raid becomes known as "Black Thursday." Only 228 of the 291 B-17s sent on the raid actually put their bombs on the target. Sixty B-17s are shot down, five more crash in England because of battle damage, 12 more have to be scrapped because of battle damage or crash landings, and 121 bombers have to be repaired before flying again. The human toll: 600 men lost over enemy territory, and there are five dead and 43 airmen wounded on the B-17s that did return.

**Oct. 31, 1943.** Over New Georgia in the Solomon Islands, a Chance Vought F4U-2 Corsair aviator accomplishes the Navy's first successful radar-guided interception.

**Dec. 5, 1943.** P-51 pilots begin escorting US bombers to European targets.

**Dec. 24, 1943.** First major Eighth Air Force assault on German V-weapon sites is made when 670 B-17s and B-24s bomb the Pas de Calais area of France.

## 1944

**Jan. 8, 1944.** Developed in only 143 days, the prototype Lockheed XP-80 Shooting Star, *Lulu Belle*, makes its first flight at Muroc Dry Lake (later Edwards AFB), Calif.

**Jan. 11, 1944.** The first US use of forward-firing rockets is made by Navy TBF-1C Avenger crews against a German submarine.

**Feb. 20, 1944.** The first mission of "Big Week"—six days of strikes by Eighth Air Force (based in England) and Fifteenth Air Force (based in Italy) against German aircraft plants.



*Eighth Air Force B-17s in England.*

**March 4, 1944.** B-17s of the Eighth Air Force conduct the first daylight bombing raid on Berlin.

**March 5, 1944.** British Brig. Gen. Orde Wingate's Raiders, popularly known as Chindits, are flown by US pilots in Waco CG-4A gliders to "Broadway," a site near Indaw, Burma, in a daring night operation.

**March 6, 1944.** In the first major AAF attack on Berlin, 660 heavy bombers unload 1,600 tons of bombs.

**March 16, 1944.** NACA proposes that a transonic research airplane be developed. This ultimately leads to the Bell X-1.

**March 25, 1944.** Fifteenth Air Force crews temporarily close the Brenner Pass between Italy and Austria. This mission, against the Aviso viaduct, is the first operational use of the VB-1 Azon (Azimuth Only) radio-controlled bomb.

**April 25-26, 1944.** The first combat rescue by helicopter takes place, as AAF 2nd Lt. Carter Harman, flying a Sikorsky YR-4 Hoverfly, lifts a downed L-1 pilot and the three injured British soldiers he was carrying out of the jungle in Burma one at a time.

**May 21, 1944.** Operation Chattanooga Choo-Choo—systematic Allied air attacks on trains in Germany and France—begins.

**June 2, 1944.** The first shuttle bombing mission, using Russia as the eastern terminus, is flown.

**June 6, 1944.** Allied pilots fly approximately 15,000 sorties on D-Day. It is an effort unprecedented in concentration and size.

**June 13, 1944.** The first German V-1 flying bombs fired in combat are launched against England. Four of 11 strike London.

**June 15, 1944.** Forty-seven B-29 crews, based in India and staging through Chengdu, China, attack steel mills at Yawata in the first B-29 strike against Japan.

**July 3, 1944.** The P-61 Black Widow, the only night fighter the US built during World War II, flies its first operational intercept mission in Europe.

**July 5, 1944.** The Northrop MX-324, the first US rocket-powered airplane, is flown.

**July 9, 1944.** Attack against vital oil installations in Ploesti, Romania.

**July 17, 1944.** Napalm incendiary bombs are dropped for the first time by American P-38 pilots on a fuel depot at Coutances, near St. Lo, France.

**Aug. 4, 1944.** The first Aphrodite mission (a radio-

controlled B-17 carrying 20,000 pounds of TNT) is flown against V-2 rocket sites in the Pas de Calais section of France.

**Aug. 14, 1944.** AAF Capt. Robin Olds records his first victory. He would go on to tally 11 more victories by July 4, 1945. His next aerial victory would come on Jan. 2, 1967, during the Vietnam War, making him the only American ace to record victories in nonconsecutive wars.

**Aug. 28, 1944.** The 78th Fighter Group claims the destruction of an Me-262, the first jet to be shot down in combat.

**Sept. 8, 1944.** The German V-2, the world's first ballistic missile, is first used in combat. Two strike Paris; two more are launched against London.

**Sept. 14, 1944.** AAF officers Col. Floyd B. Wood, Maj. Harry Wexler, and Lt. Frank Reckord fly into a hurricane in a Douglas A-20 to gather scientific data.

**Nov. 24, 1944.** The first XXI Bomber Command raid is made when 88 B-29s bomb Tokyo.

**Dec. 17, 1944.** The 509th Composite Group, assembled to carry out atomic bomb operations, is established at Wendover, Utah.

**Dec. 17, 1944.** Maj. Richard I. Bong, America's leading ace of all time, records his 40th and final aerial victory.

**Dec. 21, 1944.** Gen. H.H. "Hap" Arnold becomes General of the Army—the first airman to hold five-star rank.

## 1945

**Jan. 11, 1945.** Capt. William A. Shomo sets the AAF all-time record of seven enemy air victories in a single engagement.

**Jan. 20, 1945.** Maj. Gen. Curtis E. LeMay succeeds Brig. Gen. Haywood "Possum" Hansell as commander of XXI Bomber Command in the Mariana Islands.

**Feb. 19, 1945.** The Marine V Amphibious Corps, with air and sea support, lands on Iwo Jima. The island's three airfields will be used as emergency landing fields for Marianas-based B-29s and as a base for fighter operations. By March 26, the island will be secured, at a cost of more than 6,520 American lives.

**Feb. 20, 1945.** Secretary of War Henry L. Stimson approves plans to establish a rocket proving ground near White Sands, N.M.

**Feb. 25, 1945.** B-29 crews begin night incendiary raids on Japan; 334 aircraft drop 1,667 tons of firebombs and destroy 15 square miles of Tokyo.

**March 9, 1945.** In a change of tactics in order to double bomb loads, Twentieth Air Force sends more than 300 B-29s from the Marianas against Tokyo in a low-altitude, incendiary night raid, destroying about one-fourth of the city.

**March 11, 1945.** The greatest weight of bombs dropped in an AAF strategic raid on a single target in Europe falls on Essen, Germany, as 1,079 bomber crews release 4,738 tons of bombs.

**March 18, 1945.** Some 1,250 US bombers, escorted by 670 fighters, deal Berlin its heaviest daylight blow—3,000 tons of bombs on transportation and industrial areas.

**March 18, 1945.** First flight of the Douglas XBT2D-1, the prototype of the A-1 Skyraider, at El Segundo, Calif.

**March 27, 1945.** B-29 crews begin night mining missions around Japan, eventually establishing a complete blockade.

**April 9, 1945.** The last B-17 rolls off the line at Boeing's Seattle plant.

**April 10, 1945.** Thirty of 50 German Me-262 jet fighters are shot down by US bombers and their P-51 escorts. The German fighters shoot down 10 bombers—the largest loss of the war in a single mission covered by jets.

**April 23, 1945.** Flying Consolidated PB4Y-2 Privateers, Navy crews from VPB-109 launch two Bat missiles against Japanese ships in Balikpapan Harbor, Borneo. This is the first known use of automatic homing missiles during World War II.

**May 8, 1945.** German Maj. Erich Hartmann, flying a Messerschmitt Me-109 in his last combat mission, records one final aerial "kill," bringing his total to 352 aircraft, the most in history by any pilot in any country.

**May 8, 1945.** V-E Day. The war ends in Europe.

**June 16, 1945.** First flight of the North American XP-82 Twin Mustang at Inglewood, Calif. The P-82, later redesignated F-82, was the last propeller-driven fighter acquired in quantity by the Army Air Forces.

**June 22, 1945.** Okinawa is declared captured by US forces. The price paid to capture this island—16,000 men, 36 ships, and 800 aircraft—is a key consideration in the decision to use the atomic bombs on Japan.

**June 26, 1945.** B-29 crews begin nighttime raids on Japanese oil refineries.

**July 16, 1945.** The world's first atomic bomb is successfully detonated at Trinity Site, a desert location near Alamogordo, N.M. The weapon (referred to as "the gad-



*The B-29 Enola Gay returning to Tinian Island.*

get") is the prototype of the "Fat Man" plutonium bomb and has an explosive yield of 19 kilotons.

**Aug. 6, 1945.** The "Little Boy" (uranium) atomic bomb is dropped on Hiroshima, Japan, from the B-29 *Enola Gay*, commanded by Col. Paul W. Tibbets Jr.

**Aug. 6, 1945.** Maj. Richard I. Bong, America's all-time leading ace, is killed testing a P-80.

**Aug. 9, 1945.** The "Fat Man" atomic bomb is dropped on Nagasaki, Japan, from the B-29 *Bockscar*, commanded by Maj. Charles W. Sweeney.

**Aug. 18, 1945.** In the last combat action of any kind against the Japanese in World War II, a pair of Consolidated B-32 Dominators on a reconnaissance flight over Tokyo are attacked by 14 Zeros and Tojos.

**Sept. 2, 1945.** On board USS *Missouri* in Tokyo Bay, Japanese Foreign Minister Mamoru Shigemitsu and Chief

of Staff Gen. Yoshijiro Umezu sign instruments of surrender.

**Nov. 7, 1945.** Royal Air Force Group Capt. Hugh Wilson sets the first postwar recognized absolute speed record and breaks the 600 mph barrier at the same time, as he flies a Gloster Meteor F.4 to a speed of 606.26 mph at Herne Bay, England.

## 1946

**Feb. 15, 1946.** Thirty-five movie stars, studio executives, and reporters board a Lockheed Constellation piloted by Howard Hughes for the inauguration of TWA daily nonstop service between Los Angeles and New York City.

**Feb. 28, 1946.** First flight of the Republic XP-84 at Muroc Dry Lake, Calif. The Thunderjet is the AAF's first postwar fighter and will be used extensively in the Korean War. Later designated F-84.

**March 8, 1946.** The Bell Model 47 becomes the first rotary-wing aircraft to receive Civil Aeronautic Agency certification. The Model 47 would be used by the military as the UH-13.

**March 21, 1946.** Strategic Air Command, Tactical Air Command, and Air Defense Command are activated.

**April 24, 1946.** First flight of the prototype of the MiG-9, which will later carry the NATO reporting name "Fargo."

**June 17, 1946.** First AAF Scientific Advisory Board meets, chaired by Theodore von Karman.

**June 26, 1946.** "Knot" and "nautical mile" are adopted by the Army Air Forces and the Navy as standard aeronautical units of speed and distance.

**July 1, 1946.** Operation Crossroads begins as a B-29 drops a 23 kiloton yield nuclear weapon over a cluster of 70 target ships of various types anchored in the Bikini lagoon in the Marshall Islands in the Pacific.

**July 21, 1946.** Lt. Cmdr. James Davidson makes the first successful takeoff and landing of a jet-powered aircraft from an aircraft carrier. He is flying a McDonnell FH-1 Phantom from USS *Franklin D. Roosevelt*.

**Aug. 2, 1946.** The National Air Museum is established under the Smithsonian Institution.

**Aug. 8, 1946.** First flight of the mammoth Convair XB-36 prototype at Fort Worth, Tex.

**Aug. 24, 1946.** The US Navy's four-month-old flight demonstration team performs for the first time with its new official name: Blue Angels.

## 1947

**March 17, 1947.** First flight of the North American XB-45 Tornado takes place at Muroc AAF, Calif. The B-45 is the first American four-engine jet bomber to fly, and it is the first USAF jet bomber to go into production.

**July 26, 1947.** President Harry Truman signs the National Defense Act of 1947, the enabling legislation that will create a separate Air Force.

**Sept. 18, 1947.** The US Air Force begins operations as a separate service, with W. Stuart Symington as its first Secretary. Gen. Carl A. "Tooe" Spaatz, Commanding General of the AAF, becomes the first Chief of Staff on Sept. 26.



**Chuck Yeager in the cockpit of the Bell X-1.**

**Sept. 26, 1947.** Transfer of personnel, bases, and materiel from the Army to the new Department of the Air Force is ordered by Defense Secretary James W. Forrester.

**Oct. 1, 1947.** First flight of the North American XP-86 Sabre takes place at Muroc Dry Lake, Calif. The Sabre is the Air Force's first swept-wing fighter.

**Oct. 14, 1947.** Capt. Charles E. "Chuck" Yeager becomes the first pilot to reach supersonic speeds in level flight when he reaches a speed of Mach 1.06 (700 mph) at an altitude of 45,000 feet in the rocket-powered Bell XS-1 (later redesignated X-1) over Muroc Dry Lake, Calif.

**Oct. 21, 1947.** The first flight of the Northrop YB-49 flying wing jet bomber is made. The Air Force's Northrop B-2 stealth bomber, when it debuts in 1989, will bear a family resemblance to this airplane.

**Nov. 2, 1947.** Howard Hughes's wooden H-4 Hercules (*Spruce Goose*) makes its first (and only) flight over Los Angeles Harbor, Calif.

**Nov. 23, 1947.** The world's largest landplane, the Convair XC-99, the cargo version of the B-36 bomber, makes its first flight at Lindbergh Field in San Diego.

**Dec. 17, 1947.** The prototype Boeing XB-47 Stratojet bomber makes its first flight from Boeing Field in Seattle.

**Dec. 30, 1947.** The prototype of the MiG-15 (NATO reporting name "Fagot") fighter makes its first flight at the Soviet flight test center at Ramenskoye.

## 1948

**Jan. 2, 1948.** The Air Force Technical Museum at Patterson Field, Ohio, is officially established as a successor to the Army Aeronautical Museum.

**Jan. 30, 1948.** Orville Wright dies in his hometown of Dayton, Ohio, at age 76.

**April 21, 1948.** Secretary of Defense James V. Forrester assigns the primary responsibility for air defense of the United States to the Air Force.

**April 26, 1948.** The Air Force announces that it must "eliminate segregation among its personnel by the unrestricted use of Negro personnel in free competition for any duty within the Air Force for which they may qualify." It was the first service to announce a policy of racial integration.

**May 26, 1948.** President Truman announces his approval of the bill that establishes the Civil Air Patrol as a civilian auxiliary of the Air Force.

**June 1, 1948.** Navy and Air Force air transport systems are consolidated into Military Air Transport Service under USAF.

**June 11, 1948.** Air Force Regulation 65-60 changes the designations for several Air Force aircraft. Fighters will now have the prefix "F" instead of "P" for pursuit (which dated back to 1925); reconnaissance aircraft will now be designated "R" instead of "F" (ostensibly for "fotographic," which dated back to 1930); and helicopters will now be designated "H" instead of "R" (for rotary wing).

**June 26, 1948.** Operation Vittles, the Berlin Airlift, begins with Douglas C-47 crews bringing 80 tons of supplies into the city on the first day.



**A C-54 over Berlin.**

**Sept. 18, 1948.** First official flight of the Convair Model 7002, the first true delta-winged aircraft, takes place at Muroc Dry Lake, Calif.

**Oct. 15, 1948.** Maj. Gen. William H. Tunner assumes command of the newly created American and British Combined Airlift Task Force during the Berlin Airlift.

**Oct. 31, 1948.** Air Force reveals use of ramjet engines on piloted aircraft, a modified F-80, for first time.

**Dec. 17, 1948.** The 45th anniversary of the first powered flight is commemorated by the donation of the original Wright Flyer to the Smithsonian Institution. The Flyer was displayed in Britain for many years because of a dispute between the Wrights and the Smithsonian.

**Dec. 29, 1948.** Defense Secretary James V. Forrester says the US is working on an "Earth satellite vehicle program," a project to study the operation of guided rockets beyond Earth's pull of gravity.

## 1949

**Jan. 19, 1949.** The first flight of the Martin XB-61 Matador mobile, short-range, surface-to-surface tactical missile is carried out at Holloman AFB, N.M.

**Jan. 25, 1949.** The US Air Force adopts blue uniforms.

**Feb. 4, 1949.** The Civil Aeronautics Administration sanctions the use of the ground-controlled approach as a "primary aid" for commercial airline crews.

**Feb. 26-March 2, 1949.** *Lucky Lady II*, a SAC B-50A, is flown on the first nonstop flight around the world. The 23,452-mile flight takes 94 hours, one minute and requires four midair refuelings.

**March 26, 1949.** USAF's 10-engined B-36D makes first flight.

**April 16, 1949.** First flight of the YF-94 Starfire prototype takes place at Van Nuys, Calif. The Starfire is designed to serve as an interim all-weather interceptor.

**May 7, 1949.** Retired Gen. H. H. "Hap" Arnold is given the permanent rank of General of the Air Force by a special act of Congress.

**May 11, 1949.** President Truman signs a bill providing for a 3,000-mile-long guided-missile test range for the Air Force. The range is subsequently established at Cape Canaveral, Fla.

**May 12, 1949.** The Soviets reopen routes into Berlin.

**July 27, 1949.** The deHavilland DH-106 Comet airliner prototype makes its first flight at Hatfield, England. The Comet is the world's first jet airliner.

**Aug. 9, 1949.** Navy Lt. J.L. Fruin makes the first emergency escape with an ejection seat in the US near Walterboro, S.C. His McDonnell F2H-1 Banshee is traveling at more than 500 knots at the time.

**Sept. 30, 1949.** The Berlin Airlift, gradually reduced since May 12, 1949, officially ends. Results show 2,343,301.5 tons of supplies carried on 277,264 flights. US airplanes carried 1,783,826 tons.

## 1950

**Jan. 14, 1950.** General of the Air Force H.H. "Hap" Arnold dies of a heart ailment at Sonoma, Calif.

**Jan. 23, 1950.** USAF establishes Research and Development Command. Eight months later it is redesignated Air Research and Development Command. In 1961, ARDC will be redesignated Air Force Systems Command.

**Jan. 31, 1950.** President Truman announces that he has directed the Atomic Energy Commission "to continue its work on all forms of atomic energy weapons, including the so-called hydrogen or super bomb." This is the first confirmation of US H-bomb work.

**Feb. 1, 1950.** The prototype of the MiG-17 (NATO reporting name "Fresco") fighter makes its first flight at the Soviet flight test center at Zhukovsky.

**March 15, 1950.** The Joint Chiefs of Staff, in a statement of basic roles and missions, give the Air Force formal and exclusive responsibility for strategic guided missiles.

**June 25, 1950.** North Korea attacks South Korea to begin Korean War.

**June 27, 1950.** Flying a North American F-82 Twin

Mustang, Lt. William G. Hudson, with radar operator Lt. Carl Fraser, destroys a Yak-11 near Seoul.

**June 28, 1950.** USAF aircraft fly first strikes of the war, attacking tanks, trucks, and supply columns along the North Korean invasion route.

**June 30, 1950.** President Truman authorizes Army Gen. Douglas MacArthur to dispatch air forces against targets in North Korea.

**July 10, 1950.** Flying a North American T-6 Texan trainer armed with smoke rockets, Lts. James Bryant and Frank Mitchell, on the first day of "mosquito missions" (forward air control sorties) in Korea, call in a strike by F-80 pilots.

**Sept. 14, 1950.** North Koreans push retreating UN forces into the "Pusan Perimeter" in southeast Korea, marking the line of maximum advancement for the invaders. Airpower pounds North Korean supply lines, limiting the enemy force that can be brought to bear on Pusan.

**Sept. 22, 1950.** Air Force Col. David C. Schilling makes the first nonstop trans-Atlantic flight in a jet aircraft, flying a Republic F-84E from Manston, England, to Limestone (later Loring) AFB, Maine, in 10 hours, one minute. The trip requires three in-flight refuelings.

**Oct. 25, 1950.** Communist China enters the Korean War.

**Nov. 8, 1950.** 1st Lt. Russell J. Brown, flying a Lockheed F-80 Shooting Star, downs a North Korean MiG-15 in history's first all-jet aerial combat.

**Dec. 17, 1950.** Lt. Col. Bruce Hinton, flying a North American F-86 Sabre, wins the first ever air-to-air combat between swept-wing fighters when he shoots down a MiG-15 over Korea.

## 1951

**May 20, 1951.** Maj. James Jabara becomes the Air Force's first Korean War ace. He eventually downs 15 enemy airplanes in Korea.

**June 20, 1951.** First flight of the Bell X-5 takes place at Edwards AFB, Calif.

**July 6, 1951.** A Strategic Air Command crew, flying a KB-29M tanker, conducts the first air refueling operation over enemy territory under combat conditions. The tanker refuels three RF-80s flying reconnaissance over North Korea.

**Oct. 2, 1951.** Col. Francis S. Gabreski of the 51st Fighter Wing downs a MiG-15, which gives him 6.5 victories in Korea. Combined with his 28 victories in World War II, he is the highest scoring Air Force ace with victories in two wars.

## 1952

**April 1, 1952.** In a further change from practices carried over from when it was part of the Army, the Air Force redesignates the grades of private first class, corporal, and buck sergeant as airman third class, airman second class, and airman first class.

**April 15, 1952.** The Boeing YB-52 Stratofortress bomber prototype makes its maiden flight from Seattle.

**April 27, 1952.** The Tupolev Model 88, the prototype of the Tu-16 jet bomber, makes its first flight. The Tu-16



*An F-80 in the Korean War.*



(later given the NATO reporting name “Badger”) is the Soviet Union’s first strategic jet-powered bomber and is also the first with swept wings.

**May 3, 1952.** Air Force Lt. Cols. William Benedict and Joseph Fletcher land an LC-47 on the North Pole.

**June 23-24, 1952.** Combined air elements of the Air Force, Navy, and Marines virtually destroy the electrical power potential of North Korea. The two-day attack involves more than 1,200 sorties and is the largest single air effort since World War II and first to employ aircraft in Korea from all three services.

**July 13-31, 1952.** Two Air Force crews make the first crossing of the Atlantic by helicopter.

**July 29, 1952.** A North American RB-45C Tornado crew makes the first nonstop trans-Pacific flight by a multi-engine jet bomber, flying the 3,640 miles from Alaska to Japan in nine hours and 50 minutes with the help of a KB-29 tanker.

**Oct. 31, 1952.** The United States tests its first thermonuclear device at Eniwetok in the Marshall Islands.

## 1953

**Jan. 26, 1953.** Chance Vought Aircraft completes the last F4U Corsair. In production for 13 years (and built by two other manufacturers during World War II), almost 12,700 Corsairs will be built in a number of versions, making for one of the longest and largest production runs in history.

**Jan. 30, 1953.** Capt. B.L. Fithian (pilot) and Lt. S.R. Lyons (radar operator) shoot down an unseen North Korean aircraft using only the radar in their Lockheed F-94 Starfire to guide them to the intercept.

**May 13 and 16, 1953.** Air Force crews flying Republic F-84 Thunderjets conduct two raids on dams, causing the loss of all electrical power to North Korea.

**May 18, 1953.** Capt. Joseph C. McConnell Jr., flying an F-86, downs three MiG-15 fighters in two separate engagements. These victories give McConnell a total of 16 victories in just five months of action and make him the leading American ace of the Korean War.

**May 25, 1953.** First flight of the North American YF-100 Super Sabre prototype takes place at the Air Force Flight Test Center at Edwards AFB, Calif.

**June 8, 1953.** Officially activated June 1, 1953, USAF’s 3600th Air Demonstration Team, the Thunderbirds, perform their first aerial demonstration.

**July 16, 1953.** Lt. Col. William Barnes pushes the recognized absolute speed record past 700 mph, as he hits 715.697 mph in a North American F-86D.

**July 27, 1953.** UN and North Korea sign armistice agreement, producing a cease-fire in Korea.

**Aug. 20, 1953.** Seventeen Republic F-84G Thunderjets, refueling from Boeing KC-97s, are flown nonstop 4,485 miles from Turner AFB, Ga., to RAF Lakenheath, UK, in what is, up to this point, the longest mass movement of fighter-bombers in history.

**Sept. 1, 1953.** The first jet-to-jet air refueling takes place between a Boeing KB-47 and a “standard” B-47.

**Sept. 11, 1953.** A Grumman F6F drone is destroyed in the first successful interception test of the Sidewinder air-to-air missile at China Lake, Calif.

**Nov. 20, 1953.** NACA test pilot Scott Crossfield be-

comes the first pilot to exceed Mach 2. His Douglas D-588-II Skyrocket research airplane is dropped from a Navy P2B-1S (B-29) at an altitude of 32,000 feet over Edwards AFB, Calif.

## 1954

**Feb. 28, 1954.** First flight of the Lockheed XF-104 Starfighter takes place at Edwards AFB, Calif. A landing gear retraction problem cuts the flight short, however.

**March 1, 1954.** In the Marshall Islands, the US successfully explodes its first deliverable hydrogen bomb.

**March 4, 1954.** First full flight of the XF-104.

**March 18, 1954.** Boeing rolls out the first production B-52A Stratofortress at its plant in Seattle. Production will continue until 1962.

**April 1, 1954.** President Eisenhower signs into law a bill creating the US Air Force Academy.

**June 28, 1954.** First flight of the Douglas RB-66A Destroyer takes place at Long Beach, Calif. Developed from the Navy’s A3D Skywarrior, the RB/B-66 variant is intended to provide the Air Force with a tactical light bomber and reconnaissance aircraft.

**July 15, 1954.** The Boeing Model 367-80 makes its first flight. The aircraft is the prototype for the Air Force’s C/KC-135 series and the progenitor of the 707, which will become the first civilian jetliner to see wide use.

**Aug. 23, 1954.** First flight of the YC-130 Hercules takes place at Burbank, Calif.

**Sept. 1, 1954.** Continental Air Defense Command—a joint command composed of Air Force, Army, Navy, and Marine forces—is established at Colorado Springs, Colo.

**Sept. 29, 1954.** First flight of the McDonnell F-101A Voodoo takes place at Edwards AFB, Calif.

**Oct. 12, 1954.** The Cessna XT-37 Tweet trainer prototype is flown for the first time at Wichita, Kan.

**Oct. 27, 1954.** Benjamin O. Davis Jr., son of the first black general officer in the US Army, becomes the first black general officer in the US Air Force.

**Dec. 10, 1954.** To determine if a pilot could eject from an airplane at supersonic speed and live, Lt. Col. John Paul Stapp, a flight surgeon, rides a rocket sled to 632 mph,



*A Boeing 707 testing a new refueling boom for the KC-135.*

decelerates to zero in 1.4 seconds, and survives 40 times the force of gravity.

## 1955

**Feb. 23, 1955.** The Army picks Bell Helicopter from a list of 20 competing companies to build its first turbine-powered helicopter. The winning design, designated XH-40, will become the HU-1 (and later still, UH-1) Iroquois, the renowned Huey.

**Feb. 26, 1955.** North American Aviation test pilot George Smith becomes the first person to survive ejection from an aircraft flying at supersonic speed. His F-100 Super Sabre is traveling at Mach 1.05 when the controls jam and he is forced to punch out.

**July 11, 1955.** The first class (306 cadets) is sworn in at the Air Force Academy's temporary location at Lowry AFB, Colo.

**Aug. 4, 1955.** First official flight of the Lockheed U-2 spyplane takes place at Groom Lake, Nev. An inadvertent hop had been made on July 29.

**Oct. 22, 1955.** First flight of the Republic YF-105 Thunderchief takes place at Edwards AFB, Calif. The aircraft, commonly known as the "Thud," is the largest single-engine, single-seat fighter ever built.

**Nov. 26, 1955.** Defense Secretary Charles E. Wilson assigns responsibility for development and operations of land-based ICBMs to the Air Force.

## 1956

**Jan. 9, 1956.** The Ye-5, the first true prototype of the MiG-21 supersonic point defense fighter, makes its first flight. Later given the NATO reporting name "Fishbed," more than 8,000 MiG-21s will be built.

**March 10, 1956.** The recognized absolute speed record passes the 1,000 mph barrier, as company pilot Peter Twiss hits 1,132.13 mph in the Fairey Delta 2 research aircraft at Sussex, England.

**May 21, 1956.** An Air Force crew flying a Boeing B-52B Stratofortress at 40,000 feet air-drops a live hydrogen bomb over Bikini Atoll in the Pacific. The bomb has a measured blast of 3.75 megatons.

**May 28, 1956.** First flight of the Ryan X-13 Vertijet Vertical Takeoff and Landing (VTOL) research aircraft in hover mode takes place at Edwards AFB, Calif.

**Aug. 31, 1956.** The KC-135, the first jet-powered tanker, makes its first flight.

**Sept. 27, 1956.** Capt. Milburn Apt, USAF, reaches Mach 3.196 in the Bell X-2, becoming the first pilot to fly three times the speed of sound. Apt is killed, however, when the aircraft tumbles out of control.

**Oct. 26, 1956.** First flight of the Bell XH-40 at Fort Worth, Tex. Later redesignated UH-1, the Iroquois, or Huey.

**Oct. 31, 1956.** A ski-equipped Douglas R4D (Navy C-47) Skytrain lands at the South Pole, becoming the first aircraft to land at the bottom of the world.

**Nov. 11, 1956.** First flight of the Convair XB-58A Hustler takes place at Fort Worth, Tex. The delta-winged B-58 is the Air Force's first supersonic bomber.

**Dec. 26, 1956.** First flight of the Convair F-106 Delta Dart takes place at Edwards AFB, Calif.

## 1957

**Jan. 18, 1957.** Commanded by Maj. Gen. Archie J. Old Jr., three B-52 Stratofortresses complete a 24,325-mile round-the-world nonstop flight in 45 hours, 19 minutes, with an average speed of 534 mph. It is the first globe-circling nonstop flight by a jet aircraft.

**April 11, 1957.** The jet-powered Ryan X-13 Vertijet makes its first full-cycle flight, taking off vertically, transitioning to horizontal flight, and landing vertically.

**June 11, 1957.** The first Convair XSM-65A (later redesignated CGM-16A) Atlas ICBM launches from Cape Canaveral, Fla., but is destroyed within a few seconds.

**Aug. 1, 1957.** NORAD, the bilateral US-Canadian North American Air Defense Command, is informally established.

**Aug. 15, 1957.** Gen. Nathan F. Twining becomes Chairman of the Joint Chiefs of Staff, the first USAF officer to serve in this position.

**Oct. 4, 1957.** The space age begins when the Soviet Union launches Sputnik 1, the world's first artificial satellite, into Earth orbit.

**Dec. 6, 1957.** The first US attempt to orbit a satellite fails when a Vanguard rocket loses thrust and explodes.

**Dec. 17, 1957.** The Convair HGM-16 Atlas ICBM makes its first successful launch and flight.

## 1958

**Jan. 31, 1958.** Explorer I, the first US satellite, is launched by the Army at Cape Canaveral, Fla.

**Feb. 4, 1958.** The keel of the world's first nuclear-powered aircraft carrier, USS *Enterprise*, is laid at the Newport News Shipbuilding and Drydock Co. yards in Virginia.

**Feb. 27, 1958.** Approval is given to USAF to start research and development on an ICBM that will later be called Minuteman.

**May 27, 1958.** First flight of the McDonnell XF4H-1 (F-4) Phantom II takes place at St. Louis.

**June 17, 1958.** Boeing and Martin are named prime contractors to develop competitive designs for the Air Force's X-20 Dyna-Soar boost-glide space vehicle. This project, although later canceled, is the first step toward the space shuttle.



*Explorer I launch in 1958.*

**July 15, 1958.** The first Boeing Vertol VZ-2A tilt-wing research aircraft makes its first successful transition from vertical to horizontal flight and vice versa.

**August 1958.** The term “aerospace” is used publicly for the first time by Gen. Thomas D. White, USAF Chief of Staff, in an *Air Force Magazine* article. The term was coined by Frank W. Jennings, a civilian writer and editor for the *Air Force News Service*.

**Oct. 1, 1958.** The National Aeronautics and Space Administration (NASA) is officially established, replacing NACA.

**Dec. 18, 1958.** Project Score, an Atlas booster with a communications repeater satellite, is launched into Earth orbit. The satellite carries a Christmas message from President Eisenhower that is broadcast to Earth, the first time a human voice has been heard from space.

## 1959

**Jan. 8, 1959.** NASA requests eight Redstone-type launch vehicles from the Army for Project Mercury development flights. Four days later, McDonnell Aircraft Co. is selected to build the Mercury capsules.

**Feb. 6, 1959.** An Air Force Systems Command crew launches the first Martin XSM-68A (later redesignated HGM-25A) Titan ICBM from Patrick AFB, Fla.

**Feb. 12, 1959.** The last Convair B-36 Peacemaker is retired from USAF service.

**Feb. 28, 1959.** USAF successfully launches the Discoverer I satellite into polar orbit from Vandenberg AFB, Calif.

**April 2, 1959.** Seven test pilots—Air Force Capts. L. Gordon Cooper Jr., Virgil I. “Gus” Grissom, and Donald K. “Deke” Slayton; Navy Lt. Cmdrs. Walter M. Schirra Jr. and Alan B. Shepard Jr.; Lt. M. Scott Carpenter; and Marine Lt. Col. John H. Glenn Jr.—are announced as the Project Mercury astronauts.

**April 20, 1959.** The prototype Lockheed UGM-27A Polaris sea-launched ballistic missile successfully flies a 500-mile trajectory in a Navy test.

**April 30, 1959.** A Convair B-36J Peacemaker is flown to the Air Force Museum at Wright-Patterson AFB, Ohio. This is the last flight of the mammoth B-36.

**May 28, 1959.** Astrochimps Able and Baker are recovered alive in the Atlantic after their flight to an altitude of 300 miles in the nosecone of a PGM-19 Jupiter missile launched from Cape Canaveral Missile Test Annex, Fla.



Test pilot Scott Crossfield with the X-15.

**June 3, 1959.** The first class is graduated from the Air Force Academy.

**June 8, 1959.** After several attempts, North American pilot Scott Crossfield makes the first nonpowered X-15 flight.

**Aug. 7, 1959.** First intercontinental relay of a voice message by satellite takes place. The voice is that of Maj. Robert C. Mathis, later USAF vice chief of staff.

**Sept. 9, 1959.** The Atlas missile is fired for the first time by a SAC crew from Vandenberg AFB, Calif., and the missile type is declared operational by the SAC commander in chief.

**Sept. 12, 1959.** The Soviet Union launches Luna 2, the first man-made object to reach the moon.

**Sept. 17, 1959.** First powered flight of the North American X-15 rocket powered research aircraft takes place at Edwards AFB, Calif. Company pilot Scott Crossfield reaches a speed of Mach 2.11 and an altitude of 52,341 feet.

## 1960

**Jan. 25, 1960.** In the first known shutdown of a ballistic missile, an Army MIM-23 HAWK anti-aircraft missile downs an unarmed MGR-1 Honest John surface-to-surface unguided rocket.

**April 1, 1960.** The RCA-built TIROS 1 (Television Infrared Observation Satellite), the world’s first meteorological satellite, is successfully launched from Cape Canaveral Missile Test Annex, Fla., atop a Thor launch vehicle.

**April 19, 1960.** The Grumman A2F-1 attack aircraft prototype makes its first flight at the company’s Calverton, N.Y., facility. Later designated the A-6 Intruder, more than 680 Intruders are built.

**May 1, 1960.** Central Intelligence Agency pilot Francis Gary Powers, flying a U-2 reconnaissance aircraft, is shot down over the Soviet Union near Sverdlovsk. He is captured and later put on trial for espionage.

**July 20, 1960.** The first underwater launch of a Lockheed UGM-27 Polaris ballistic missile is successfully carried out from USS *George Washington* off Cape Canaveral Missile Test Annex, Fla.

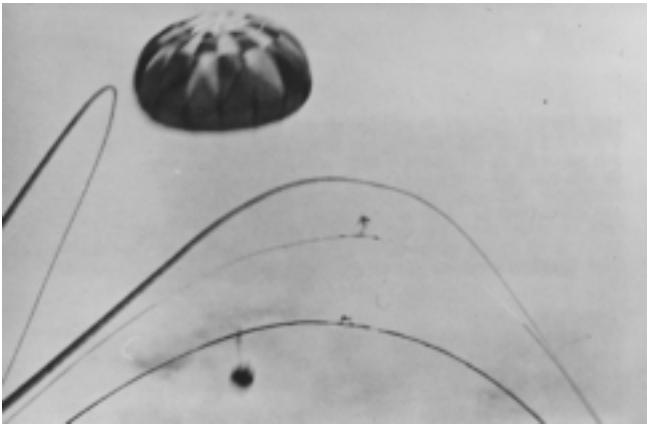
**Aug. 16, 1960.** At an altitude of 102,800 feet over Tularosa, N.M., Air Force Capt. Joseph W. Kittinger Jr. steps out of his balloon’s open gondola and freefalls 84,700 feet, reaching a speed of 614 mph. Kittinger lands unharmed 13 minutes, 45 seconds after jumping. This is the highest jump and longest free fall ever recorded.

**Aug. 18, 1960.** A USAF crew flying a specially modified Fairchild C-119J Flying Boxcar makes the first successful midair retrieval of a then-classified Corona program satellite imagery capsule re-entering the atmosphere. The crew uses two wire hooks trailing from the aircraft’s cargo hold to snag the parachute of the Discoverer XIV imagery capsule over the Pacific.

**Sept. 21, 1960.** Tactical Air Command formally accepts the first Republic F-105D Thunderchief all-weather fighter in ceremonies at Nellis AFB, Nev.

## 1961

**Feb. 1, 1961.** The first Boeing LGM-30A Minuteman ICBM is launched from Cape Canaveral Missile Test



**A C-119J attempt to retrieve a satellite in midair in 1960.**

Annex, Fla. It travels 4,600 miles and hits the target area.

**Feb. 3, 1961.** SAC's Boeing EC-135 Airborne Command Post begins operations. Dubbed "Looking Glass," the airplanes and their equipment provide a backup means of controlling manned bombers and launching land-based ICBMs in case a nuclear attack wipes out conventional command and control systems.

**March 10, 1961.** The Ye-155—the prototype of the MiG-25, a Mach 3 capable interceptor and reconnaissance platform—makes its first flight.

**April 12, 1961.** The Soviet Union stuns the world with the first successful manned spaceflight. Cosmonaut Yuri Gagarin is not only history's first spaceman, he is also the first person to orbit the Earth.

**April 15, 1961.** The Lockheed P3V-1 Orion makes its first flight at Burbank, Calif.

**May 5, 1961.** Cmdr. Alan B. Shepard Jr. becomes the first Project Mercury astronaut to cross the space frontier. His flight in Freedom 7 lasts 15 minutes, 28 seconds, reaches an altitude of 116.5 miles, and ends 303.8 miles downrange.

**May 25, 1961.** President Kennedy, at a joint session of Congress, declares a national space objective: "I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to Earth."

**July 21, 1961.** Capt. Virgil I. "Gus" Grissom becomes the first Air Force astronaut in space. He attains an altitude of 118.3 miles on the second Mercury mission.

**Aug. 6-7, 1961.** Flying in the Vostok 2 spacecraft, Soviet Air Force Capt. Gherman Titov becomes the first person to orbit the Earth for more than a day. He also becomes the first person to get spacesick.

## 1962

**Jan. 17, 1962.** Defense Secretary Robert S. McNamara announces the Air Force will adopt the Navy's McDonnell F4H-1 Phantom II as an interim replacement for the F-105.

**Feb. 2, 1962.** A Fairchild C-12 crashes while spraying defoliant on a Viet Cong ambush site. It is the first Air Force crew and aircraft lost in South Vietnam.

**Feb. 20, 1962.** Marine Lt. Col. John H. Glenn Jr. becomes the first US astronaut to orbit the Earth. His Friendship 7 flight lasts nearly five hours.

**April 30, 1962.** First official flight of the Lockheed A-12,

the forerunner of the SR-71 high-speed reconnaissance aircraft, takes place at Groom Lake, Nev.

**June 30, 1962.** The Department of Defense adopts a common designation system for all military aircraft based on existing (and much simpler) Air Force designation methods.

**July 17, 1962.** Maj. Robert M. White pilots the X-15 research aircraft to an altitude of 314,750 feet, thus making the first spaceflight in a manned aircraft.

**Oct. 3, 1962.** Navy Cmdr. Walter M. "Wally" Schirra Jr. completes nearly six orbits. He is also the first astronaut to splash down in the Pacific Ocean.

**Oct. 14, 1962.** Maj. Richard S. Heyser, flying a Lockheed U-2E, returns to the United States with photographic evidence that Soviet SS-4 intermediate range nuclear missiles are being erected near San Christobal, Cuba.

**Oct. 22, 1962.** Strategic Air Command goes on actual airborne alert.

**Oct. 23, 1962.** Air Force pilots from Shaw AFB, S.C., make the first low-level photoreconnaissance flights during the Cuban Missile Crisis.

**Oct. 26, 1962.** The 744th and last Boeing B-52 Stratofortress is delivered to SAC.

**Oct. 27, 1962.** Maj. Rudolph Anderson Jr., flying a Lockheed U-2, is shot down by a Soviet built SA-2 Guideline surface-to-air missile while performing an overflight mission over Cuba. He is the only combat casualty of the Cuban Missile Crisis.

**Dec. 14, 1962.** NASA's Mariner II satellite scans the surface of Venus for 35 minutes as it flies past the planet at a distance of 21,642 miles.

## 1963

**Feb. 9, 1963.** The Boeing 727 tri-jet airliner makes its first flight, from Seattle to Everett, Wash.

**Feb. 28, 1963.** The first Minuteman ICBM squadron, the 10th Strategic Missile Squadron (SMS) at Malmstrom AFB, Mont., is declared operational.

**May 15, 1963.** Air Force Maj. L. Gordon Cooper Jr. is the first to spend a complete day in orbit.

**June 16-19, 1963.** Cosmonaut Jr. Lt. Valentina Tereshkova, a former cotton mill worker, becomes the first woman in space. Her Vostok 6 flight lasts nearly three days.

**Aug. 22, 1963.** NASA pilot Joe Walker achieves an unofficial world altitude record of 354,200 feet in the X-15.

**Oct. 17, 1963.** The first LGM-30A Minuteman I operational test launch is carried out at Vandenberg AFB, Calif., by a crew from Malmstrom AFB, Mont.

**Oct. 22, 1963.** In Exercise Big Lift, the Air Force airlifts more than 15,000 men of the 2nd Armored Division and its supporting units from Ft. Hood, Tex., to bases near Frankfurt, West Germany.

**Dec. 17, 1963.** Lockheed C-141A Starlifter, USAF's first jet-powered transport, makes its first flight at Marietta, Ga.

## 1964

**Jan. 8, 1964.** The newest Air Force decoration, the Air Force Cross, is posthumously awarded to reconnaissance pilot Maj. Rudolf Anderson Jr., the only combat casualty of the 1962 Cuban Missile Crisis.

**Feb. 29, 1964.** President Lyndon B. Johnson announces the existence of the Lockheed A-11 with a cruising speed of more than Mach 3 above 70,000 feet.

**May 11, 1964.** The North American XB-70 Valkyrie is rolled out at Palmdale, Calif.

**Aug. 2, 1964.** The destroyer USS *Maddox* is attacked by North Vietnamese patrol boats in the Gulf of Tonkin.

**Aug. 5, 1964.** USAF moves into Southeast Asia in force. B-57s from Clark AB, Philippines, deploy to Bien Hoa, South Vietnam, and additional F-100s move to Da Nang, South Vietnam. Eighteen F-105s deploy from Japan to Korat AB, Thailand, beginning Aug. 6.

**Aug. 7, 1964.** Congress passes the Gulf of Tonkin Resolution.

**Aug. 19, 1964.** The Hughes Syncom III satellite is launched by a Thor-Delta launch vehicle. It becomes the world's first geosynchronous satellite.

**Sept. 21, 1964.** First flight of the North American XB-70A Valkyrie takes place at Palmdale, Calif.

**Dec. 14, 1964.** US Air Force flies the first Barrel Roll armed reconnaissance mission in Laos.

**Dec. 15, 1964.** Taking off from Bien Hoa AB, South Vietnam, the Douglas FC-47 (later redesignated AC-47) gunship, attacks enemy sampans, buildings, trails, and suspected jungle staging areas.

**Dec. 21, 1964.** First flight of the variable-geometry General Dynamics F-111A takes place at Fort Worth, Tex. The flight lasts 22 minutes.

**Dec. 22, 1964.** Lockheed gets approval to start development for the Air Force of the CX-HLS transport, which will become the C-5A.

**Dec. 22, 1964.** First flight of the Lockheed SR-71A "Blackbird" strategic reconnaissance aircraft takes place at Palmdale, Calif.

## 1965

**Feb. 8, 1965.** The Air Force performs its first retaliatory air strike in North Vietnam. A North American F-100 Super Sabre flies cover for attacking South Vietnamese fighter aircraft, suppressing ground fire.

**Feb. 18, 1965.** First Air Force jet raids are flown against an enemy concentration in South Vietnam.

**March 2, 1965.** Capt. Hayden J. Lockhart, flying an F-100 in a raid against an ammunition dump north of the Vietnamese demilitarized zone, is shot down and becomes the first Air Force pilot to be taken prisoner by the North Vietnamese. He will not be released until Feb. 12, 1973.

**June 3-7, 1965.** Air Force Maj. Edward H. White makes the first US spacewalk.

**June 18, 1965.** SAC B-52s are used for the first time in Vietnam, when 28 aircraft strike Viet Cong targets near Saigon.

**July 10, 1965.** Capt. Thomas S. Roberts, with his backseater Capt. Ronald C. Anderson, and Capt. Kenneth E. Holcombe, and his backseater Capt. Arthur C. Clark, both flying F-4C Phantom IIs, shoot down two MiG-17s, the first Air Force air-to-air victories of the Vietnam War.

**Aug. 18, 1965.** In an effort to combat mounting aircraft losses to North Vietnamese surface-to-air missiles, an Air Force committee headed by Brig. Gen. Kenneth C. Dempster recommends the installation of radar homing and warning



A Strategic Air Command B-52D.

(RHAW) electronic equipment in North American F-100Fs.

**Sept. 27, 1965.** First flight of the YA-7A Corsair II attack aircraft takes place at NAS Dallas, Tex.

**Dec. 1, 1965.** Four crews flying modified F-100F Super Sabres carry out the first Wild Weasel radar suppression mission near the North Vietnam border.

**Dec. 15, 1965.** In a first for the US space program, the crews of Gemini 6 and Gemini 7 rendezvous in space.

## 1966

**Jan. 1, 1966.** Military Air Transport Service is redesignated Military Airlift Command (MAC).

**Jan. 17, 1966.** A B-52 loaded with four hydrogen bombs collides with a KC-135 while refueling near Palomares, Spain. Seven of the 11 crew members involved are killed. Three of the four weapons are quickly recovered. The fourth, which falls into the Mediterranean Sea, is not recovered until early spring.

**Jan. 23, 1966.** Military Airlift Command completes Operation Blue Light, the airlift of the Army's 3rd Brigade, 25th Infantry Division, from Hawaii to Pleiku, South Vietnam, to offset the buildup of Communist forces there.

**Feb. 28, 1966.** The US space program suffers its first fatalities, as the Gemini 9 prime crew of Elliot M. See Jr. and Charles A. Bassett II are killed as their Northrop T-38 crashes in St. Louis in bad weather.

**March 4, 1966.** A flight of Air Force F-4C Phantoms is attacked by three MiG-17s in the first air-to-air combat of the war over North Vietnam. The MiGs make unsuccessful passes before fleeing to the sanctuary of the Communist capital area.

**March 16, 1966.** The Gemini 8 crew, Neil A. Armstrong and USAF Maj. David R. Scott, successfully carry out the first docking with another vehicle in space.

**April 12, 1966.** Strategic Air Command B-52 bombers strike targets in North Vietnam for the first time. They hit a supply route in the Mu Gia Pass, about 85 miles north of the border.

## 1967

**Jan. 2, 1967.** USAF 8th Tactical Fighter Wing pilots, led by Col. Robin Olds in the famous MiG sweep Operation

Bolo mission, down seven North Vietnamese MiG-21s over the Red River Valley in North Vietnam.

**Jan. 2, 1967.** By shooting down a MiG-21, Col. Robin Olds becomes the first and only USAF ace with victories in both World War II and Vietnam.

**Jan. 27, 1967.** Astronauts USAF Lt. Col. Virgil I. "Gus" Grissom, Navy Lt. Cmdr. Roger B. Chaffee, and USAF Lt. Col. Edward H. White II are killed in a flash fire aboard their Apollo 1 command module during a ground test.

**March 10, 1967.** Air Force F-105 Thunderchief and F-4C Phantom II crews bomb the Thai Nguyen steel plant in North Vietnam for the first time.

**April 3, 1967.** CMSgt. Paul W. Airey becomes the first Chief Master Sergeant of the Air Force.

**April 9, 1967.** First flight of the Boeing 737 airliner takes place at Seattle. The 737 becomes the world's best-selling passenger aircraft.

**May 13, 1967.** Pilots of the 8th Tactical Fighter Wing, Ubon RTAB, Thailand, shoot down seven MiGs in a single day's action over North Vietnam.

**May 31-June 1, 1967.** Two Air Force crews flying Sikorsky HH-3E Jolly Green Giants make the first non-stop flight across the Atlantic by helicopter.

**Nov. 17-Dec. 29, 1967.** Operation Eagle Thrust, the largest and longest airlift of troops and cargo from the US to Southeast Asia, begins by C-141 and C-133 aircraft.

**Dec. 11, 1967.** The Aerospatiale-built Concorde supersonic jetliner prototype rolls out at the company's plant in Toulouse, France.

## 1968

**Jan. 1, 1968.** Battle of Khe Sanh in South Vietnam begins. Air Force airlifters bring in an average of 165 tons of materiel daily during the 77-day siege.

**Feb. 29, 1968.** Jeanne M. Holm, director of Women in the Air Force, and Helen O'Day, assigned to the Office of the Air Force Chief of Staff, become the first women promoted to permanent colonel.

**March 2, 1968.** The first of 80 C-5A Galaxy transports rolls out at Lockheed's Marietta, Ga., facility.

**March 25, 1968.** F-111s fly their first combat mission against military targets in North Vietnam.

**March 31, 1968.** President Johnson announces a partial halt of bombing missions over North Vietnam and proposes peace talks.

**May 25, 1968.** The Grumman EA-6B electronic warfare/airborne jammer prototype makes its first flight at Long Island, N.Y.

**June 30, 1968.** The world's largest aircraft, the Lockheed C-5A Galaxy, makes its first flight, at Dobbins AFB, Ga.

**Aug. 16, 1968.** The first test launch of a Boeing LGM-30G Minuteman III ICBM is carried out from Cape Kennedy AFS, Fla.

**Oct. 11-22, 1968.** Apollo 7, the first test mission following the disastrous Apollo 1 fire, is carried out.

**Nov. 1, 1968.** President Johnson halts all bombing of North Vietnam.

**Dec. 21-27, 1968.** Three Apollo 8 Astronauts, USAF Col. Frank Borman, Navy Cmdr. James A. Lovell Jr., and USAF Maj. William A. Anders, become the first humans to orbit the moon.

**Dec. 31, 1968.** The Soviet Union conducts the first flight of the Tu-144, the world's first supersonic transport.

## 1969

**Feb. 9, 1969.** Boeing conducts the first flight of the 747. The jumbo jet, with standard seating for 347 passengers, introduces high passenger volume to the world's airways.

**May 18-26, 1969.** In a dress rehearsal for the moon landing, Apollo 10 astronauts USAF Col. Thomas P. Stafford and Cmdr. Eugene A. Cernan fly the lunar module *Snoopy* to within nine miles of the lunar surface.

**July 20, 1969.** Man sets foot on the moon for the first time. At 10:56 p.m. EDT, Apollo 11 astronaut Neil A. Armstrong puts his left foot on the lunar surface. He and lunar module pilot Col. Edwin E. "Buzz" Aldrin Jr., USAF, spend just under three hours walking on the moon. Command module pilot Lt. Col. Michael Collins, USAF, remains in orbit.



*Astronaut Buzz Aldrin during an Apollo 11 moon walk.*

**Oct. 31, 1969.** The last Boeing B-47 Stratojet jet bomber is retired from USAF service.

**Nov. 3, 1969.** The Air Force issues a request for proposal for a new bomber to meet its advanced manned strategic aircraft requirement. Its designation will be B-1.

**Nov. 14-24, 1969.** Apollo 12 is hit by lightning on liftoff, but Cmdrs. Charles Conrad Jr. and Alan L. Bean make the second manned lunar landing with pinpoint accuracy.

## 1970

**Feb. 17, 1970.** Crews flying Boeing B-52s bomb targets in northern Laos for the first time.

**April 11-17, 1970.** An explosion in the Apollo 13 service module cripples the spaceship and forces the crew to use the lunar module as a lifeboat to get back to Earth. After a tense four days, the Apollo 13 crew safely splashes down in the Pacific.

**June 6, 1970.** The first operational C-5A Galaxy transport is delivered at Charleston AFB, S.C.

**Aug. 24, 1970.** Two Air Force crews complete the first nonstop trans-Pacific helicopter flight as they land their Sikorsky HH-53Cs at Da Nang AB, South Vietnam, after a 9,000-mile flight from Eglin AFB, Fla. The helicopters were refueled in flight.

**Dec. 21, 1970.** The Grumman F-14A Tomcat fleet air defense fighter makes its first flight at Long Island, N.Y.

## 1971

**April 17, 1971.** Federal Express begins air freight operations from Memphis, Tenn., guaranteeing overnight delivery anywhere in the United States.

**July 16, 1971.** Jeanne M. Holm becomes the first female general officer in the Air Force.

**July 26, 1971.** Apollo 15 blasts off with an all-Air Force crew: Col. David R. Scott, Lt. Col. James B. Irwin, and Maj. Alfred M. Worden. Millions of viewers throughout the world watch as color-TV cameras cover Scott and Irwin exploring the lunar surface using a moon rover vehicle for the first time.

**Sept. 3, 1971.** President Richard M. Nixon dedicates the new US Air Force Museum building at Wright-Patterson AFB, in Dayton, Ohio.

## 1972

**March 1972.** The North Vietnamese spring invasion is stopped and then turned back by US airpower.

**April 6, 1972.** American aircraft and warships begin heavy, sustained attacks on North Vietnam for the first time since the cessation of bombing in October 1968.

**April 27, 1972.** Four Air Force fighter crews, releasing Paveway 1 “smart” bombs, knock down the Thanh Hoa Bridge in North Vietnam. Previously, 871 conventional sorties resulted in only superficial damage to the bridge.

**May 10-11, 1972.** F-4 Phantoms from the 8th Tactical Fighter Wing drop smart bombs on the Paul Doumer Bridge, causing enough damage to keep this mile-long highway and rail crossing at Hanoi out of use. It will not be rebuilt until air attacks on North Vietnam cease in 1973.

**July 27, 1972.** First flight of the McDonnell Douglas F-15A Eagle air superiority fighter at Edwards AFB, Calif.

**Aug. 28, 1972.** Capt. Richard S. Ritchie shoots down his fifth MiG-21 near Hanoi, becoming the Air Force’s first ace since the Korean War.

**Sept. 9, 1972.** Capt. Charles B. DeBellevue (WSO), in a McDonnell Douglas F-4D, shoots down two MiG-19s near Hanoi. These were the fifth and sixth victories for DeBellevue, which made him the leading American ace of the war.

**Dec. 7-19, 1972.** The Apollo 17 mission is the last of the moon landings.

**Dec. 18, 1972.** The US begins Operation Linebacker II, the 11-day bombing of Hanoi and Haiphong. Massive air strikes help persuade North Vietnam to conclude Paris peace negotiations, which will be finalized Jan. 27, 1973.

## 1973

**April 17, 1973.** Taking off from Guam, Air Force crews flying B-52 Stratofortresses make the last bombing missions over Laos, attacking targets south of the Plain of Jars because of Communist cease-fire violations.

**Aug. 15, 1973.** Maj. John J. Hoskins and Capt. Lonnie O. Ratley, flying LTV A-7D Corsair IIs, make the last raids

of the war in Southeast Asia when they attack targets near Phnom Penh, Cambodia, late in the afternoon.

**Nov. 14, 1973.** The US ends its major airlift to Israel. In a 32-day operation during the Yom Kippur War, Military Airlift Command airlifts 22,318 tons of supplies.

**Nov. 14, 1973.** The first production F-15A Eagle is delivered to the Air Force at Luke AFB, Ariz.

**Nov. 16, 1973-Feb. 8, 1974.** Marine Lt. Col. Gerald Carr, Air Force Lt. Col. William Pogue, and Edward Gibson form the third and final Skylab crew.

## 1974

**Jan. 21, 1974.** The YF-16 prototype makes a first, unplanned flight at Edwards AFB, Calif. As company test pilot conducts high-speed taxi tests, the aircraft lifts off the runway, and rather than risk damage to the aircraft, the pilot elects to lift off and go around to come in for a normal landing.

**June 9, 1974.** First flight of the Northrop YF-17 at Edwards AFB, Calif. It would become the progenitor of the Navy’s F/A-18 Hornet.

**Oct. 24, 1974.** The Air Force’s Space and Missile Systems Organization carries out a midair launch of a Boeing LGM-30A Minuteman I from the hold of a Lockheed C-5A.

**Dec. 23, 1974.** First flight of the Rockwell B-1A variable-geometry bomber takes place at Palmdale, Calif.



*YF-16—Lightweight Fighter Technology program.*

## 1975

**Jan. 13, 1975.** The General Dynamics YF-16 is announced as the winner of the Air Force’s Lightweight Fighter Technology evaluation program.

**June 30, 1975.** The last Douglas C-47A Skytrain in routine Air Force use is retired to the US Air Force Museum at Wright-Patterson AFB, Ohio.

**July 15-24, 1975.** US astronauts Brig. Gen. Thomas P. Stafford, USAF, Vance D. Brand, and Donald K. Slayton rendezvous, dock, and shake hands with Soviet cosmonauts Alexei A. Leonov and Valeri N. Kubasov in orbit during the Apollo-Soyuz Test Project.

**Aug. 20, 1975.** The Viking 1 mission to Mars is launched. The lander soft-lands on July 20, 1976.

**Sept. 1, 1975.** Gen. Daniel “Chappie” James Jr., USAF,



**Daniel "Chappie" James receiving a fourth star.**

becomes the first black officer to achieve four-star rank in the US military.

**Oct. 21, 1975.** Fairchild Republic's A-10A Thunderbolt II makes its first flight.

**Nov. 29, 1975.** The first Red Flag exercise at Nellis AFB, Nev., begins a new era of highly realistic training for combat aircrews.

## 1976

**Jan. 9, 1976.** Air Force's first operational F-15 Eagle arrives at the 1st Tactical Fighter Wing, Langley AFB, Va.

**Sept. 6, 1976.** Soviet pilot Lt. Victor Belenko, taking off from Sakharovka Air Base near Vladivostok, lands his MiG-25 (NATO reporting name "Foxybat") interceptor at the Hakodate Airport in northern Japan and asks for political asylum.

## 1977

**March 10, 1977.** The prototype Grumman EF-111A airborne tactical jamming platform for the Air Force is flown for the first time.

**March 24, 1977.** Boeing delivers the first basic production version of the E-3A Sentry (AWACS) to Tinker AFB, Okla.

**May 20, 1977.** The Sukoi T-10, the prototype of the Su-27 (NATO reporting name "Flanker") makes its first flight.

**June 30, 1977.** President Jimmy Carter announces he is canceling the B-1A variable-geometry bomber program.

**Oct. 6, 1977.** The MiG-29 prototype (NATO reporting name "Fulcrum") makes its first flight.

**Dec. 1, 1977.** First flight of the Lockheed XST Have Blue demonstrator takes place at Groom Lake, Nev. Developed in only 20 months, Have Blue is designed as a test bed for stealth technology.

## 1978

**Feb. 22, 1978.** The first test satellite in the Air Force's Navstar Global Positioning System is successfully launched into orbit.

**March 23, 1978.** Capt. Sandra M. Scott becomes the first female aircrew member to pull alert duty in SAC.

**Nov. 30, 1978.** The last Boeing LGM-30G Minuteman III ICBM is delivered to the Air Force at Hill AFB, Utah.

## 1979

**Jan. 6, 1979.** The 388th Tactical Fighter Wing at Hill AFB, Utah, receives the first operational General Dynamics F-16A fighters.

**July 9, 1979.** The Voyager 2 space probe, launched in 1977, flies within 399,560 miles of Jupiter's cloud tops. Voyager 2 will pass Neptune in 1989.

**Oct. 1, 1979.** All atmospheric defense assets and missions of Aerospace Defense Command are transferred to Tactical Air Command (TAC).

## 1980

**April 24, 1980.** In the middle of an attempt to rescue US citizens held hostage in Iran, mechanical difficulties force several Navy RH-53 helicopter crews to turn back. Later, one of the RH-53s collides with an Air Force HC-130 in a sandstorm at the Desert One refueling site. Eight US servicemen are killed.

**May 28, 1980.** The Air Force Academy graduates its first female cadets.

**Aug. 22, 1980.** Department of Defense reveals existence of stealth technology that "enables the United States to build manned and unmanned aircraft that cannot be successfully intercepted with existing air defense systems."

## 1981

**April 12, 1981.** The space shuttle *Columbia*, the world's first reusable manned space vehicle, makes its first flight.

**April 14, 1981.** The space shuttle *Columbia* lands at Edwards AFB, Calif., after its first orbital mission. This is the first time in history that an orbital vehicle leaves the Earth under rocket power and returns as an aircraft.

**June 7, 1981.** A surprise attack by the Israeli Air Force destroys the Osirak nuclear reactor near Baghdad, setting back Iraq's attempt to develop nuclear weapons.

**June 18, 1981.** In total secrecy, company pilot Hal Farley makes the first flight of the Lockheed F-117A stealth fighter at Tonopah Test Range, Nev.

**June 26, 1981.** The first production Grumman/General Dynamics EF-111A, a specially developed ECM tactical jamming aircraft, makes its first flight.

**Sept. 26, 1981.** The Boeing 767 twin-engine, twin-aisle jetliner makes its first flight at Everett, Wash.

**Oct. 2, 1981.** President Reagan reinstitutes the B-1 bomber program canceled by the Carter Administration in 1977.

## 1982

**Feb. 4, 1982.** First flight of Tacit Blue "Whale," which demonstrates that curvilinear surfaces are valuable in foiling radar. It leads to advances that live on in the B-2 and the F/A-22.

**Feb. 19, 1982.** The Boeing 757 twin-engine, single aisle jetliner makes its first flight at Renton, Wash.



**Feb. 24, 1982.** NATO receives the first of 18 E-3A Airborne Warning and Control System (AWACS) aircraft at Geilenkirchen AB, Germany.

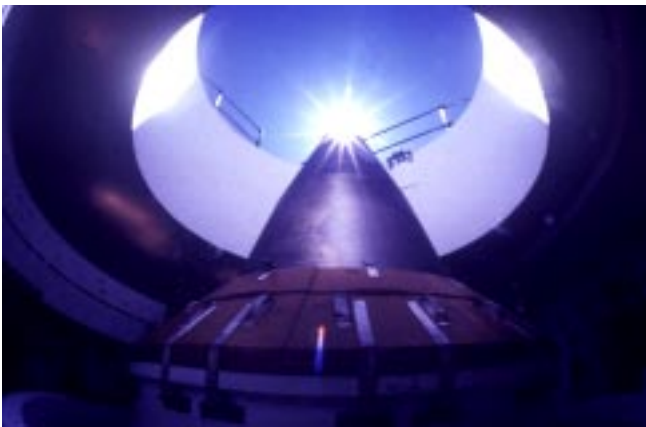
**June 6-11, 1982.** In the Bekka Valley of Lebanon, the Israeli Air Force overcomes the long-standing combat advantage of surface-to-air missiles, destroying 19 SAMs with no losses. In the follow-up action, the Israelis shoot down 82 Syrian MiGs without losing any of their own fighters.

**Sept. 1, 1982.** Air Force Space Command is established, with headquarters at Colorado Springs, Colo.

## 1983

**March 23, 1983.** Flight testing of the Rockwell B-1A resumes at Edwards AFB, Calif. This aircraft is modified for the B-1B development effort.

**June 17, 1983.** The first LGM-118A Peacekeeper ICBM is test-launched from Vandenberg AFB, Calif.



*The LGM-118 Peacekeeper ICBM.*

**June 18, 1983.** The first American woman to go into space, Sally K. Ride, is aboard *Challenger* on the seventh space shuttle mission.

**Aug. 30, 1983.** The first black American astronaut, Lt. Col. Guion S. Bluford Jr., USAF, is sent aloft on the space shuttle *Challenger*.

## 1984

**Aug. 27, 1984.** The first Grumman X-29A forward-swept-wing research aircraft rolls out at the company's Long Island facility in New York.

**Sept. 4, 1984.** The first production Rockwell B-1B bomber is rolled out at Air Force Plant 42 in Palmdale, Calif.

**Oct. 18, 1984.** Company pilot M.L. Evenson and USAF Lt. Col. L.B. Schroeder make the first flight of the Rockwell B-1B variable-geometry bomber at Palmdale, Calif., and land at Edwards AFB, Calif.

**Dec. 14, 1984.** At Edwards AFB, Calif., Grumman pilot Chuck Sewell makes the first flight of the X-29A forward-swept-wing demonstrator.

## 1985

**Jan. 24-27, 1985.** The 15th space shuttle mission is the first dedicated DOD flight. The *Discovery* crew deploys

a classified payload, believed to be a signals intelligence satellite.

**Sept. 13, 1985.** The first test of the LTV-Boeing ASM-135A air-launched antisatellite weapon against a target is successfully carried out over the Western Test Range at Vandenberg AFB, Calif. Launched from an F-15, the missile destroys a satellite orbiting at a speed of 17,500 mph approximately 290 miles above Earth.

**Oct. 10, 1985.** The LGM-118 Peacekeeper ICBM reaches initial operational capability. The 10-warhead missiles are based at F.E. Warren AFB, Wyo.

**Dec. 16, 1985.** After 20 years of operation, the Pioneer 6 satellite becomes the longest-running spacecraft in history. When launched in 1965, the solar-orbiting satellite had a life expectancy of six months.

## 1986

**Jan. 28, 1986.** The space shuttle *Challenger* explodes 73 seconds after liftoff, killing all seven astronauts, including schoolteacher Christa McAuliffe. Others on Mission 51-L were Francis R. Scobee, Navy Cmdr. Michael J. Smith, Judith A. Resnik, Ronald E. McNair, Air Force Lt. Col. Ellison S. Onizuka, and Gregory B. Jarvis.

**April 15, 1986.** In Operation El Dorado Canyon, US Air Force F-111s launch from RAF Lakenheath in England, are refueled in the air six times by KC-10 tankers, maintain complete radio silence, and are joined by Navy A-6s in a retaliatory raid against Libya in response to state-sponsored terrorism.

**Dec. 23, 1986.** Dick Rutan and Jeanna Yeager land at Edwards AFB, Calif., after nine-day flight in experimental aircraft *Voyager*, the first-ever nonstop, unrefueled flight around the world.

## 1987

**May 5, 1987.** The last Martin Marietta LGM-25C Titan II ICBM is taken off strategic alert at Little Rock AFB, Ark. The Titan II had stood nuclear alert since 1963.

**Sept. 24, 1987.** The Air Force's Thunderbirds fly for a crowd of 5,000 in Beijing. It has been nearly 40 years since a US combat aircraft flew over and landed on Chinese soil.

## 1988

**Jan. 20, 1988.** The 100th and final B-1B bomber rolls off the line at Rockwell's plant in Palmdale.

**May 23, 1988.** The Bell-Boeing V-22 Osprey, the world's first production tilt-rotor aircraft, is rolled out at Bell Helicopter Textron's plant in Arlington, Tex.

**Sept. 29, 1988.** Launch of the space shuttle *Discovery* ends the long stand-down of the US manned space program in the wake of the *Challenger* disaster.

**Nov. 6, 1988.** The Air Force launches its last Martin Marietta Titan 34D booster from Vandenberg AFB, Calif. It carries a classified payload.

**Nov. 10, 1988.** The Air Force reveals the existence of the Lockheed F-117A stealth fighter, operational since 1983.

**Nov. 12, 1988.** Soviet cosmonauts Vladimir G. Titov and Musa K. Manarov break the world space endurance

record as they remain on board the space station Mir for their 326th day in orbit.

**Nov. 22, 1988.** Northrop and the Air Force roll out the B-2 stealth bomber at Air Force Plant 42 in Palmdale, Calif.

**Nov. 30, 1988.** The Soviets roll out the An-225 transport, the world's largest airplane.

**Dec. 29, 1988.** The first operational dual-role (air superiority and deep interdiction) McDonnell Douglas F-15E fighter is delivered to the Air Force.

## 1989

**March 19, 1989.** First flight of the Bell-Boeing V-22 Osprey takes place at Arlington, Tex.

**April 17, 1989.** Lockheed delivers the 50th and last C-5B Galaxy transport to the Air Force in ceremonies at Marietta, Ga.

**June 10, 1989.** Capt. Jacquelyn S. Parker becomes the first female pilot to graduate from the Air Force Test Pilot School at Edwards AFB, Calif.

**June 14, 1989.** The first Martin Marietta Titan IV heavy-lift space booster is successfully launched from Launch Complex 40 at Cape Canaveral AFS, Fla.

**July 6, 1989.** The nation's highest civilian award, the Presidential Medal of Freedom, is presented to retired Air Force Gen. Jimmy Doolittle.

**July 17, 1989.** First flight of the Northrop B-2A advanced technology bomber, takes place from Palmdale, Calif., to Edwards AFB, Calif.

**Aug. 24, 1989.** The Voyager 2 space probe passes within 3,000 miles of Neptune. Voyager 2 was launched in Aug. 1977.

**Oct. 3, 1989.** The last of 37 Lockheed U-2R/TR-1A/B high-altitude reconnaissance aircraft is delivered to the Air Force.

**Oct. 4, 1989.** A crew from the 60th Military Airlift Wing, Travis AFB, Calif., lands a Lockheed C-5B transport at McMurdo Station in Antarctica.

**Dec. 20, 1989.** Operation Just Cause begins in Panama. The Lockheed F-117A stealth fighter is used operationally for the first time.

## 1990

**Jan. 25, 1990.** The Lockheed SR-71 Blackbird high-altitude, high-speed reconnaissance aircraft is retired from SAC service in ceremonies at Beale AFB, Calif.

**March 1, 1990.** The Rockwell/MBB X-31A Enhanced Fighter Maneuverability demonstrator rolls out in Palmdale, Calif.

**March 26, 1990.** Grumman rolls out the first production-standard F-14D Tomcat in Calverton, N.Y.

**April 2, 1990.** Air Force pilot Maj. Erwin "Bud" Jenschke demonstrates in-flight thrust reversing for the first time while flying the McDonnell Douglas NF-15B S/MTD (STOL/Maneuvering Technology Demonstrator) aircraft over Edwards AFB, Calif.

**July 12, 1990.** The last of 59 Lockheed F-117A stealth fighters is delivered at Palmdale, Calif.

**July 24, 1990.** SAC ends Looking Glass, more than 29 years of continuous airborne alert, as a Boeing EC-135C

airborne command post aircraft lands at Offutt AFB, Neb. **Aug. 7, 1990.** The US begins Operation Desert Shield, the large-scale movement of US forces to the Middle East in response to Iraq's Aug. 2 invasion of Kuwait and threat to Saudi Arabia.

**Aug. 8, 1990.** A C-141 carrying an airlift control element lands in Dhahran, Saudi Arabia, the first USAF aircraft into the crisis zone. F-15s from 1st Tactical Fighter Wing, Langley AFB, Va., and elements of the 82nd Airborne Division, Ft. Bragg, N.C., arrive in Saudi Arabia. US AWACS aircraft augment Saudi AWACS orbiting over Saudi Arabia.

**Aug. 17, 1990.** For the first time, the Civil Reserve Air Fleet is activated to increase the availability of airlift to the Middle East.

**Aug. 29, 1990.** The Lockheed/Boeing/General Dynamics YF-22A prototype is unveiled in ceremonies at Lockheed Plant 10 in Palmdale, Calif.

**Oct. 11, 1990.** First flight of the Rockwell/MBB X-31A EFM demonstrator takes place at Palmdale, Calif.

## 1991

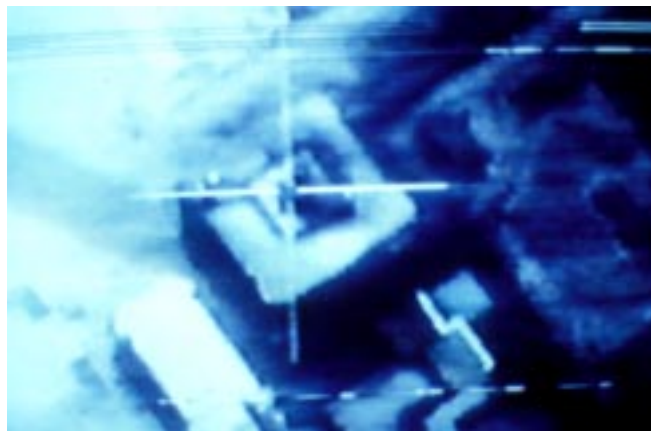
**Jan. 7, 1991.** Secretary of Defense Dick Cheney announces that he is canceling the A-12 Avenger attack aircraft program for default. The A-12 would have been the Navy's first stealth aircraft.

**Jan. 16, 1991.** At 6:35 a.m. local time, B-52G crews from the 2nd Bomb Wing, Barksdale AFB, La., take off to begin what will become the longest bombing mission in history. Carrying 39 AGM-86C Air Launched Cruise Missiles, the bomber crews fly to the Middle East and launch their missiles against high-priority targets in Iraq.

**Jan. 17, 1991.** War begins in the Persian Gulf. Operation Desert Shield becomes Operation Desert Storm.

**Feb. 28, 1991.** Iraq surrenders to the US-led coalition. In the 43-day, round-the-clock war, the Air Force flies more than 38,000 combat sorties, offloads more than 800 million pounds of fuel, and transports 96,465 passengers and 333 million pounds of cargo.

**March 8, 1991.** The first Martin Marietta Titan IV heavy-lift space booster to be launched from Vandenberg AFB, Calif., lifts off. The booster carries a classified payload.



*In the crosshairs—precision weapons in Gulf War I.*

**April 18, 1991.** The Air Force carries out the first successful flight test of the Martin Marietta/Boeing MGM-134A small ICBM. The missile flies 4,000 miles from Vandenberg AFB, Calif., to its assigned target area in the Army's Kwajalein Missile Range in the Pacific Ocean.

**Sept. 15, 1991.** The McDonnell Douglas C-17A transport makes its first flight.

**Sept. 27, 1991.** Strategic bomber crews stand down from their decades-long, round-the-clock readiness for nuclear war.

## 1992

**Jan. 18, 1992.** Air Training Command receives its first T-1A Jayhawk trainer aircraft at Reese AFB, Tex.

**Jan. 31, 1992.** The Navy takes delivery of the last production Grumman A-6 Intruder attack aircraft, closing out 31 years of Intruder production.

**May 12, 1992.** Lockheed delivers the 2,000th C-130 Hercules transport at Marietta, Ga.

**June 1, 1992.** SAC, TAC, and MAC are deactivated. Bomber, fighter, attack, reconnaissance, and electronic combat/electronic warfare aircraft and all ICBMs regroup under Air Combat Command. Airlifter and tanker aircraft regroup under Air Mobility Command.

**July 1, 1992.** Air Force begins Operation Provide Promise, flying humanitarian relief missions into Croatia and Bosnia. It is the longest-running air supply effort in history, officially ending Jan. 4, 1996.

**Aug. 27, 1992.** Operation Southern Watch begins as Persian Gulf coalition members (primarily the US Air Force and Navy) enforce the ban on Iraqi airplanes flying south of the 32nd parallel.

**Dec. 27, 1992.** Two F-16 pilots intercept a pair of Iraqi MiG-25s flying in the UN-imposed no-fly zone over southern Iraq. One of the pilots fires an AIM-120A AMRAAM and downs one of the MiGs, marking the first use of the AIM-120A in combat and the first USAF F-16 air-to-air victory.

## 1993

**Jan. 13, 1993.** USAF Maj. Susan Helms, aboard *Endeavour*, becomes the first US military woman in space.

**April 12, 1993.** NATO Operation Deny Flight begins, enforcing a ban ordered by the UN Security Council on aircraft operations in the no-fly zone of Bosnia.

**April 28, 1993.** Defense Secretary Les Aspin lifts the long-standing ban on female pilots flying US combat aircraft.

**April 29, 1993.** German test pilot Karl Lang makes the first demonstration of a high-angle-of-attack, post-stall, 180-degree turn known as a Herbst Maneuver while flying the Rockwell/MBB X-31A.

**June 14, 1993.** The first operational C-17A transport is delivered at Charleston AFB, S.C.

**July 1, 1993.** Day-to-day control of ICBMs passes to Air Force Space Command from Air Combat Command.

**Aug. 6, 1993.** Sheila E. Widnall becomes Secretary of the Air Force. Widnall is the first female Secretary for any of the armed services.

**Sept. 15, 1993.** The first B-52H bomber to be adapted for conventional warfare missions is completed.



*Delivery of the first operational B-2 stealth bomber.*

**Dec. 17, 1993.** On the 90th anniversary of the Wright brothers' first sustained flight, the first operational Northrop B-2 stealth bomber, *Spirit of Missouri*, is delivered to the 509th Bomb Wing at Whiteman AFB, Mo.

## 1994

**Feb. 10, 1994.** Lt. Jeannie M. Flynn, the first woman selected for USAF combat pilot training, completes her F-15E training.

**Feb. 28, 1994.** Air Force F-16s, operating under NATO command, shoot down four Bosnian Serb aircraft. It is NATO's first combat in its 45-year history.

**March 15, 1994.** Reports by *Air Force Magazine* reveal the politically slanted plans of the National Air and Space Museum to exhibit the *Enola Gay*, the B-29 that dropped the atomic bomb on Hiroshima. Under pressure from Congress, the news media, and public opinion, the exhibit is canceled and the museum director is fired.

**April 10, 1994.** In NATO's first air attacks on ground positions, two Air Force F-16C fighters destroy a Bosnian Serb Army command post with Mk 82 500-pound bombs.

**June 12, 1994.** The Boeing 777 makes its first flight. It is the first jetliner to be 100 percent digitally designed using three-dimensional computer graphics.

**June 29, 1994.** First visit of a US space shuttle to a space station, the Russian Mir.

**July 1994.** The 184th Bomb Group, Kansas Air National Guard, becomes the first Guard unit to be equipped with the B-1B.

**Aug. 2, 1994.** Two B-52s from the 2nd Bomb Wing, Barksdale AFB, La., set a world record while circumnavigating the Earth. Flying 47.2 hours, the bombers set a world record not only for the longest B-52 flight but also for the longest jet aircraft flight in history.

**Aug. 4, 1994.** Two B-1Bs complete a 19-hour nonstop global power mission.

**October 1994.** USAF responds to hostile movements in the Persian Gulf area by Iraq's Saddam Hussein by deploying 193 combat aircraft.

**Nov. 21-23, 1994.** In Project Sapphire, Air Mobility Command C-5s transport more than 1,300 pounds of highly enriched uranium from the former Soviet republic of Kazakhstan to Dover AFB, Del., to protect this large

supply of nuclear materials from terrorists, smugglers, and unfriendly governments.

## 1995

**Feb. 7, 1995.** First drop of live bombs from the B-2A stealth bomber. The two Mk 84 bombs were dropped as part of the B-2's first Red Flag exercise at Nellis AFB, Nev.

**April 7, 1995.** 2nd Lt. Kelly Flinn, the first woman to join a bomber crew, begins student pilot training with the 11th Bomb Squadron, 2nd Bomb Wing, Barksdale AFB, La.

**April 27, 1995.** The Global Positioning System (GPS) achieves full operational capability.

**June 2-3, 1995.** Two Dyess AFB, Tex.-based Rockwell B-1B crews land after completing a 36 hour, 13 minute, 36 second, 20,100-mile nonstop round-the-world flight.

**June 28, 1995.** The National Air and Space Museum of the Smithsonian Institution finally puts the *Enola Gay*, the B-29 that dropped the first atomic bomb on Japan, on display. Exhibition is straightforward.

**July 29, 1995.** Air Combat Command activates an unmanned aerial vehicle (UAV) unit and assigns it to the 57th Operations Group at Nellis AFB, Nev.

**Aug. 30, 1995.** US Air Force, Navy, and Marine aircraft lead Operation Deliberate Force, a NATO bombing campaign responding to Bosnian Serb mortar attacks that killed 38 civilians at an outdoor market in Sarajevo, Yugoslavia. The operation ends Sept. 14, 1995.

**Nov. 29, 1995.** First flight of the F/A-18E Super Hornet carrier-based fighter attack aircraft.

**Dec. 6, 1995.** A crew from the 37th Airlift Squadron at Ramstein AB, Germany, marks the beginning of Operation Joint Endeavor by flying their Lockheed C-130E to Tuzla, Bosnia.

**Dec. 20, 1995.** NATO air operation Decisive Endeavor begins to monitor and enforce peace in Bosnia.

## 1996

**Jan. 4, 1996.** First flight of the Army's YRAH-66 Comanche helicopter prototype.

**March 15, 1996.** After 77 years of aircraft manufacturing in the Netherlands, Fokker Aircraft declares bankruptcy.

**June 25, 1996.** Terrorist truck bomb explodes at Khobar Towers in Dhahran, Saudi Arabia, killing 19 airmen.

**July 27, 1996.** On the day it is retired from service, the Air Force officially bestows the nickname Aardvark on the General Dynamics F-111 in ceremonies at the (now Lockheed Martin) plant in Fort Worth, Tex.

**October 1996.** After the terrorist bombing at Khobar Towers in June, the Air Force moves to Prince Sultan Air Base in the Saudi Arabian desert.

**Oct. 8, 1996.** B-2A Spirit bombers hit 16 out of 16 targets with live Global Position System-Aided Targeting System/ GPS-Aided Munition (GATS/GAM) weapons during a test.

**Nov. 26, 1996.** The Air Force carries out the first successful test of a full-up GBU-31 Joint Direct Attack Munition (JDAM).

**Dec. 4, 1996.** The Mars Pathfinder, the first spacecraft designed to land on and explore Mars in nearly 21 years, is launched from Cape Canaveral AS, Fla.

## 1997

**Jan. 1, 1997.** Operation Northern Watch, the follow-on to Provide Comfort II, begins, as US aircrews patrol the no-fly zone over northern Iraq.

**Feb. 20, 1997.** The Global Hawk long-range reconnaissance UAV rolls out in San Diego.

**April 1, 1997.** The B-2A Spirit stealth bomber reaches



*Roll out of the first production F-22 Raptor.*

initial operational capability with the 509th Bomb Wing at Whiteman AFB, Mo.

**April 9, 1997.** The first F-22 fighter, *Spirit of America*, rolls out at the Lockheed plant at Marietta, Ga.

**July 4, 1997.** NASA's Pathfinder spacecraft lands on Mars.

**Sept. 7, 1997.** First flight of the F-22 Raptor takes place at Dobbins ARB, Ga.

**Sept. 12, 1997.** Air University begins the Air and Space Basic Course School at Maxwell AFB, Ala.

**Sept. 25, 1997.** Russia's Sukhoi S-32 stealth fighter makes its maiden flight at an air base outside of Moscow.

**Dec. 18, 1997.** Joint STARS officially achieves IOC seven years after the aircraft, in its development phase, was employed in the Persian Gulf War.

## 1998

**March 23-April 3, 1998.** The B-2 bomber makes its first sustained overseas deployment, to Guam, demonstrating the capability to deploy and operate from locations around the world.

**Aug. 4, 1998.** The Air Force announces plans to reorganize its operational capabilities into an Expeditionary Aerospace Force, with 10 standing Air Expeditionary Forces.

**Dec. 9, 1998.** Benjamin O. Davis Jr., retired World War II Air Force hero and leader of the all-black Tuskegee Airmen, is promoted to four-star rank.

**Dec. 16, 1998.** In Operation Desert Fox, a limited four-day operation, American and British aircraft and US air- and sea-launched cruise missiles strike some 100 targets in Iraq.

## 1999

**March 24, 1999.** Combat begins in Operation Allied Force, the NATO air campaign against Serbia.

**March 24, 1999.** B-2 bomber makes its combat debut in Operation Allied Force. It will account for 11 percent of the bombing.

**June 10, 1999.** Operations against Serbia are suspended and end formally on June 20.

**June 23-27, 1999.** Air Force Lt. Col. Eileen M. Collins becomes the first woman to command a space shuttle.

**Oct. 1, 1999.** First regular Air Expeditionary Force rotational cycle begins. The full cycle is 15 months, divided into five three-month periods.

**Oct. 6, 1999.** Destruction of 150 Minuteman III silos, in accordance with the Strategic Arms Reduction Treaty, begins near Langdon, N.D.

## 2000

**May 3, 2000.** Gen. Joseph W. Ralston becomes Supreme Allied Commander, Europe, the first Air Force officer to lead NATO in almost 40 years.

**July 25, 2000.** The Air Force CV-22, a special operations-modified version of the V-22 Osprey tilt-rotor aircraft, rolls out at Fort Worth, Tex.

**Sept. 27, 2000.** Boeing unveils the first X-45A Unmanned Combat Air Vehicle at its facilities at St. Louis.

**Oct. 24, 2000.** Lockheed Martin's X-35A Joint Strike Fighter demonstrator makes its first flight at Palmdale, Calif.

**Oct. 27, 2000.** Gen. Charles R. Holland becomes commander of US Special Operations Command, the first Air Force officer ever to command all SOF.

## 2001

**Jan. 11, 2001.** Congressionally mandated Space Commission recommends significant organizational realignments and increased responsibilities for the Air Force.

**Jan. 22-26, 2001.** Air Force Space Command's Space Warfare Center conducts "Schriever 2001," the first war game to explore requirements for space control, counters to enemy space capabilities, and the ability of an enemy to deny the US and its allies the use of space assets.

USAF photo by Lt. Col. William Ramsay



An ANG F-15 on combat air patrol over New York City.

**Feb. 21, 2001.** A Predator UAV—up to then strictly a surveillance platform—hits a stationary Army tank with a live Hellfire-C missile.

**April 22-23, 2001.** Global Hawk UAV takes off from Edwards AFB, Calif., and flies 22-hour, 8,600-mile mission, nonstop and unrefueled, to a precision landing in Australia.

**May 8, 2001.** The Air Force is designated as Department of Defense executive agent for space.

**Sept. 11, 2001.** Airliners hijacked by terrorists crash into the World Trade Center, the Pentagon, and a field in Pennsylvania. Operation Noble Eagle—combat air patrols above American cities—begins.

**Oct. 7, 2001.** Operation Enduring Freedom begins with air strikes against terrorist targets in Afghanistan.

**Oct. 8, 2001.** NATO announces that five of its AWACS aircraft will patrol off the East Coast of the United States. Patrols begin Oct. 12.

**Oct. 17, 2001.** Pentagon announces that it is employing armed Predator drones, equipped with Hellfire missiles, in Afghanistan.

**Oct. 26, 2001.** The Air Force awards the Joint Strike Fighter contract to Lockheed Martin.

**Nov. 13, 2001.** Taliban forces, hammered hard by airpower, abandon the Afghan capital of Kabul.

**Dec. 9, 2001.** Taliban rule in Afghanistan officially ends as the final province slips from its control.

## 2002

**May 22, 2002.** On its first flight, Boeing's X-45A Unmanned Combat Air Vehicle prototype takes off, flies for 14 minutes, and lands at Edwards AFB, Calif., controlled by an onboard computer preprogrammed with flight instructions.

**Sept. 17, 2002.** The F-22 fighter is redesignated the F/A-22 to emphasize its multiple roles, including attack.

**Oct. 7, 2002.** Operation Noble Eagle, combat air patrols above American cities, marks end of first year, with 25,100 total sorties flown.

## 2003

**Feb. 1, 2003.** Seven astronauts perish as the shuttle *Columbia* breaks up on re-entry, 200,000 feet above east Texas, on its return from a 16-day mission in space.

**March 17, 2003.** Operation Northern Watch flies its last mission over the northern no-fly zone in Iraq. The operation is officially terminated May 2.

**March 19, 2003.** Operation Southern Watch flies its last mission over the southern no-fly zone in Iraq.

**March 20, 2003.** Air Force F-117 fighters and cruise missiles from six US warships strike "leadership targets of opportunity" in Iraq at 5:35 a.m., Baghdad time.

**March 21, 2003.** Coalition air forces launch nearly 1,000 strike sorties as A-Day, the air campaign, begins at 9 p.m. for Operation Iraqi Freedom.

**April 9, 2003.** Baghdad falls to coalition ground troops.

**May 1, 2003.** President George W. Bush, speaking from the deck of the aircraft carrier *Abraham Lincoln*, declares that major combat operations in Iraq are over. ■