

# AIR FORCE Magazine's Aerospace Chronology

## *Up From Kitty Hawk*



### **PART ONE**

**1903-1979**



### **PART TWO**

**1980-present**

**Air Force Magazine**  
Online Journal of the Air Force Association



## Up From Kitty Hawk 1980-1989

*F-117 Nighthawk stealth fighters, first flight June 1981.*

Articles noted throughout the chronology are hyperlinked to the online archive for *Air Force Magazine* and the *Daily Report*.



### 1980

**March 12-14, 1980.** Two B-52 crews fly nonstop around the world in 43.5 hours, covering 21,256 statute miles, averaging 488 mph, and carrying out sea surveillance/reconnaissance missions.

**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.

#### [Desert One](#)

**May 18-June 5, 1980.** Following the eruption of Mount Saint Helens in northwest Washington State, the Aerospace Rescue and Recovery Service, Military Airlift Command, and the 9th Strategic Reconnaissance Wing conduct humanitarian-relief efforts: Helicopter crews lift 61 people to safety, while SR-71 airplanes conduct aerial photographic reconnaissance.

**May 28, 1980.** The Air Force Academy graduates its first female cadets. Ninety-seven women are commissioned as second lieutenants. Lt. Kathleen Conly graduates eighth in her class.

**Aug. 22, 1980.** The 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.”

**Sept. 18, 1980.** An explosion destroys the 308th Strategic Missile Wing’s Titan II launch complex 374-7 in Little Rock, Ark., killing one person.

**Oct. 1, 1980.** Operation Elf begins with deployment of four USAF E-3A AWACS aircraft to Riyadh, Saudi Arabia, to protect Saudi airspace during the Iran-Iraq War. Three KC-135s also deploy.

**Oct. 3, 1980.** Piloting a USAF HH-3 Jolly Green Giant helicopter, Capt. John J. Walters and his crew rescue 61 passengers and crewmen from the burning Dutch luxury liner *Prinsendam* in the Pacific Ocean, hoisting and airlifting them from lifeboats to a supertanker. Walters receives the Mackay Trophy.

## 1981

**January-June, 1981.** Operating from Corpus Christi, Tex., and Little Rock, Ark., USAF C-130s deliver 500 tons of arms, ammunition, helicopters, and other war materiel to El Salvador to help the government combat leftist guerrillas.

**Jan. 11, 1981.** The Boeing Company delivers USAF's first Air Launched Cruise Missiles (ALCMs) to the 416th Bombardment Wing at Griffiss AFB, N.Y.

**Jan. 18-25, 1981.** Two USAF C-9 Nightingales transport 52 Americans held hostage by Iran for 444 days from Tehran to Rhein-Main AB, Germany.

### [The Carter Doctrine](#)

**Feb. 9, 1981.** Verne Orr becomes Secretary of the Air Force.

**March 17, 1981.** McDonnell Douglas Aircraft Company delivers the first KC-10A Extender tanker/cargo aircraft to Strategic Air Command.

**April 12, 1981.** The space shuttle *Columbia*, the world's first reusable manned space vehicle, makes its first flight. It is flown by astronauts John W. Young and Navy Capt. Robert L. Crippen.

**April 14, 1981.** The space shuttle *Columbia* lands on Rogers Dry Lake, Edwards AFB, Calif., after its first orbital mission. This was the first time in history that an orbital vehicle left earth under rocket power and returned via its aircraft-style wings.

**May 2, 1981.** An airborne laser destroys an aerial target for the first time when the Airborne Laser Laboratory (ALL), a modified KC-135 aircraft armed with a carbon dioxide laser, shot down a drone over White Sands Missile Range, N.M. Two years later, the ALL successfully shoots down five Sidewinder air-to-air missiles, proving its utility as an antimissile system.

**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.

### [Osirak and Beyond](#)

### [Air Strike at Osirak](#)

**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. The existence of this aircraft would not be publicly revealed until 1988.

### [Two Decades of Stealth](#)

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

**Aug. 1, 1981.** CMSgt. Arthur L. Andrews becomes Chief Master Sergeant of the Air Force.

**Aug. 3, 1981.** USAF air traffic controllers begin manning US airport facilities to allow commercial airlines to continue service during an illegal strike by federal civilian controllers.

**Sept. 15, 1981.** Strategic Air Command receives its first TR-1A reconnaissance aircraft, the Lockheed-built aircraft is an improved and enlarged version of the U-2 reconnaissance airplane.

**Sept. 26, 1981.** The Boeing 767 twin-engine, twin-aisle jetliner makes its first flight at Everett, Wash. Flight decks of the 767 and its stablemate, the single-aisle Boeing 757 are nearly identical, so pilots can easily qualify to fly both.

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

### [A Tale of Two Bombers](#)

**Nov. 10, 1981.** For the first time, US Air Forces in Europe and the German Air Force test a section of the autobahn for emergency landings.

**Nov. 23, 1981.** During Bright Star '82, eight B-52 bombers assigned to the strategic-projection force establish a record for the longest nonstop B-52 bombing mission. Flying a distance of 15,000 miles with three midair refuelings in 31 hours from air bases in North Dakota, the bombers deliver their conventional munitions on a simulated runway in Egypt.

## 1982

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

### [The \(Tacit\) Blue Whale](#)

**Feb. 24, 1982.** NATO receives the first of 18 E-3A AWACS aircraft at Geilenkirchen AB, Germany.

**April 2, 1982.** With the help of airpower, Argentina invades and captures the Falkland Islands, a British crown colony. On May 4, an Argentine airplane sinks the British destroyer HMS *Sheffield* with an Exocet missile. Argentine aircraft sink three more British ships, including two frigates and a destroyer, before British forces prevail, aided by land and carrier-based aircraft. On June 14, the last Argentine forces surrender to British troops in the Falklands.

### [The Wars of Eighty-Two](#)

**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.

### [The Bekaa Valley War](#)

**June 10, 1982.** Strategic Air Command's first all-woman KC-135 crew, assigned to the 924th Air Refueling Squadron, Castle AFB, Calif., performs a five-hour training mission that includes a midair refueling of a B-52 bomber.

**July 1, 1982.** US Air Force activates its first Ground Launched Cruise Missile (GLCM) wing, the 501st Tactical Missile Wing, at RAF Greenham Common in England.

### [The Short, Happy Life of the Glick-Em](#)

**July 1, 1982.** Gen. Charles A. Gabriel becomes Air Force Chief of Staff.

**Sept. 1, 1982.** USAF establishes Space Command, with headquarters at Peterson AFB, Colo. (USAF

redesignates it Air Force Space Command on Nov. 15, 1985, following establishment of US Space Command on Sept. 23, 1985.)

### [Space Command: Setting the Course for the Future](#)

**Sept. 16, 1982.** Capt. Ronald L. Cavendish and his crew successfully land their B-52 Stratofortress after the aircraft lost both of its rudder-elevator hydraulic systems. The crew earns the Mackay Trophy for this feat, which had never been accomplished without significant damage to or complete destruction of the aircraft. (The crew of E-21 from the 19th Bombardment Wing at Robins AFB, Ga.: Cavendish, 2nd Lt. Frank A. Boyle, 1st Lt. Michael J. Connor, 1st Lt. James D. Gray, Capt. Ronald D. Nass, 1st Lt Gerald E. Valentini, and TSgt. Ronald B. Wright.)

**Sept. 21, 1981.** A B-52 Stratofortress of the 416th Bombardment Wing, Griffiss AFB, N.Y., conducts the first operational test of an ALCM.

**Nov. 11, 1982.** Vance D. Brand, Robert F. Overmyer, Joseph P. Allen IV, and William B. Lenoir lift off in the space shuttle *Columbia*. STS-5 is the first mission to send four astronauts aloft at one time and is the first fully operational flight of a space shuttle.

## 1983

**Feb. 9, 1983.** The first rewinged C-5A makes its first flight at Marietta, Ga. It will be delivered to the Air Force at the end of the month.

**Feb. 10, 1983.** The Cruise Pact is signed by the US and Canada, allowing testing of US cruise missiles in northern Canada.

**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.

### [Here Comes the B-1B](#)

**April 1-May 1, 1983.** The Air Force transfers 31 units and four installations from Strategic Air Command to Space Command, which took over missile warning and space surveillance systems.

**May 9, 1983.** A C-141 crew from the 18th Military Airlift Squadron, McGuire AFB, N.J., becomes USAF's first all-female crew to fly a round-trip mission across the Atlantic.

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

**June 18, 1983.** The first American woman to go into space, Sally K. Ride, is aboard *Challenger* on the seventh space shuttle mission (STS-7).

**July 1, 1983.** As war rages between Iran and Iraq, posing a threat to the oil-rich nations of the Persian Gulf, the US Air Force activates a unit in Saudi Arabia—a provisional support squadron at Riyadh Air Base—its first in that country.

**July 4, 1983.** Flying in their new General Dynamics F-16A Fighting Falcons, the USAF Thunderbirds perform before an estimated crowd of two million people at Coney Island, N.Y.

**Aug. 1, 1983.** CMSgt. Sam E. Parish becomes Chief Master Sergeant of the Air Force.

**Aug. 30, 1983.** Two milestones are recorded on the STS-8 space shuttle mission: The oldest astronaut, William E. Thornton, 54, and the first black American astronaut, USAF Lt. Col. Guion S. Bluford Jr., are sent aloft on the space shuttle *Challenger* with three others.

**Sept. 1, 1983.** A Soviet Su-15 interceptor shoots down a Boeing 747 Korean airliner with 269 people aboard near Sakhalin Island, north of Japan. Three USAF HC-130 aircraft from the 33rd Aerospace Rescue and Recovery Squadron at Kadena AB, Japan, participate in the subsequent search but found no survivors.

**Sept. 3-25, 1983.** As part of Operation Rubber Wall, Military Airlift Command flies 85 C-141, 24 C-5, and four C-130 missions to transport about 4,000 tons of supplies from the US to American marines in Lebanon.

**Sept. 5, 1983.** A KC-135 crew led by Capt. Robert J. Goodman saves an F-4E Phantom and its crew over the Pacific, refueling the F-4E four times and towing it with a refueling boom. The KC-135 crew received the 1983 Mackay Trophy for the most meritorious flight of the year.

**Oct. 23-Dec. 9, 1983.** After a terrorist bomb explodes at a Marine Corps barracks in Beirut, Lebanon, Military Airlift Command and Air Force Reserve cargo and aeromedical evacuation aircraft transport 239 dead and 95 wounded Americans to the US and Europe for burial and medical treatment.

**Oct. 24-Nov. 3, 1983.** In Operation Urgent Fury, American military forces raid the Caribbean island of Grenada to evacuate US citizens, restore democracy, and eliminate a hostile Cuban/Soviet base. Military Airlift Command and Air Force Reserve C-5, C-141, and C-130 aircraft fly 496 missions to transport 11,389 passengers and 7,709 tons of cargo to Grenada. Strategic Air Command tankers and Tactical Air Command fighters, as well as Air National Guard EC-130Es, support the operation, which accomplished its triple mission. USAF Lt. Col. James L. Hobson Jr., who leads a flight of MC-130Es to successfully complete an airborne assault on Point Salinas, dropping paratroopers at the exact planned time over target in a hail of anti-aircraft fire, receives the 1984 Mackay Trophy.

**Oct. 25-Nov. 2, 1983.** US forces conduct Operation Urgent Fury, the rescue of American medical students on the Caribbean island of Grenada.

"Blue Christmas Coming Up," *Air Force Magazine*, January 1984 (not yet online)

**Nov. 28, 1983.** The ninth space shuttle mission (STS-9) is launched. Mission Commander John W. Young becomes the first person to make six spaceflights, and *Columbia* is the first spacecraft to be launched with a crew of six. The flight is also the first to use the European Spacelab module.

## 1984

**Feb. 3-11, 1984.** Navy Capt. Bruce McCandless II becomes the first human satellite as he takes the self-contained Manned Maneuvering Unit (MMU) out for a spin on Feb. 8 while in Earth orbit on space shuttle mission 41-B.

**March 19-April 9, 1984.** The US Air Force flies 28 C-5 and 17 C-141 missions and deployed an E-3A Sentry to support Egypt and Sudan against threats from Libya.

**April 6-13, 1984.** The 11th US space shuttle mission (41-C) is a spectacular success as the defective

Solar Maximum Mission satellite (Solar Max) is repaired in orbit. After mission specialist George D. Nelson fails to capture the satellite on his spacewalk, Terry J. Hart uses Challenger's remote manipulator arm to catch Solar Max on the fly. Nelson and James D.A. van Hoften repair the satellite in the shuttle's payload bay before it is released.

**May 16, 1984.** USAF C-141s deliver 22 tons of medical supplies to Afghan refugees at Peshawar, Pakistan. The refugees had fled their country because of war.

**May 22, 1984.** The Chiefs of Staff of the Army and the Air Force sign a memorandum of agreement titled "Joint Force Development Process," also known as "The 31 Initiatives."

**Aug. 7–Oct. 2, 1984.** In Operation Intense Look—the deployment of US minesweeping assets to the Red Sea—Military Airlift Command flies 44 missions to transport 983 passengers and 1,324 tons of cargo. Egypt and Saudi Arabia had requested the minesweeping after mysterious shipping explosions.

**Aug. 27, 1984.** The first Grumman X-29A forward swept wing research aircraft rolls out at the company's Calverton, 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.

"The Magnificent B-1B," *Air Force Magazine*, November 1984 (not yet online)

### [Here Comes the B-1B](#)

**Sept. 18, 1984.** Col. Joe Kittinger Jr., USAF (Ret.), completes the first successful solo crossing of the Atlantic Ocean in a balloon, traveling from Caribou, Maine, to Savona, Italy, in 84 hours and setting a new balloon distance record of 3,550 miles.

**Oct. 5–13, 1984.** On the 13th space shuttle mission, *Challenger* lifts off for the first time with a crew of seven. Mission 41-G is the first to have two female astronauts (Sally K. Ride and Kathryn D. Sullivan, who will become the first American woman to make a spacewalk) and the first to have a Canadian astronaut aboard (Marc Garneau). Commander Robert L. Crippen becomes the first to fly on the shuttle four times. Aloft, the crew refuels a satellite in orbit for the first time.

**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. This is the first of 100 aircraft to be built in the revitalized B-1 bomber program.

**Dec. 14, 1984.** At Edwards AFB, Calif., Grumman pilot Chuck Sewell makes the first flight of the X-29A forward-swept wing demonstrator. The X-29s, two of the most unusual aircraft ever built, are designed to prove the aerodynamic benefits of wings that appear to have been put on backwards.

## 1985

**Jan. 1, 1985.** Lt. Col. David E. Faught, a 97th Bombardment Wing instructor pilot, saves the lives of seven fellow crewmen and a KC-135, landing the aircraft despite the fact that its nose gear would not extend. He receives the Mackay Trophy.

**Jan. 24–27, 1985.** The 15th space shuttle mission (51-C) is the first all-military flight. The *Discovery* crew of Navy Capt. Thomas K. Mattingly (mission commander), Air Force Lt. Col. Loren J. Shriver (pilot), and Air Force mission specialists Lt. Col. Ellison S. Onizuka and Maj. Gary E. Payton, along with Marine Lt. Col. James F. Buchli, deploy a classified payload, believed to be a signals intelligence satellite.



**July 1, 1985.** A US Air Force C-141 from the 438th Military Airlift Wing transports 39 passengers released from Trans World Airlines flight 847, which was hijacked on June 30 by two Shiite Muslims. At Rhein-Main Air Base, Germany, Vice President George H.W. Bush greets the survivors upon their arrival from Damascus, Syria.

**July 7, 1985.** Strategic Air Command accepts its first operational B-1B Lancer, a long-range bomber with variable swept wings. It goes to the 96th Bombardment Wing at Dyess AFB, Tex.

**Aug. 23, 1985.** Air Force Systems Command successfully conducts its first "cold launch" from an underground silo, a modified Minuteman launch facility at Vandenberg AFB, Calif. The cold-launch technique ejects the missile from the silo by gas pressure, and the propellant ignites after it becomes airborne. This technique causes less damage to the silo and reduces the time needed for another launch.

**Sept. 13, 1985.** The first test of the LTV-Boeing ASM-135A air-launched anti-satellite weapon against a target is successfully carried out over the Western Test Range, 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.

### [The Flying Tomato Can](#)

**Sept. 21–30, 1985.** USAF airlift units fly more than 360 tons of relief cargo to Mexico City following massive earthquakes there. On Sept. 23, the 89th Military Airlift Wing transports First Lady Nancy Reagan to Mexico City to express the nation's concern and to deliver a check for \$1 million.

**Oct. 7, 1985.** Navy F-14 Tomcats intercept and surround an Egypt Air Boeing 737 in international airspace over the Mediterranean. The 737, which is carrying the Palestinian terrorists who had hijacked the Italian luxury liner *Achille Lauro*, is forced to land in Sigonella AB, Sicily, where the terrorists are taken into custody.

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

### [In Focus: Peacekeeper and the Protestors](#)

### [Readiness Counts, Too](#)

### [The Future of the ICBM](#)

**Nov. 15, 1985.** USAF redesignates Space Command as Air Force Space Command.

**Dec. 9, 1985.** Russell A. Rourke becomes Secretary of the Air Force.

**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. 8, 1986.** Military Airlift Command accepts delivery of its first C-5B Galaxy, an improved version of the C-5A, at Altus AFB, Okla.



**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 are 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. The manned space program will be halted for two years while vehicular and management flaws are corrected.

### Coming Back in Space

**Feb. 18–22, 1986.** The 129th Aerospace Rescue and Recovery Group and the 41st Aerospace Rescue and Recovery Squadron employ four HH-3 Jolly Green Giant helicopters, two HH-53 helicopters, and three C-130 Hercules aircraft to assist flood victims of the Russian and Yuba Rivers of northern California. The airmen evacuate 520 flood victims, save 33 lives, and supply more than 3,000 sandbags to Army troops at the disaster site.

**March 4, 1986.** During Exercise Bright Star, a combined US-Egyptian training operation, USAF tankers refuel foreign aircraft for the first time.

**March 5, 1986.** During a Coronet East deployment, Capt. Marc C. Felman and his KC-10 Extender crew perform an emergency refueling of Marine A-4M aircraft in the middle of the Atlantic, an action for which they receive the Mackay Trophy.

**March 25, 1986.** For the first time, an all-woman Minuteman missile crew serves on alert duty; the crew is assigned to the 351st Strategic Missile Wing, Whiteman AFB, Mo.

**April 14–15, 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.

### El Dorado Canyon

**April 24–May 7, 1986.** Veterans of three wars attend the Air Force Association's "Gathering of Eagles" in Las Vegas.

**April 28–May 7, 1986.** Air Weather Service units support US efforts to track the movement of radioactive contamination from the Chernobyl nuclear-reactor accident in the Soviet Union. WC-130 Hercules aircraft fly air-sampling missions.

**June 5, 1986.** The Air Force orders two specially modified and equipped Boeing 747-200s to be the new Presidential transports. The new Air Force One aircraft, to be assigned to Andrews AFB, Md., will be designated VC-25A.

**June 9, 1986.** Edward C. Aldridge Jr. becomes Secretary of the Air Force.

**July 1, 1986.** Gen. Larry D. Welch becomes Air Force Chief of Staff.

**July 1, 1986.** CMSgt. James C. Binnicker becomes Chief Master Sergeant of the Air Force.

**July 19–28, 1986.** Twenty-four C-141s and eight C-130s fly 32 missions during Operation Southern Haylift, supplying some 536 tons of donated hay (more than 19,000 bales) to drought-stricken farmers in several southeastern states. The operation saves hundreds of cattle as well as the livelihoods of a great many Southern livestock farmers.

**Oct. 1, 1986.** The Goldwater-Nichols Act gives theater commanders increased control of forces from all services.

**Oct. 10, 1986.** The Air Force formally places the LGM-118A Peacekeeper (also known as MX missile) on alert duty.

**Dec. 11, 1986.** The McDonnell Douglas F-15E Strike Eagle, the two-seat, dual role air-to-air and air-to-ground variant of the F-15 family, flies for the first time.

**Dec. 23, 1986.** Dick Rutan and Jeanna Yeager land at Edwards Air Force Base, Calif., after nine-day flight in experimental aircraft Voyager, the first-ever non-stop, 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.

**May 17, 1987.** Forty-four years to the day its crew became the first to complete 25 bombing missions over Europe, the *Memphis Belle*, arguably the most famous Boeing B-17 Flying Fortress ever built, is placed in its permanent home, a covered pavilion in a park on Mud Island, in Memphis, Tenn., in gala ceremonies. The dedication includes a flyby of seven privately owned B-17s.

### [The Making of an Iconic Bomber](#)

**July 4, 1987.** Lt. Col. Robert Chamberlain and crew set a dozen recognized class records for speed with payload (jet aircraft) in a Rockwell B-1B out of Palmdale, Calif. The brand-new aircraft is on an acceptance flight and flies a 500-mile closed course near Vandenberg AFB, Calif. This flight and one on Sept. 17 (see below) are instrumental in award of the 1987 Mackay Trophy to Det. 15, Air Force Plant Representative Office and B-1B System Program Office, Air Force Systems Command.

**July 24, 1987.** In Operation Earnest Will, the US begins providing protection to reflagged Kuwaiti oil tankers in the Persian Gulf during the Iran-Iraq War. USAF E-3 AWACS warn of aerial threats, C-5 and C-141 aircraft airlift minesweeping personnel and equipment to the theater, and KC-10 and KC-135 tankers refuel escorting Navy fighters. The operation continues until Nov. 17, 1988.

**Sept. 17, 1987.** Maj. Brent A. Hedgpeth and crew set nine recognized class records for 3,100 miles with and without payload (jet aircraft) of 655.09 mph in a Rockwell B-1B out of Palmdale, Calif. This flight and one on July 4 (see above) are instrumental in award of the 1987 Mackay Trophy to Det. 15, Air Force Plant Representative Office and B-1B System Program Office, Air Force Systems Command.

**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.

**Oct. 1, 1987.** Air Force Systems Command relinquishes Onizuka AFS, Calif., and the Air Force Satellite Control Network—a set of worldwide remote-tracking stations—to Air Force Space Command.

**Dec. 8, 1987.** The US and the Soviet Union sign the Intermediate-Range Nuclear Forces Treaty, agreeing to remove all intermediate-range (620 miles to 3,415 miles) missiles from Europe. The agreement results in the inactivation of six USAF tactical missile wings equipped with Ground-Launched Cruise Missiles (GLCM).

### [Restoring NATO's Flexible Response](#)

### [The Short, Happy Life of the Glick-Em](#)

## 1988

**Jan. 1, 1988.** SAC changes its missile crew assignment policy to permit mixed male/female crews in Minuteman and Peacekeeper ICBM launch facilities.

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

### [A Tale of Two Bombers](#)

**Feb. 10, 1988.** The 2,000th F-16 fighter built is accepted by Singapore.

**March 3, 1988.** The Pioneer 8 solar orbiter, which was launched Nov. 8, 1968, with a six-month life expectancy, is finally declared defunct.

**March 17–18, 1988.** USAF transport aircraft carry some 3,200 US soldiers to Honduras for Exercise Golden Pheasant, responding to a Honduran government request after Honduras experiences an incursion of Sandinista forces from Nicaragua.

**April 5–8, 1988.** Eight C-5s and 22 C-141s of Military Airlift Command transport 1,300 security specialists from the US to Panama to counteract political instability that threatens the safety of several thousand US citizens in the Canal Zone.

**April 17–July 23, 1988.** Capt. Michael Eastman and his C-5 transport crew are the first US airmen to land at Semipalatinsk, Kazakhstan, in the Soviet Union. They deliver sensitive verification equipment for monitoring nuclear tests under existing international agreements. Eastman and crew receive the 1988 Mackay Trophy.

**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.

### [Finally, the Osprey](#)

**June 8, 1988.** The Grumman X-29 breaks the record for most flights by an X-series aircraft, as NASA pilot Rogers Smith flies the No. 1 aircraft for the 200th time, breaking the record of 199 flights set by the three North American X-15s.

### [Coming On and Coming Up](#)

**Aug. 2, 1988.** As evidence of thawing superpower relations, US Secretary of Defense Frank C. Carlucci is given the opportunity to inspect the Soviet Tu-160 Blackjack strategic bomber during a visit to Kubinka Air Base, near Moscow.

**Aug. 15–28, 1988.** USAF C-5s airlift a 500-member United Nations peacekeeping force from Canada to Turkey and Iraq to monitor a cease-fire agreement between the two countries.

**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. 7, 1988.** The US Postal Service issues a 65-cent commemorative stamp bearing the likeness of Gen. H.H. "Hap" Arnold in ceremonies at the Arnold Engineering and Development Center at Arnold AFB, Tenn.

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

[The Secret Doings at Tonopah](#)

[How the Skunk Works Fielded Stealth](#)

[The Black Jet](#)

**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. 19, 1988.** Boeing KC-135R tanker crews from the 19th Air Refueling Wing (Robins AFB, Ga.), 340th ARW (Altus AFB, Okla.), 319th Bomb Wing (Grand Forks AFB, N.D.), and 384th BW (McConnell AFB, Kan.) set 16 class time-to-climb records in flights from Robins.

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

[The Spirit of Missouri](#)

[With the First B-2 Squadron](#)

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

**Dec. 9, 1988.** The first Sierra Research-de Havilland Canada E-9A airborne telemetry data relay aircraft is delivered to the Air Force's 475th Weapons Evaluation Group at Tyndall AFB, Fla.

**Dec. 9, 1988.** For the first time, the US flies airplanes directly to the Soviet Union without Soviet personnel on board as observers. The flights are part of the first humanitarian airlift to the Communist country, which earlier had refused such assistance. Over the course of eight weeks, Military Airlift Command aircraft and crews deliver more than 311 tons of relief cargo to victims of an earthquake in Yerevan, Armenia.

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

[In Focus: The Dual-Role Eagle](#)

## 1989

**Jan. 4, 1989.** Two Libyan MiG-23 Flogger fighters, displaying hostile intentions, are shot down over international waters by an element of US Navy F-14 Tomcats operating from the carrier USS *John F. Kennedy* (CVN-67).

**Feb. 14, 1989.** The first McDonnell Douglas Delta II space booster is launched from Cape Canaveral

AFS, Fla. The 128-foot-tall rocket boosts the first operational NS-7 Block II Global Positioning System satellite into orbit.

**Feb. 16, 1989.** Northrop completes the 3,806th and final aircraft in the F-5/T-38 series. The milestone aircraft, an F-5E, will later be delivered to Singapore.

**March 1, 1989.** The first General Dynamics F-16A modified under the Air Force's air defense fighter program is delivered to the Air National Guard's 114th Tactical Fighter Training Squadron at Kingsley Field, Ore.

**March 19, 1989.** Bell pilot Dorman Canon and Boeing pilot Dick Balzer make the first flight of the Bell-Boeing V-22 Osprey at Bell Helicopter Textron's Flight Research Center in Arlington, Tex.

### [The Amazing Osprey](#)

### [The Osprey Factor](#)

### [Finally, the Osprey](#)

**March 21, 1989.** NASA completes the flight test of the Mission Adaptive Wing, a modification to the advanced fighter technology integration (AFTI) F-111 that allows the curvature of the aircraft's leading and trailing edges to be varied in flight. The MAW completes 144.9 hours on 59 flights.

**March 30, 1989.** Fairchild delivers the first of 10 C-26A operational support aircraft to the Air National Guard's 147th Fighter-Interceptor Group at Ellington ANGB, Tex. The C-26 is the military version of the Metro III commuter aircraft.

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

**April 17–18, 1989.** Lockheed pilots Jerry Hoyt and Ron Williams set 16 class time-to-climb and altitude records in separate flights in a NASA U-2C at the Dryden Flight Research Center at Edwards AFB, Calif. The 32-year-old aircraft, which was loaned to NASA in 1971, is retired to a museum after the flights.

**May 4, 1989.** Air Force Maj. Mark C. Lee releases the Magellan probe from the payload bay of the space shuttle orbiter Atlantis during the first day of the four-day STS-30 space mission. The 21-foot-tall, 7,604-pound Magellan probe is designed to map Venus with its synthetic aperture radar.

**May 13–18, 1989.** In Operation Nimrod Dancer, US troops deploy with USAF airlift support to the Canal Zone because of an increasing threat to US personnel in Panama.

### [A Small War in Panama](#)

**May 22, 1989.** Donald B. Rice becomes Secretary of the Air Force.

**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. The booster, nearly 20 stories tall, carries a classified military payload.

**July 6, 1989.** Retired Air Force Gen. James H. "Jimmy" Doolittle receives the nation's highest civilian award, the Presidential Medal of Freedom, in White House ceremonies.

"Jimmy Doolittle's Greatest Contributions," *Air Force Magazine*, September 1985 (not yet online)

### [An American Hero](#)

**July 6, 1989.** The 169th and last MGM-31 Pershing 1A intermediate-range ballistic missile is destroyed at the Longhorn Army Ammunition Plant near Karnack, Tex., under the terms of the intermediate nuclear forces (INF) treaty.

**July 17, 1989.** Northrop Chief Test Pilot Bruce Hinds and Air Force Col. Richard Couch, director of the B-2 Combined Test Force, make the first flight of the Northrop B-2A advanced technology bomber, flying from Air Force Plant 42 in Palmdale, Calif., to the Air Force Flight Test Center at Edwards AFB, Calif.

**Aug. 2, 1989.** The Navy successfully carries out the first undersea launch of the Lockheed UGM-133A Trident II (D5) sea-launched ballistic missile. The missile is launched from USS *Tennessee* (SSBN-734) while cruising off Florida.

**Aug. 6, 1989.** As further evidence of the thaw in US-Soviet relations, two MiG-29 fighters and the giant An-225 transport land and refuel at Elmendorf AFB, Alaska, on their way to an air show in Canada.

**Aug. 8–13, 1989.** The 30th mission in the US space shuttle program is carried out, as the crew of five service astronauts launches a classified payload from the orbiter *Columbia*. It is the longest military shuttle flight to date.

**Aug. 24, 1989.** The Voyager 2 space probe completes its grand tour of the solar system as the 1,787-pound vehicle passes within 3,000 miles of Neptune. Voyager 2 was launched in August 1977.

**Sept. 14, 1989.** The Bell-Boeing V-22 Osprey tilt-rotor aircraft achieves its first conversion from helicopter mode to airplane mode while in flight.

**Sept. 15, 1989.** McDonnell Douglas delivers the 500th AH-64 Apache helicopter to the US Army at the company's plant in Mesa, Ariz.

**Sept. 21–Nov. 15, 1989.** USAF aircraft transport 4,330 tons of relief equipment and supplies to the victims of Hurricane Hugo in the Caribbean Sea and South Carolina and airlift some 2,000 passengers, including evacuees and medical and engineering personnel.

**Oct. 1, 1989.** Air Force Gen. Hansford T. Johnson, pinning on his fourth star and assuming command of US Transportation Command and MAC, becomes the first Air Force Academy graduate to attain the rank of full general. He is a member of the Academy's first graduating class of 1959.

**Oct. 3, 1989.** USAF receives the last of 37 Lockheed U-2R/TR-1A/B high-altitude reconnaissance aircraft.

**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. This is the first time an aircraft so large has landed on the ice continent. The C-5B, carrying 72 passengers and 168,000 pounds of cargo (including two fully assembled Bell UH-1N helicopters), lands without skis.

**Oct. 4, 1989.** A B-1B crew from the 96th Bombardment Wing at Dyess AFB, Tex., land successfully despite a retracted landing gear in the nose, a first for the B-1B. There were no injuries and only minimal damage to the bomber. The crew receives the 1989 Mackay Trophy.

**Dec. 3, 1989.** Solar Max, the first satellite to be repaired in orbit, is destroyed as it re-enters the atmosphere over Sri Lanka.

**Dec. 14, 1989.** MAC approves a policy change that allows female aircrew members to serve on C-130 and C-141 combat airdrop missions.

**Dec. 19, 1989.** Airlift begins for Operation Just Cause, in which USAF plays a major role, including air strikes, airlift, airdrops, and aerial refueling. The F-117A stealth fighter is used operationally for the first time. In the largest night-combat airdrop since World War II, USAF aircraft transport 9,500 airborne troops from various locations to Panama in fewer than 36 hours. An AC-130H crew (mission #1J1600GA354) of the 16th Special Operations Squadron receives the 1990 Mackay Trophy. Active, Air National Guard, and Air Force Reserve Command special operations crews participate in Just Cause.

#### [A Small War in Panama](#)

#### [The Black Jet](#)

**Dec. 29–31, 1989.** Two C-130s of the 435th Tactical Airlift Wing and the 37th Tactical Airlift Squadron transport 31 tons of medical supplies to Bucharest, Rumania, for treatment of civilians wounded in a violent but successful anticommunist revolution.





## Up From Kitty Hawk 1990-1999

*Desert Storm, January 1991.*

Articles noted throughout the chronology are hyperlinked to the online archive for *Air Force Magazine* and the *Daily Report*.



### 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. SR-71 crews flew more than 65 million miles, half at speeds above Mach 3.

[Cold War From on High](#) (pictorial)

[Going Nowhere Fast](#)

**Jan. 31, 1990.** Coronet Cove, the Air National Guard's rotational deployments to defend the Panama Canal, ends after more than 11 years. More than 13,000 sorties, totaling 16,959 hours, had been flown since the operation began.

**Feb. 21, 1990.** The Air Force returns to dual-track pilot training. The team of McDonnell Douglas, Beech, and Quintron is selected over two other teams to provide the Tanker/Transport Training System. This turnkey operation will train pilots going on to fly "heavies" using the T-1A Jayhawk.

**March 1, 1990.** The Rockwell/MBB X-31A Enhanced Fighter Maneuverability (EFM) demonstrator rolls out at Rockwell's facility at Air Force Plant 42 in Palmdale, Calif. A joint venture between the US and West Germany, the X-31 is designed to prove technologies that will allow close-in aerial combat beyond normal flying parameters.

**March 6, 1990.** Lt. Col. Ed Yielding (pilot) and Lt. Col. J.T. Vida (reconnaissance systems officer) set four speed records, including a transcontinental mark of 2,112.52 mph (one hour, eight minutes, 17 seconds elapsed time) over the 2,404.05-mile course from Oxnard, Calif., to Salisbury, Md., on, what was at the time, the last Air Force flight of the Lockheed SR-71 Blackbird (see Jan. 25 entry).

**March 26, 1990.** Grumman rolls out the first production-standard version of the improved F-14D Tomcat for the US Navy at its plant 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.

**April 4, 1990.** McDonnell Douglas turns over the last of 60 KC-10A Extender tanker/cargo aircraft to the Air Force at its plant in Long Beach, Calif.

**April 5, 1990.** The first launch of the Orbital Sciences/Hercules Aerospace Pegasus air-launched space booster, the first all-new booster in two decades, is successfully carried out off the California coast.

**April 24, 1990.** The space shuttle *Discovery*, with a crew of five, lifts off on the 35th mission in the shuttle program. The next day, astronaut Steven A. Hawley releases the Hubble Space Telescope, an on-orbit observatory with great scientific promise. Although the telescope gathers unprecedented images, it proves to be somewhat myopic (exhibiting a two-micron-wide spherical aberration, something less than the width of a human hair) and will have to be repaired on a 1993 shuttle flight.

**April 25, 1990.** Boeing delivers the 200th re-engined and upgraded KC-135R tanker to the Air Force. It is delivered to the 340th Air Refueling Group at Altus AFB, Okla.

**April 30, 1990.** USAF announces that Air Force Special Operations Command, the first new command since 1982, will be established by early summer, as a component of US Special Operations Command. (See May 22 entry.)

**May 4, 1990.** The Hughes/Raytheon AIM-120A Advanced Medium-Range Air-to-Air Missile (AMRAAM) passes its “final exam”—demonstration of its ability to achieve multiple victories against multiple targets. There are three direct hits and a lethal near miss in the four missiles vs. four targets test near Eglin AFB, Fla.

**May 17, 1990.** An Air Force crew from McGuire AFB, N.J., lands a C-141B transport at Moscow’s Sheremetievo Airport to deliver an inoperative MGM-31 Pershing II missile that will go into a museum in Moscow. The crew then picks up an inoperative Soviet SS-20 for display at the National Air and Space Museum in Washington, D.C.

**May 22, 1990.** USAF redesignates 23rd Air Force as Air Force Special Operations Command.

**May 22, 1990.** Company pilot Larry Walker and Air Force pilot Maj. Erwin “Bud” Jenschke land the McDonnell Douglas NF-15B S/MTD test bed in a mere 1,650 feet at the Air Force Flight Test Center at Edwards AFB, Calif. Pratt & Whitney two-dimensional, thrust-reversing engine nozzles are the main method of stopping the aircraft.

**June 1990.** The Air Force publishes its vision statement, Global Reach—Global Power.

**June 1, 1990.** SAC turns over the first pair of FB-111As to TAC. With one internal modification, the aircraft will be redesignated F-111G.

**June 22, 1990.** The Northrop/McDonnell Douglas YF-23A Advanced Tactical Fighter prototype is rolled out in ceremonies at the ATF Combined Test Force Facility at Edwards AFB, Calif. It is powered by two Pratt & Whitney YF119-PW-100 engines.

**July 1, 1990.** Gen. Michael J. Dugan becomes Air Force Chief of Staff.

**July 11, 1990.** Four Air National Guard F-16 pilots from the 177th Fighter-Interceptor Group at Atlantic City IAP, N.J., escort two Soviet MiG-29 fighters and an Il-76 transport in US airspace, flying from Kalamazoo, Mich., to Rockford, Ill., as part of the Soviet Union’s first US air show tour.

**July 12, 1990.** The last of 59 F-117A stealth fighters is delivered to the Air Force in ceremonies at Lockheed’s Palmdale, Calif., facility.

**July 24, 1990.** SAC ends Looking Glass, more than 29 years of continuous airborne alert, as an EC-135C Airborne Command Post aircraft lands at Offutt AFB, Neb.

**Aug. 1, 1990.** CMSgt. Gary R. Pfingston becomes Chief Master Sergeant of the Air Force.

**Aug. 2, 1990.** In a major policy speech, President George H.W. Bush declares a new defense strategy, emphasizing regional conflict rather than the fading Soviet threat. He says it will be possible to reduce the armed forces by about 25 percent, a level that will become known as the "Base Force." The speech receives minimal notice, overshadowed by events in Kuwait and the impending War in the Gulf.

### The Base Force

**Aug. 2, 1990.** Iraq invades Kuwait. Iraq completes its occupation the next day and stands poised to cross the Saudi Arabian border.

**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.

### Desert Shield

**Aug. 8, 1990.** A C-141 carrying Airlift Control Element lands in Dhahran, 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. 9, 1990.** USAF redesignates Alaskan Air Command as 11th Air Force; it is made part of Pacific Air Forces.

**Aug. 17, 1990.** For the first time since it was authorized in 1952, the Civil Reserve Air Fleet is activated to increase the availability of airlift to the Middle East.

**Aug. 21, 1990.** By this date, one billion pounds of materiel have arrived in or are en route to Saudi Arabia. Six fighter wings are deployed, and SAC steps up refueling efforts and RC-135 reconnaissance flights in the area. By late Aug., more than 40,000 reserve members of all services have been called up.

**Aug. 23, 1990.** The first of two VC-25A Presidential transport aircraft is delivered to the 89th Military Airlift Wing at Andrews AFB, Md. The new aircraft, a modified Boeing 747-200B commercial transport, will replace the VC-137C aircraft currently used as "Air Force One."

**Aug. 27, 1990.** Northrop pilot Paul Metz makes the first flight of the Northrop/McDonnell Douglas YF-23A Advanced Tactical Fighter prototype.

**Aug. 29, 1990.** The Lockheed/Boeing/General Dynamics YF-22A ATF prototype is unveiled in ceremonies at Lockheed Plant 10 in Palmdale, Calif. This aircraft is powered by two General Electric YF120-GE-100 turbofan engines.

**Sept. 6, 1990.** The US Postal Service issues a 40-cent postage stamp honoring Lt. Gen. Claire L. Chennault.

**Sept. 8, 1990.** Marcelite Jordan Harris becomes the first black woman to hold the grade of brigadier general in the Air Force.

**Sept. 18–28, 1990.** The 436th and 438th Military Airlift Wings transports 107 pallets of tents, cots, and blankets to Jordan for the relief of some 100,000 foreign workers who had fled from Kuwait because of the Iraqi invasion.

**Sept. 18, 1990.** Gen. John Michael Loh becomes acting Air Force Chief of Staff. (Defense Secretary Dick Cheney fires Gen. Michael J. Dugan on Sept. 17.)

**Sept. 29, 1990.** Lockheed pilot Dave Ferguson makes the first flight of the Lockheed/Boeing/General Dynamics YF-22A ATF prototype.

**Oct. 1, 1990.** Air Force Systems Command relinquishes Patrick AFB, Fla., and the space-launch mission to Air Force Space Command.

**Oct. 11, 1990.** Rockwell pilot Ken Dyson makes the first flight of the Rockwell/MBB X-31A Enhanced Fighter Maneuverability (EFM) demonstrator at Air Force Plant 42 in Palmdale, Calif. The flight lasts 38 minutes.

**Oct. 30, 1990.** Gen. Merrill A. McPeak becomes Air Force Chief of Staff.

**Nov. 9, 1990.** Col. Thomas C. Cook, believed to be the Air Force's last World War II combat veteran still serving, retires. He saw action as a B-24 navigator in Europe and transferred to reserve status in 1948. He returned to active duty in 1976.

**Dec. 17, 1990.** The Lockheed/Boeing/General Dynamics YF-22 prototype is flown to an unprecedented 60-degree angle-of-attack (AOA) attitude and remains in full control in a test flight over Edwards AFB, Calif.

**Dec. 29, 1990.** The 169th Tactical Fighter Group is the first Air National Guard unit to deploy to the Persian Gulf region for Operation Desert Shield.

## 1991

**Jan. 7, 1991.** Saying that "nobody could tell him how much it would cost to keep the program going," Secretary of Defense Dick Cheney announces that he is canceling the McDonnell Douglas/General Dynamics A-12 Avenger attack aircraft program for default. The A-12 would have been the Navy's first stealth aircraft.

### [How the A-12 Went Down](#)

**Jan. 15, 1991.** Strategic Air Command relinquishes Vandenberg AFB, Calif., and its launch facilities to Air Force Space Command.

**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 (a conventional version of the nuclear-armed General Dynamics AGM-86B ALCM), the bomber crews fly to the Middle East and launch their missiles against high-priority targets in Iraq.

### [Washington Watch: Airpower Opens the Fight](#)

### [Fifty Years of the B-52](#)

**Jan. 17, 1991.** War begins in the Persian Gulf. Operation Desert Shield becomes Operation Desert Storm. More than 1,200 combat sorties are flown, and 106 cruise missiles are launched against targets in Iraq and Kuwait during the first 14 hours of the operation.

#### [The Gulf War: Expanded Chronology](#)

#### [The Strategy of Desert Storm](#)

#### [Desert Storm](#)

#### [What We Should Have Learned in Desert Storm, but Didn't](#)

#### [Total Storm](#)

**Jan. 17, 1991.** Constituting less than 2.5 percent of all coalition aircraft, stealthy F-117A fighter-bombers attack more than 31 percent of Iraqi strategic targets on the first day of the war.

**Jan. 21, 1991.** USAF Capt. Paul T. Johnson, in his A-10 Thunderbolt II, locates a Navy F-14 fighter pilot who has ejected in Iraqi territory. Johnson destroys a threatening Iraqi truck to allow a USAF MH-53J Pave Low helicopter to rescue the pilot. Johnson receives the Air Force Cross. The Pave Low helicopter crew earned the 1991 Mackay Trophy.

#### [Hog Heaven](#)

**Jan. 25, 1991.** In one of the fastest program to develop and field a weapon in modern history, Air Force Systems Command's Armament Division asks the Army to machine eight-inch cannon barrels to the shape of a bomb. On Feb. 24, the first of these Lockheed/Texas Instruments GBU-28/B bombs is tested at Tonopah Test Range, Nev., and penetrates so deeply, the weapon is never found. Within five hours of delivery to Saudi Arabia, two of the 4,700-pound weapons are dropped from an F-111 on Feb. 27.

**Jan. 27, 1991.** Two F-111Fs deliver precision bombs on the refinery at Al Ahmadi, Kuwait, closing oil manifolds opened by Iraqi forces and stopping the flow of crude oil into the Persian Gulf.

**Jan. 27, 1991.** Coalition aircraft attain air supremacy after 10 days of aerial combat.

**Jan. 29, 1991.** Iraq launches its only offensive of the Gulf War and gets promptly clobbered by airpower.

#### [The Epic Little Battle of Khafji](#)

**Feb. 6, 1991.** Capt. Robert Swain of the 706th Tactical Fighter Group (AFRES), NAS New Orleans, La., shoots down an Iraqi helicopter in the first air-to-air victory for the A-10 Thunderbolt II attack aircraft. He uses the airplane's internal GAU-8/A 30 mm cannon.

**Feb. 15, 1991.** In one of the most unusual air-to-air victories ever, Capt. Tim Bennett and Capt. Dan Bakke of the 4th Tactical Fighter Wing at Seymour Johnson AFB, N.C., shoot down an Iraqi helicopter (probably an Mi-24 Hind) with a GBU-10 2,000-pound Laser-Guided Bomb dropped from their F-15E.

#### [Tim Bennett's War](#)

**Feb. 22, 1991.** Soviet cosmonaut Musa K. Manarov sets a record for accumulated time in space, amassing his 447th day in orbit. Cosmonaut Manarov is on the 83rd day of his Soyuz TM-11 mission, working aboard the space station Mir, when he breaks the record.

**Feb. 24, 1991.** With Iraqis reeling—casualties, desertions, and other effects of the air campaign—the coalition launches its ground campaign, which (supported heavily by airpower) is concluded in just 100 hours.

**Feb. 28, 1991.** Iraq surrenders to the US-led coalition. In the 42-day, round-the-clock war, the Air Force flew 57 percent of all sorties with less than 58 percent of the assets, flew more than 38,000 combat sorties, offloaded more than 800 million pounds of fuel, and transported 96,465 passengers and 333 million pounds of cargo.

### [What We Should Have Learned in Desert Storm, But Didn't](#)

**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.

**April 5, 1991.** Operation Provide Comfort begins. It was a humanitarian air operation to protect and supply Kurds in northern Iraq threatened by Saddam Hussein after the Gulf War. By July 15, USAF C-5, C-141, and C-130 aircraft airlift more than 7,000 tons of relief supplies. Subsequent increments of the operation include the deny flight mission over northern Iraq to ensure the Kurds could safely return home. The operation ends finally on Dec. 31, 1996, when it is replaced by Operation Northern Watch (see Jan. 1, 1997.)

**April 11, 1991.** Iraq accepts all terms of the UN cease fire. Gulf War officially ends.

**April 18, 1991.** USAF 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.

### [In Focus: SAC Backs Small ICBM](#)

**April 23, 1991.** Air Force Secretary Donald B. Rice announces that the Lockheed/Boeing/General Dynamics F-22 and the Pratt & Whitney F119 engine are the winners in the Advanced Tactical Fighter competition.

**May 6, 1991.** The US destroys the last of 846 MGM-31 Pershing II missiles prohibited by the INF Treaty. On May 12, the Soviet Union destroys the last of 1,846 SS-20 missiles.

**May 10–June 13, 1991.** In Operation Sea Angel, USAF transport aircraft airlift more than 3,000 tons of relief equipment and supplies to Bangladesh after a typhoon and tidal wave. C-5s and C-141s carry most of the cargo, including five Army Black Hawk helicopters and their crews, to the city of Dacca. From there, C-130s and the helicopters transport relief supplies to the flooded area.

**June 6, 1991.** The Air Force reveals the existence of the Northrop AGM-137A Tri-Service Standoff Attack Missile (TSSAM), a stealthy ground attack weapon with a range of less than 600 kilometers.

**June 8–July 2, 1991.** The eruption of Mount Pinatubo in the Philippines buries Clark Air Base and two other US military installations with volcanic ash, forcing the Air Force to evacuate some 15,000 people to Guam and the United States. Operation Fiery Vigil becomes the largest evacuation operation since the fall of South Vietnam in 1975. Clark Air Base in the Philippines, the oldest and largest USAF overseas base, closes permanently.

### [Clark Digs Out of the Ashes](#)

**July 1, 1991.** The Warsaw Pact, the military coalition of Soviet Bloc countries, formally disbands.

**July 2, 1991.** McDonnell Douglas announces the first flight of the first production helicopter built without a tail rotor. The MD520N uses a blown air system for anti-torque and directional control.

**Sept. 15, 1991.** The McDonnell Douglas C-17A transport makes its first flight. The crew of four takes off from the company's plant in Long Beach, Calif., and lands two hours, 23 minutes later at the Air Force Flight Test Center at Edwards AFB, Calif.

**Sept. 27, 1991.** Strategic Air Command nuclear alert crews stand down from their decades-long, round-the-clock readiness for nuclear war. SAC alerts began in October 1957.

**Nov. 26, 1991.** Clark AB, Philippines, is officially turned over to the Philippine government, ending nearly 90 years of US occupancy. It was the largest overseas USAF base.

**Dec. 17–19, 1991.** Four Naval aviators set 16 recognized class records for altitude, speed, and time-to-climb with and without payload (turboprop aircraft) in a Grumman E-2C Hawkeye at NAS Patuxent River, Md.

**Dec. 19, 1991.** Lt. Cmdr. Eric Hinger and Lt. Cmdr. Matt Klunder set a recognized class record for altitude with a 1,000-kilogram payload (turboprop aircraft) of 41,253.6 feet in an E-2C Hawkeye.

**Dec. 21, 1991.** The first Rockwell new-generation AC-130U gunship is flown for the first time.

**Dec. 25, 1991.** The Soviet Union ceases to exist.

## 1992

**Jan. 18, 1992.** Air Training Command receives its first T-1A Jayhawk trainer aircraft at Reese AFB, Tex. With the T-1A, ATC will implement its new Specialized Undergraduate Pilot Training program.

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

**Feb. 10, 1992.** Operation Provide Hope, the delivery of food and medical supplies to the former Soviet Union, begins.

**Feb. 28–29, 1992.** Four Air Force crews set recognized class time-to-climb records (jet aircraft) in a B-1B flying from Grand Forks AFB, N.D.

**March 24, 1992.** Rep. Les Aspin, Chairman of the House Armed Services Committee—and soon to be Secretary of Defense in the Clinton Administration—introduces a portfolio of alternatives to the defense program, prosing cuts deeper than the 25 percent “Base Force” reduction already planned.

### [The Base Force Meets Option C](#)

**March 24, 1992.** The US joins 24 other nations in signing the Open Skies Treaty, which allows any one of them to fly unarmed aerial reconnaissance missions over any other signatory nation.

**April 1, 1992.** The Community College of the Air Force graduates its 100,000th student, TSgt. Gordon J. Wiese.

**April 9, 1992.** The Air Force's new Variable Stability In-Flight Simulator Test Aircraft (VISTA), a modified F-16, designated NF-16, is flown for the first time at the General Dynamics facility in Fort Worth, Tex. The flight lasts 53 minutes. The NF-16 will replace the 40-plus-year-old NT-33.



**April 24, 1992.** Two Peruvian fighters attack and heavily damage an unarmed USAF C-130 flying in international airspace off Peru. For making a safe emergency landing, the C-130 crew receives the 1992 Mackay Trophy.

**May 12, 1992.** Lockheed delivers the 2,000th C-130 Hercules in ceremonies at Marietta, Ga. The milestone aircraft, a C-130H, is later delivered to ANG's 123rd Airlift Wing at Standiford Field, Ky.

**June 1, 1992.** USAF inactivates SAC, TAC, and MAC and activates Air Combat Command (taking control of bomber, fighter, attack, reconnaissance, and electronic combat/electronic warfare aircraft and ICBMs) and Air Mobility Command (taking control of airlift and tanker aircraft).

### No More SAC, TAC, and MAC

**June 1, 1992.** DOD establishes US Strategic Command, with responsibility for planning, targeting, and command of US strategic forces.

**July 1, 1992.** USAF inactivates Air Force Systems Command and Air Force Logistics Command and activates Air Force Materiel Command, to provide "cradle to grave" weapon systems management.

**July 2, 1992.** Air Force begins flying humanitarian relief missions into Croatia and Bosnia under Operation Provide Promise, which officially ends Feb. 15, 1996. (Loading would begin July 1 in the US.)

**Aug. 14, 1992.** To save victims of drought and civil war in Somalia from starvation, the US launches Operation Provide Relief. By the time it ends on Feb. 28, 1993, 46 USAF transport aircraft airlift more than 23,000 tons of food, water, medical supplies, and other relief cargo to Somalia and to Somali refugees in Kenya.

**Aug. 25, 1992.** A day after Hurricane Andrew smashed into southern Florida, Air Mobility Command, Air Force Reserve, and Air National Guard transports, augmented by airliners under contract, deliver more than 21,000 tons of relief supplies and transport more than 13,500 passengers.

**Aug. 27, 1992.** Operation Southern Watch begins as Persian Gulf coalition members (primarily the US Air Force and Navy) begin to enforce the ban (announced 24 hours earlier) on Iraqi airplanes from flying south of the 32nd parallel. Any Iraqi aircraft flying south of the parallel will be shot down. This action is precipitated by Iraq's failure to comply with United Nations Resolution 688, which demands that the Iraqi government stop the repression of its Shiite population in southern Iraq. It ends March 17, 2003.

**Sept. 12–Oct. 18, 1992.** Following Typhoon Iniki, which devastated Kauai in the Hawaiian archipelago, Air Mobility Command, Pacific Air Forces, Air Force Reserve, and Air National Guard aircraft airlift 6,888 tons of relief equipment and supplies to Hawaii and airlifts more than 12,000 passengers—evacuees and military and civilian relief workers.

**Sept. 13–29, 1992.** During Operation Impressive Lift, Air Mobility Command aircraft move 974 United Nations peacekeeping troops from Pakistan to Somalia and 1,168 tons of equipment and supplies—a total of 94 missions. The troops attempt to ensure a fair distribution of food being delivered in Operation Provide Relief.

**Oct. 15, 1992.** The Pentagon's budget-driven "Bottom Up Review" makes wholesale reductions to the armed forces. Air Force fighter wing equivalents, for example—cut previously from 34 to 26 in the "Base Force" plan—are cut yet again to 20.

[The Bottom-Down Review](#)

[The High-Risk Military Strategy](#)

[The Legacy of the Bottom-up Review](#)

**Dec. 5, 1992.** Operation Restore Hope, an international humanitarian operation in Somalia, begins. Commercial airliners transport more than 30,000 troops, who safeguard food, supplies, and aid workers, from armed factions trying to seize power. USAF airlifts 32,000 tons of equipment and supplies before it ends May 4, 1993.

**Dec. 16–18, 1992.** Capt. Pamela A. Melroy and Capt. John B. Norton, along with McDonnell Douglas pilots William R. Casey and Charles N. Walls, set a number of recognized altitude records with payload (for two different subclasses of jet aircraft) in a C-17A at Edwards AFB, Calif. A class record for greatest load (133,422 pounds) carried to 6,600 feet is also set on the flight.

**Dec. 16, 1992.** A B-52 bomber from the 668th Bombardment Squadron loses two of its eight engines when one explodes and damages its neighbor. At about the same time, two more engines on the same side of the aircraft flame out. The crew is able to restart the two flamed-out engines and land safely. They receive the 1993 Mackay Trophy.

**Dec. 19, 1992.** Capt. Jeff Kennedy and crew set a recognized class record for great circle distance without landing (jet aircraft) of 10,083.11 miles in a KC-135R flying non-stop and unrefueled from Kadena AB, Japan, to McGuire AFB, N.J.

**Dec. 27, 1992.** While flying combat air patrol in Operation Southern Watch, two F-16 pilots from the 363rd Fighter Wing, Shaw AFB, S.C., intercept a pair of Iraqi MiG-25s flying in the UN-imposed no-fly zone over southern Iraq. One of the pilots, flying an F-16D, 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. 1, 1993.** The first Air Force Reserve space unit, the 7th Space Operations Squadron, is activated at Falcon AFB, Colo.

**Jan. 3, 1993.** US President George H.W. Bush and Russian President Boris Yeltsin sign the second Strategic Arms Reduction Treaty (START II), the most far-reaching nuclear-arms reduction pact in history. The agreement commits the US and Russia to the elimination of all ICBMs carrying multiple, independently targetable reentry vehicles (MIRVs) and the reduction of the number of nuclear weapons carried by bombers.

**Jan. 13, 1993.** President George H.W. Bush orders punitive air strikes against 32 Iraqi missile sites and air-defense command centers after the US discovers an Iraqi troop foray across the newly demarcated border with Kuwait and active Iraqi surface-to-air missile sites in the no-fly zone.

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

**March 1, 1993.** Lockheed completes acquisition of General Dynamics Fort Worth Division. The \$1.5 billion purchase gives Lockheed control of the F-16 fighter line and increases the corporation's share of the F-22 program to 67.5 percent.

**March 9, 1993.** An SR-71A Blackbird reconnaissance aircraft comes out of retirement to fly its first scientific flight for NASA's Dryden Flight Research Center at Edwards AFB, Calif. The aircraft, fitted with an ultraviolet video camera in the nose bay, is flown to an altitude of approximately 83,000 feet and collects more than 140,000 images of stars and comets.

### [Going Nowhere Fast](#)

**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. The operation ends Dec. 20, 1995.

**April 28, 1993.** Secretary of Defense Les Aspin lifts the long-standing ban on female pilots flying US combat aircraft, including Army and Marine Corps attack helicopters.

**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 EFM demonstrator. The turn is completed in a 475-foot radius.

**May 22, 1993.** Lt. Cmdr. Kathryn P. Hire, the first woman in the Navy to be assigned to a combat unit, flies her first mission as a tactical crew member on a P-3C Update III maritime patrol aircraft during a bombing exercise. Hire flies with VP-62, a Reserve unit based at NAS Jacksonville, Fla. The first Air Force female combat pilot will be 1st Lt. Jeannie Flynn, who will take her place in an F-15E cockpit later in 1993.

**May 25–Aug. 3, 1993.** The first successful demonstration of aerobraking (using atmospheric drag to slow a spacecraft) puts the Magellan Venus probe in a lower orbit. The probe suffers no ill effects.

**June 11, 1993.** AC-130 Spectre gunships participate in a United Nations raid on Somali warlord forces in retaliation for a June 5 attack on UN forces in Mogadishu, Somalia.

**June 14, 1993.** The first operational McDonnell Douglas C-17A Globemaster III transport is delivered to the 437th Airlift Wing at Charleston AFB, S.C.

**June 17, 1993.** Lt. Col. Patricia Fornes becomes the first woman to lead an Air Force ICBM unit. She assumes command of the 740th Missile Squadron at Minot AFB, N.D., a squadron once commanded by her father.

**June 29, 1993.** The Air Force rolls out the first Boeing OC-135B Open Skies Treaty observation aircraft at Wright-Patterson AFB, Ohio. It is the first of three that will be used by the US to verify foreign compliance with arms treaties.

**July 1, 1993.** USAF redesignates Air Training Command as Air Education and Training Command.

**July 1, 1993.** AETC assumes responsibility for F-15 and F-16 format training from Air Combat Command and takes ownership of the 58th Fighter Wing (F-16) and Luke AFB, Ariz., and the 325th FW (F-15) and Tyndall AFB, Fla.

**July 1, 1993.** Air Force Space Command assumes responsibility for ICBMs from ACC and takes control of 20th Air Force and F.E. Warren AFB, Wyo.

**July 8, 1993.** Slingsby Aviation Ltd. rolls out the first T-3A Enhanced Flight Screener for the Air Force at its plant in York, England.

**July 30, 1993.** The multi-axis thrust-vectoring system installed on the VISTA NF-16 is employed for the first time in a test at the Air Force Flight Test Center, Edwards AFB, Calif. By September 1993, the aircraft will achieve a transient angle of attack of 110 degrees and a sustained AOA of 80 degrees.

**Aug. 5, 1993.** The Advanced Flight Test Integration (AFTI) F-16 completes its 600th mission at the Air Force Flight Test Center, Edwards AFB, Calif. The flight collects data for the AFTI/F-16 Ground Collision Avoidance System test effort.

**Aug. 6, 1993.** Sheila E. Widnall, associate provost and professor of aeronautics and astronautics at the Massachusetts Institute of Technology, becomes Secretary of the Air Force. Widnall is the first female Secretary for any of the armed services.

**Aug. 11–14, 1993.** Global Enterprise, an ACC exercise to train aircrews for long-distance power projection missions, is carried out from Ellsworth AFB, S.D. Two B-1B Lancers are flown to Europe, across the Mediterranean and Red Seas around the Arabian Peninsula, and land at a staging base in Southwest Asia. After exchanging crews, the B-1s are flown from Southwest Asia, via Japan, over the Aleutians, and then back to South Dakota. Total flight time is 37.3 hours, and the 24-hour first leg is the longest flight ever made by a B-1B crew.

**Aug. 17, 1993.** The first of 350 early model B-52 bombers is cut into five pieces with a 13,000-pound steel guillotine at Davis-Monthan AFB, Ariz. The bombers are destroyed under the terms of START II.

**Aug. 18, 1993.** McDonnell Douglas's Delta Clipper Experimental (DC-X) subscale single-stage-to-orbit prototype makes a 60-second first flight at the White Sands Missile Range, N.M. The 42-foot-tall vehicle takes off vertically, hovers at about 150 feet, moves laterally approximately 350 feet, and lands tail down.

**Aug. 24 and 26, 1993.** Two mixed Air Force and contractor crews set recognized class time-to-climb and altitude records (jet aircraft) in a C-17A Globemaster III at Long Beach, Calif.

**Sept. 15, 1993.** Boeing announces that work on the first B-52H bomber to be adapted for conventional warfare missions has been completed at its facility in Wichita, Kan.

**Oct. 1, 1993.** Air Combat Command takes control of all stateside C-130s from Air Mobility Command, while most ACC KC-135s transfer to AMC control. The KC-135 exceptions are those at Mountain Home AFB, Idaho, and two at Offutt AFB, Neb.

**Oct. 1, 1993.** USAF's Officer Training School moves from Lackland AFB, Tex., to Maxwell AFB, Ala.

**Oct. 3–4, 1993.** At Mogadishu, Somalia, where 18 American Rangers were killed and 80 wounded, Air Force Special Operations air commandos play a major role in helping the wounded and beating back the attack. USAF pararescueman TSgt. Timothy A. Wilkinson will be awarded the Air Force Cross for his actions. MSgt. Scott Fales and Sgt. Jeffrey Bray will be awarded the Silver Star.

### [Heroes at Mogadishu](#)

**Oct. 5–13, 1993.** In Operation Restore Hope II, C-5 and C-141 aircraft transport 1,300 troops, 18 M–1 Abrams tanks, and 44 Bradley infantry fighting vehicles from the US to Somalia in nine days. Some flights went nonstop in 18 hours with four aerial refuelings.

**Oct. 8, 1993.** Capt. Pamela A. Melroy and McDonnell Douglas pilot Richard M. Cooper set two recognized jet aircraft class records for altitude with a 70,000-kilogram payload (32,169 feet) and greatest mass carried to a height of 2,000 meters (161,023 pounds) in a C-17A at Edwards AFB, Calif.

**Dec. 1, 1993.** Allison Engine Company separates from General Motors and becomes an independent company. Allison had been a part of GM since 1929.

**Dec. 2–13, 1993.** Astronauts on space shuttle *Endeavour*, piloted by USAF Col. Richard O. Covey, perform a record five spacewalks to repair the Hubble Space Telescope.

**Dec. 7, 1993.** Air Force Reserve acquires its first B–52 bombers, which go to the 917th Wing at Barksdale AFB, La.

**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.

[The Spirit of Missouri](#)

[With Stealth in the Balkans](#)

## 1994

**Jan. 10, 1994.** Two HH-60G Pave Hawk crews from the 56th Rescue Squadron at NAS Keflavik, Iceland, receive the 1994 Mackay Trophy for their rescue of six sailors from a damaged ship off the coast of Iceland.

**Jan. 13, 1994.** The final F-15 of the 32nd Fighter Group departs Soesterberg Air Base, ending 40 years of USAF operations in the Netherlands.

**Jan. 15, 1994.** Hungary, Rumania, and Bulgaria grant overflight rights for F-16s deploying from Germany to Turkey, saving them two hours and marking the first flight of USAF fighters on an operational mission over these countries since World War II.

**Jan. 25, 1994.** A Titan II booster launches the unmanned space probe *Clementine I* toward the Moon—part of the first US lunar mission since Apollo 17 in 1972.

**Feb. 3, 1994.** Air Education and Training Command receives its first T-3A enhanced flight screener aircraft at Hondo Field, Tex.

**Feb. 7, 1994.** The first Titan IV Centaur rocket boosts the first Milstar communications satellite into orbit.

**Feb. 10, 1994.** Lt. Jeannie Flynn completes F-15E training, becoming the first female fighter pilot in the US Air force.

[The Quiet Pioneers](#)

**Feb. 18, 1994.** USAF aircraft deployed to France for the first time in more than 20 years. The five KC-135 tankers fly from French bases to refuel aircraft patrolling airspace over Bosnia-Herzegovina in Operation Deny Flight.

**Feb. 28, 1994.** Two USAF F-16 pilots of the 526th Fighter Squadron, operating under NATO's Deny Flight, shoot down four Serb Super Galeb attack aircraft after twice warning the Serb jets to leave Bosnian airspace. It is NATO's first combat in its 45-year history.

**March 15, 1994.** Reports by *Air Force Magazine* and the Air Force Association reveal the plans of the National Air and Space Museum to exhibit *Enola Gay*, the B-29 that dropped the atomic bomb on Hiroshima, as a prop in a political horror show. A great controversy ensues, and under pressure from

Congress, the news media, and public opinion, the exhibit is canceled and the museum director is fired.

*Read a chronology, AFA special reports and analyses, and Air Force Magazine articles and editorials in this special collection:*

[The Enola Gay Controversy](#)

**April 7, 1994.** Capt. Michael S. Menser and crew set a recognized class record for 6,200-mile speed without payload (jet aircraft) of 599.59 mph flying from Grand Forks AFB, N.D., to Monroeville, Ala., to Mullan, Idaho, in a B-1B Lancer. At the same time, Capt. R.F. Lewandowski and crew set the recognized record for a different class for 6,200-mile speed without payload (jet aircraft) of 594.61 mph over the same course, also in a B-1B.

**April 10, 1994.** In NATO's first air attacks on ground positions since the Alliance was founded 45 years previously, two USAF F-16C fighters destroy a Bosnian Serb Army command post with Mk 82 500-pound bombs after Bosnian Serbs attack UN personnel.

**April 14, 1994.** Two USAF F-15 Eagles, flying a UN no-fly zone mission over northern Iraq, mistakenly shoot down two Army UH-60 Black Hawk helicopters, killing 26 people.

### [Legacy of the Air Blockades](#)

**May 3, 1994.** Col. Silas Johnson Jr., 93rd Bomb Wing commander, flies the last B-52G to the "Boneyard" at Davis-Monthan AFB, Ariz., thus removing this series from the active inventory.

**May 6, 1994.** 1st Lt. Leslie DeAnn Crosby becomes the first Air Force Reserve woman fighter pilot after she graduates from an F-16 training course in Tucson, Ariz.

**May 18, 1994.** Northrop acquires Grumman to form Northrop Grumman Corporation.

**June 3, 1994.** Maj. Andre A. Gerner and McDonnell Douglas pilot John D. Burns set a recognized record for STOL aircraft for greatest mass carried to a height of 6,600 feet (44,088 pounds) in a C-17A at Edwards AFB, Calif.

**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. It enters service in June 1995 with United Airlines.

**June 24, 1994.** USAF officially names the F-117 stealth aircraft the Nighthawk.

**June 29, 1994.** A US space shuttle makes first visit to a space station, the Russian Mir.

**June 30, 1994.** US Air Forces in Europe ended its presence in Berlin, Germany, after 46 years.

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

### [Bombers in the Guard](#)

**July 22, 1994.** For Operation Support Hope, a humanitarian-relief operation for refugees from the Rwandan civil war, USAF C-5s and C-141s begin airlifting equipment and supplies from Germany to Uganda and Kenya. C-130s transport the cargo from there to refugee camps in Zaire. By Aug. 7, they had delivered 3,660 tons of relief cargo.

**Aug. 2, 1994.** During a global power mission to Kuwait, 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. Dropping 54



bombs over a range located 25 miles from the Iraqi border, the aircraft demonstrate their global reach and power on the fourth anniversary of the Iraqi invasion of Kuwait.

**Aug. 4, 1994.** Two B-1Bs (one from the 384th Bomb Group and one from the 184th Bomb Group of the Kansas Air National Guard) complete a 19-hour nonstop global power mission to Hawaii. This is the first time the 184th, the first ANG unit to receive the B-1B, flies a global power mission.

**Sept. 19, 1994.** Operation Uphold Democracy begins. USAF airlifters transport US military forces to Haiti to restore the country's democratically elected president and stem the flow of Haitian refugees to the US.

**Sept. 26, 1994.** A B-52 and B-1B bombers, accompanied by a KC-10 tanker, land at Poltava AB, Ukraine, marking the first time since World War II that US bombers have landed in that country. B-17 bombers had flown there 50 years earlier on shuttle bombing missions against Nazi targets in eastern Europe.

**Oct. 4, 1994.** F-16s replace the last F-4 Wild Weasel aircraft in the suppression of enemy air defenses (SEAD) mission.

**Oct. 10, 1994.** Responding to massing of Iraqi troops near the Kuwait border, USAF airlifters begin transporting additional US forces to the Persian Gulf region under Operation Vigilant Warrior. During October, USAF will deploy 193 additional combat aircraft to augment the 77 already in place. Four bombers fly nonstop from bases in the US to deliver 55,000 pounds of bombs on target, on time, within audible range of Saddam's forces. The Iraqis withdraw northward. Secretary of Defense William J. Perry later says, "The Air Force really has deterred a war."

**Oct. 14, 1994.** The first operational C-17 mission flies from Langley AFB, Va., to Saudi Arabia, delivering a five-ton "rolling command post," five vehicles, and assorted supplies for the US Army.

**Oct. 26, 1994.** Gen. Ronald R. Fogleman becomes Air Force Chief of Staff.

**Oct. 26, 1994.** CMSgt. David J. Campanale becomes Chief Master Sergeant of the Air Force.

**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. From Dover, the uranium is taken to Oak Ridge, Tenn., to await conversion to commercial nuclear fuel.

### [Project Sapphire](#)

## 1995

**Jan. 1, 1995.** The first Air Force Reserve KC-135 associate unit, the 931st Air Refueling Group, is activated.

**Feb. 3-11, 1995.** USAF Lt. Col. Eileen M. Collins is the first woman to pilot a space shuttle, STS-63 *Discovery*.

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

**March 15, 1995.** Lockheed and Martin Marietta merge to form Lockheed Martin.



**March 24, 1995.** In a trans-Atlantic purchase, Allison Engine Company is acquired by Rolls Royce plc. Allison now operates as a standalone member of the Rolls Royce Aerospace Group.

**March 31, 1995.** 2nd Lt. Kelly Flinn, the first woman selected for bomber crew training, begins B-52 pilot training with the 11th Bomb Squadron, 2nd Bomb Wing, Barksdale AFB, La.

**April 8:** A USAF C-130 is hit 12 times by small-arms fire during takeoff but returns safely to Italy after delivering flour to Sarajevo, Bosnia, as part of Operation Provide Promise.

**April 27, 1995.** Air Force Space Command declares the Global Positioning System (GPS) satellite constellation has achieved full operational capability.

**June 1, 1995.** Lockheed Martin and Boeing roll out the stealthy DarkStar Tier III Minus high-altitude Unmanned Aerial Vehicle in ceremonies at Palmdale, Calif.

**June 2, 1995.** USAF F-16 pilot Capt. Scott F. O'Grady is shot down over northwest Bosnia on an Operation Deny Flight mission. Rescued after an eight-day ordeal during which he subsisted on bugs and rainwater, O'Grady returns home to a hero's welcome.

**June 2–3, 1995.** Two Dyess AFB, Tex.-based B-1B crews complete a 36 hour, 13 minute, 36 second, 20,100-mile nonstop round the world flight. This global power mission, called Coronet Bat, requires six air refuelings and incorporates bombing runs over the Pachino Range, Italy; the Torishima Range near Kadena AB, Japan; and the Utah Test and Training Range. The crews receive the 1995 Mackay Trophy. One of the crews, commanded by Lt. Col. Douglas Raaberg, sets a recognized speed record for average eastbound speed around the world (with air refueling) of 631.16 mph on the flight.

**June 6, 1995.** Astronaut Norman E. Thagard, flying on the Russian Mir space station, sets the US record for spaceflight endurance, passing 84 days, one hour, and 17 minutes in space. The previous US record-holders were the three astronauts on the third Skylab mission in 1974.

**June 22, 1995.** Secretary of the Air Force Sheila E. Widnall announces that Beech Aircraft has been selected to develop and deliver the Joint Primary Aircraft Training System (JPATS) for the Air Force and Navy. The new trainer, a modified version of the Swiss Pilatus PC-9 turboprop trainer, will replace USAF's Cessna T-37Bs and the Navy's Beech T-34Cs.

**June 28, 1995.** The National Air and Space Museum of the Smithsonian Institution puts the *Enola Gay*, the B-29 that dropped the first atomic bomb on Japan, on display. The exhibition program is straightforward and factual. Earlier, amid major controversy, the museum canceled plans to show the *Enola Gay* as a prop in a politicized horror show after Congress and the public—alerted by reports from the Air Force Association—strongly objected.

**June 30–Aug. 10, 1995.** Under Operation Quick Lift, USAF C-5s and C-141s airlift British and Dutch forces, comprising a United Nations rapid-reaction force, to Croatia.

**July 7–Aug. 5, 1995.** The C-17 airlifter, earlier beset by troubles so severe that program cancellation was a possibility, produces outstanding results in a month-long wartime surge test. In Nov., DOD says the C-17 has bounced back from its problems and authorizes the Air Force to buy up to 120 of these aircraft.

**July 8, 1995.** The Minuteman III ICBM achieves 100 million hours of operational duty.

**July 29, 1995.** Air Combat Command activates the 11th Reconnaissance Squadron, an Unmanned Aerial Vehicle (UAV) unit, and assigns it to the 57th Operations Group at Nellis AFB, Nev.

**Aug. 25, 1995.** Capt. Russell F. Mathers and crew set three recognized class closed course speed records at Edwards AFB, Calif. The Barksdale AFB, La.-based crew flies their B-52H to a speed of 549.45 mph over the 6,200-mile course. The flight lasts 11 hours, 23 minutes.

**Aug. 30, 1995.** US Air Force, Navy, and Marine Corps 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. The operation ends Sept. 14, 1995. It is the first operational use of the Predator RPA, at that time an Advanced Concept Technology Demonstration (ACTD) program led by the Army (USAF takes over in 1996).

### Deliberate Force

**Sept. 1, 1995.** Air Combat Command declares the SR-71 operationally capable, although still in mothball status (see Jan. 1, 1997).

**Sept. 10, 1995.** *First Lady*, the first production C-130 Hercules, is retired in ceremonies at Duke Field, Fla. This aircraft, which was first flown on April 7, 1955, had a distinguished career, including more than 4,500 combat hours in Southeast Asia after it was converted into a gunship. *First Lady* was later retired to the USAF Armament Museum at Eglin AFB, Fla.

**Sept. 14–30, 1995.** USAF airlifts more than 30 tons of medical supplies from Charleston AFB, S.C., to Hanoi, Vietnam, marking the first USAF humanitarian-airlift mission to Vietnam since 1975.

**Sept. 15–21, 1995.** The C-17 makes its operational debut, helping to deliver cargo after Hurricane Marilyn devastated islands in the eastern Caribbean Sea. In all, Air Mobility Command, Air Force Reserve, and Air National Guard cargo aircraft airlift nearly 1,000 tons of relief cargo to the Virgin Islands.

**Sept. 22, 1995.** An E-3B Sentry AWACS aircraft crashes on takeoff at Elmendorf AFB, Alaska, after several Canadian geese flew into the aircraft's two left wing engines. The crew of 24 US and Canadian airmen are killed. This is the first catastrophic AWACS accident in more than 18 years of operation.

**Oct. 1, 1995.** Air Combat Command activates the 609th Information Warfare Sq. at Shaw AFB, S.C.

**Oct. 28–Dec. 18, 1995.** USAF first tests its new air expeditionary force concept, deploying F-16s of the 20th Fighter Wing and the 347th Wing to Bahrain, under Operation Vigilant Sentinel.

**Nov. 2, 1995.** Lt. Col. Greg Feest becomes the first operational Air Force pilot to log 1,000 hours of flight time in the F-117A Nighthawk.

**Nov. 29, 1995.** Company test pilot Fred Madenwald makes the first flight of the McDonnell Douglas F/A-18E Super Hornet carrier-based fighter attack aircraft at the company's plant in St. Louis, Mo.

**Dec. 6, 1995.** A C-130E from the 37th Airlift Squadron at Ramstein AB, Germany, begins the airlift of troops and equipment into Tuzla, Bosnia, for Operation Joint Endeavor, NATO's first peacekeeping effort (Dec. 20, 1995 – Dec. 20, 1996).

**Dec. 7, 1995.** Literally going out in a blaze of glory, the Galileo spacecraft's atmospheric probe separates from the orbiter and plunges into Jupiter's atmosphere. The probe sends a stream of data back to the orbiter and manages to survive 58.5 minutes before it is crushed by the intense pressure. Galileo was launched from the space shuttle in 1989.

**Dec. 19, 1995.** A federal judge rules in favor of General Dynamics and McDonnell Douglas, establishing that the Navy's A-12 Avenger stealth attack aircraft was canceled for the convenience of the government, rather than default. The A-12 was canceled in 1991.

**Dec. 20, 1995.** NATO air operation Decisive Endeavor (part of Joint Endeavor) begins to monitor and enforce peace implementation in Bosnia.

**Dec. 20, 1995.** The Air Force announces that its personnel strength has dipped below 400,000 for the first time since 1948. USAF's postwar strength peaked at 977,593.

## 1996

**Jan. 4, 1996.** Sikorsky test pilot Rus Stiles and Boeing test pilot Bob Gradle make the first flight of the Army's YRAH-66 Comanche helicopter prototype at West Palm Beach, Fla. The RAH-66, designed for armed reconnaissance/light attack missions, is the first helicopter to employ stealth technologies.

**Feb. 14, 1996.** The E-8A Joint STARS surveillance platform flies the 50th Joint STARS mission for Operation Joint Endeavor, breaking a sortie record set in Operation Desert Storm in 1991. Despite the E-8's successes in these two operations, Joint STARS is still officially in development.

**Feb. 15, 1996.** Operation Provide Promise officially ends. During this international operation, USAF flew more than 4,500 sorties to deliver 62,802 metric tons of cargo to Sarajevo and other parts of Bosnia-Herzegovina.

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

**April 3, 1996.** Secretary of Commerce Ronald Brown is among the people killed when the 76th Airlift Squadron CT-43 transport airplane in which he is a passenger crashes into a hillside near Dubrovnik, Croatia. Secretary Brown had been on an economic-development mission to Serbia.

**April 9–25, 1996.** USAF aircraft, including MH-53 Pave Lows, KC-135s, C-130s, MC-130 Combat Talons, and AC-130 Spectres, fly 94 missions during Operation Assured Response, in which US forces evacuate more than 2,000 noncombatants from Liberia during civil unrest in that country.

**May 5, 1996.** Col. Betty L. Mullis takes command of the Air Force Reserve's 940th Air Refueling Wing, becoming the first woman to command a USAF flying wing.

**June 11, 1996.** Air Combat Command officially receives its first E-8 Joint STARS aircraft. USAF operated E-8 development aircraft during Operations Desert Storm and Joint Endeavor.

**June 25, 1996.** Terrorist truck bomb explodes at Khobar Towers, a military billeting complex in Dhahran, Saudi Arabia, killing 19 airmen and injuring hundreds of others. The Department of Defense sets aside the factual findings of two Air Force inquiries and puts the blame on the wing commander.

[Fallout From Khobar Towers](#)

[Khobar Towers](#)

[Desert Stronghold](#)

[From Khobar to the Cole](#)

[The Second Sacking of Terry Schwalier](#)

[Death in the Desert](#)

[Vindication + Vengeance](#)

[Schwalier Case Takes Another Downturn](#)

[The Empire Strikes Back—at Schwalier](#)

**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 Lockheed Martin plant in Fort Worth, Tex., where the aircraft was built. The new official name formalizes what crews had been unofficially calling the aircraft for years.

**Sept. 2–3, 1996.** USAF flies B-52 bombers to the Middle East to launch 13 cruise missiles against military targets in Iraq under Operation Desert Strike, which is in response to Iraqi troops' seizure of the city of Irbil, located in a zone protected by the US for Kurds in northern Iraq.

### [The Long Deployment](#)

**Sept. 3, 1996.** The 11th Reconnaissance Squadron is the first Air Force unit to operate the RQ-1 Predator unmanned aerial vehicle, flying over Bosnia to help the US ensure a peace agreement there.

### [The Little Predator That Could](#)

### [The Robotic Air Force](#)

**Sept. 15, 1996.** Operation Pacific Haven begins. USAF airlifts thousands of refugees driven from their homes in northern Iraq to Andersen AFB, Guam, where they are processed for settlement in the US.

**October 1996.** After the terrorist bombing at Khobar Towers in June, the Air Force moves to a more secure hub for Southern Watch operations, relocating to Prince Sultan Air Base in the Saudi Arabian desert.

### [Miracle in the Desert](#)

**Oct. 8, 1996.** Three Air Force crews flying B-2A Spirit bombers, hit 16 out of 16 targets with live GPS-Aided Targeting System/ GPS-Aided Munition (GATS/GAM) weapons during a test at the Nellis AFB, Nev., range. The Whiteman AFB, Mo.-based crews drop the 2,000-lb. weapons from 41,000 feet and record 13 direct hits; three bombs record heavy damage and one is functionally damaged. The Northrop-developed GAM will serve as an interim weapon until USAF fields the new Joint Direct Attack Munition (JDAM).

**Oct. 21, 1996.** The Air Force successfully conducts the first guided launch of the GBU-31 Joint Direct Attack Munition. JDAM, built by Boeing, is a guidance kit that converts "dumb" bombs into precision-guided munitions using Global Positioning System update information. During this test, the 2,000-pound weapon was released from a Lockheed Martin F-16C Fighting Falcon flying at 20,000 feet at Mach 0.8 over the test range at Eglin AFB, Fla. The weapon received satellite data prior to release, but primarily used inertial navigation system data on this test.

**Nov. 5, 1996.** CMSgt. Eric W. Benken becomes Chief Master Sergeant of the Air Force.

### [Chief Benken](#)

**Nov. 26, 1996.** The Air Force carries out the first successful test of a full-up GBU-31 Joint Direct Attack Munition (JDAM). During this test, the 2,000-pound weapon was released from an F-16C Fighting Falcon flying at 20,000 feet at Mach 0.8 over the test range at Eglin AFB, Fla. The range had a cloud cover at 10,000 feet and the pilot could not see the target when he released the weapon. The JDAM tail kit received satellite updates during its flight and missed the bull's-eye by only 9.2 meters, well within the required 13 meters.

**Dec. 4, 1996.** Air Force Capt. Kurt Gallegos from the 388th Fighter Wing's 4th Fighter Squadron at Hill AFB, Utah, flies the five millionth flight hour recorded by the U.S. Air Force's fleet of F-16 Fighting Falcons.

**Dec. 4, 1996.** The Mars Pathfinder, the first spacecraft designed to land and explore Mars in nearly 21 years, is launched from Cape Canaveral AFS, Fla., aboard a McDonnell Douglas Delta II rocket. It is expected to arrive on Mars on July 4, 1997.

## 1997

**Jan. 1, 1997.** Operation Northern Watch replaces Provide Comfort, as US aircrews continue enforcing the no-fly zone over northern Iraq. It ends March 17, 2003.

### [Northern Watch](#)

#### [The Highs and Lows of Northern Watch](#)

**Jan. 1, 1997.** The SR-71 Blackbird strategic reconnaissance aircraft is brought out of retirement, as the Air Force announces that two aircraft and crews are mission ready. Mothballed in 1990, the Blackbird was revived in 1994, but was never made operational. In December 1996, Congress appropriated \$39 million to get the aircraft back in action, and the 9th Strategic Reconnaissance Wing at Beale AFB, Calif., began flying training sorties.

**Feb. 17, 1997.** USAF establishes Air Force Reserve Command (previously the Air Force Reserve field operating agency) as its ninth major command.

**Feb. 18–March 3, 1997.** USAF C-130s airlift 1,160 African peacekeeping troops to Liberia to restore order after a civil war there and 452 tons of cargo, under Operation Assured Lift.

**Feb. 20, 1997.** The Global Hawk long-range reconnaissance Unmanned Aerial Vehicle rolls out at the Teledyne Ryan Aeronautical plant in San Diego.

**March 17, 1997.** Under Operation Guardian Retrieval, US Special Operations Command and Air Mobility Command evacuate US citizens and other foreigners from Zaire, where civil unrest threatened them. SOCOM provides personnel and aircraft, including Air Force Special Operations Command MC-130s and MH-53s. AMC provides C-5s, C-17s, C-141s, and KC-135s. By the end of March, the operation flies 57 missions and transports 532 passengers.

**March 21, 1997.** USAF Lt. Col. Marcelyn A. Atwood, at NAS Pensacola, Fla., becomes the first woman to command a training squadron and the first USAF officer to command a Navy squadron. The squadron trains both Air Force and Navy pilots.

**April 1, 1997.** The B-2A Spirit stealth bomber reaches initial operational capability (IOC) with the 509th Bomb Wing at Whiteman AFB, Mo.

**April 1, 1997.** Operational control of stateside C-130s and their units switches back from Air Combat Command to Air Mobility Command. The shift also includes C-21 Learjets. The C-130s and C-21s in the Pacific and Europe remain under control of PACAF and USAFE.

**April 4, 1997.** A Titan IIG booster launches a Defense Meteorological Satellite Program satellite into polar orbit from Vandenberg AFB, Calif. This is the first time a satellite has been launched aboard a converted ICBM.

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

### [Raptor 01](#)

### [The Indispensable Fighter](#)

**April 22–25, 1997.** The Air Force Association hosts Air Force Fifty, a celebration of the 50th Anniversary of the US Air Force in Las Vegas, Nev. The event, which features a meeting of the Global Air Chiefs, is capped off by the Golden Air Tattoo, a spectacular air show at nearby Nellis AFB.

**May 12, 1997.** A contingent of students from the US Air Force Test Pilot School at Edwards AFB, Calif., visit the Russian Air Force Flight Test Facility at the Gromov Flight Research Institute at Zhukovskiy, Russia, for the first time in an unparalleled opportunity for American test pilots to interact and share experiences and techniques with their Russian counterparts. Each of the US students received an orientation flight in a MiG-29 fighter.

**May 16, 1997.** 2nd Lt. Kazue Takeuchi, 25, becomes the first woman pilot in Japan Air Self Defense Force history to earn her wings.

**May 17, 1997.** The NASA-McDonnell Douglas X-36, the 28 percent scale, remotely piloted research aircraft designed to demonstrate tailless, high angle of attack fighter agility utilizing stealth technologies, is flown for the first time at the Air Force Flight Test Center at Edwards AFB, Calif., under the control of company pilot Larry Walker.

**June 10, 1997.** An Air Force Special Operations Command MC-130 crew inserts a European survey and assessment team into Congo and extracts 56 people, including 30 US citizens, from Brazzaville, Congo—in 23 minutes—in the midst of violent civil strike. Led by Lt. Col. Frank J. Kisner, the crew flew more than 13 hours over 3,656 miles and thwarted hostile gunfire. They received the 1997 Mackay Trophy.

**June 24, 1997.** The Air Force issues its second report on the “Roswell Incident,” the alleged crash and recovery of an extraterrestrial vehicle and its alien occupants near Roswell, N.M., in July 1947. The report, entitled “The Roswell Report: Case Closed,” concludes that Air Force activities that occurred over a period of many years are now represented to have occurred in two or three days in 1947; “aliens” were actually anthropomorphic test dummies; “unusual military activities” were actually high altitude balloon tests; and claims of “alien bodies” at Roswell Army Air Field were a combination of human remains from two separate aircraft accidents. While the report thoroughly documents its conclusions, it is widely dismissed by groups ranging from the lunatic fringe to respected scientists.

### [USAF and the UFOs](#)

**June 30, 1997.** The Defense Information Systems Agency and the Joint Chiefs of Staff disconnect the Worldwide Military Command and Control System’s (WWMCCS) Top Secret Support System, the last remnant of an information network developed in the 1970s. The Global Command and Control System (GSSC), which debuted in August 1996, is now the primary national system for planning and conducting military operations around the world.

**July 4, 1997.** NASA’s Pathfinder spacecraft lands on Mars in the space agency’s first “smaller, faster, cheaper” series of scientific probes. Pathfinder, built by the Jet Propulsion Laboratory in Pasadena, Calif., entered the Martian atmosphere directly, parachuted down, inflated a protective cocoon of airbags, bounced several times and then righted itself. The airbags deflated and then the spaceship’s three petals opened up to expose the ship’s scientific instruments and cameras. The Sojourner rover, a six-wheeled robot attached to one of the petals, begins operation several days later, rolling down a ramp on the spacecraft, exploring rocks on the Martian surface and sending back readings and photographs. Once the first photos from Mars are posted on JPL’s Internet Web site, nearly 40 million “hits” are recorded within the first few days. The spacecraft are renamed as a memorial to noted astronomer Carl Sagan, who had passed away several months earlier. The entire mission cost less than \$275 million, including the booster.

**July 28–Aug. 1, 1997.** A Russian delegation led by Col. Mikhail Botvinko, flying an Antonov An 30 turboprop, conducts the first Open Skies Treaty surveillance operation over the US. This was only a practice mission, as the Open Skies Treaty has yet to be formally ratified by all participating countries.

**Aug. 1, 1997.** Boeing and McDonnell Douglas merge to become The Boeing Company.

**Sept. 1, 1997.** Gen. Ronald R. Fogleman retires prior to the end of his full term as Air Force Chief of Staff.

### [Aerospace World: The Chief Steps Down](#)

#### [Fogleman's Farewell](#)

**Sept. 7, 1997.** Lockheed Martin test pilot Paul Metz makes the first flight of the F-22 Raptor, flying out of Dobbins ARB, Ga.

**Sept. 12, 1997.** Air University begins the Air and Space Basic Course School at Maxwell AFB, Ala. It would later be known as the Aerospace and Basic Course under the Squadron Officer College.

**Sept. 14-15, 1997.** Air Force C-17 airlifters fly nonstop from Pope AFB, N.C., to Kazakhstan to airdrop 500 US troops from the Army's 82nd Airborne Division as well as 40 Asian troops during an exercise named Centrazbat '97. Two aircraft airdrop cargo and vehicles. The C-17s are refueled three times en route during the 19-hour flight.

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

**Sept. 26, 1997.** The Senate confirms Gen. Michael E. Ryan as the Air Force's 16th Chief of Staff. Ryan is the first son to follow in his father's footsteps in the Air Force's top job. (Gen. John D. Ryan served from Aug. 1, 1969, to July 31, 1973.)

**Oct. 12, 1997.** Three Wyoming Air National Guard C-130s, equipped with the Modular Airborne Fire Fighting System, drop 685,000 gallons of water and fire retardant on fires in Java and Sumatra; each airplane drops up to 3,000 gallons at a time. The Wyoming airmen fly some 194 sorties before the operation ends in early December.

**Dec. 18, 1997.** USAF C-5, C-141, C-130, and KC-135 participate in airlift of relief supplies to Andersen AFB, Guam, delivering more than 2.5 million pounds of cargo by Jan. 4, after Typhoon Paka strikes with winds up to 236 miles per hour.

**Nov. 1, 1997.** F. Whitten Peters becomes acting Secretary of the Air Force. He is named Secretary in full capacity July 30, 1999.

**Dec. 18, 1997.** E-8 Joint STARS officially achieves initial operational capability, seven years after the aircraft, in its development phase, was employed in the Persian Gulf War and played a pivotal role.

## 1998

**Feb. 28, 1998.** The first flight—some 56 minutes—of the RQ-4 Global Hawk UAV takes place from Edwards AFB, Calif.



**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.

### [The B-2 Proves a Point](#)

**May 29, 1998.** First transfer of an operational space system to a civilian agency occurred when USAF handed over primary control of the Defense Meteorological Satellite Program on-orbit assets to the National Oceanic and Atmospheric Administration.

**Aug. 4, 1998.** The Air Force announces plans to reorganize its operational capabilities into an "Expeditionary Aerospace Force" with 10 standing Air Expeditionary Forces, or "buckets of capability" available to theater commanders. One objective is to give Air Force people more predictability and stability about deployments overseas.

### [The EAF in Peace and War](#)

**Sept. 22, 1998.** Following Hurricane Georges, Air Mobility Command, Air Force Reserve, and Air National Guard transport crews deliver water, generators, construction supplies, plastic sheeting, and ice from all over the US to Puerto Rico, the Dominican Republic, and southern Mississippi, flying at least 150 missions.

**Oct. 29, 1998.** Former Senator John H. Glenn, Jr., the first US astronaut to orbit Earth (1962), returns to space in the space shuttle *Discovery* to test the effects of microgravity on the elderly. He is 76, the oldest person to enter space.

**Nov. 6, 1998.** Following Hurricane Mitch, which claimed more than 10,000 lives, USAF airlifters deliver 7.4 million pounds of relief cargo to Honduras, Nicaragua, Guatemala, and El Salvador. The airlift ends on March 19, 1999, after more than 200 missions.

**Dec. 4–15, 1998.** The crew of the space shuttle *Endeavour* completes the first International Space Station assembly mission, which involves delivery and attachment of *Unity*, the first US module, to Russia's previously launched *Zarya* module. The crew members also launch USAF's *MightySat I*, designed to evaluate composite materials, advanced solar cells, and other technology.

**Dec. 9, 1998.** Benjamin O. Davis, Jr., retired World War II Air Force hero and leader of the all-black Tuskegee Airmen, receives a fourth star.

### [Aerospace World: Benjamin O. Davis Gets Fourth Star](#)

### [Benjamin O. Davis, American](#)

**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. It would be the first combat use of the B-1B bomber.

### [Lessons in Limited Force](#)

### [The Long Deployment](#)

## 1999

**Feb. 17, 1999.** The first C-130J, a new Lockheed Martin Hercules variant with six-bladed propellers, advanced avionics, and shorter takeoff and landing capability, arrives at Keesler AFB, Miss., to serve with the Air Force Reserve's 403rd Wing.

**March 16, 1999.** Three former members of the Warsaw Pact—Poland, Hungary, and the Czech Republic—join NATO.

**March 24, 1999.** Combat operations begin in Operation Allied Force, the NATO air campaign against Yugoslavia. US aircraft fly about two-thirds of the 45,000 sorties, pressuring Serb leader Slobodan Milosevic to withdraw his forces from Kosovo.

### [Airpower Made It Work](#)

**March 24, 1999.** The B-2 bomber makes its combat debut, flying less than one percent of total sorties in Operation Allied Force, but accounting for 11 percent of the bombing.

### [With Stealth in the Balkans](#)

**March 27, 1999.** An F-117 stealth fighter was shot down in combat. Enemy ground fire brought down the Nighthawk over Yugoslavia. Capt. John A. Cherrey, an A-10 pilot, earned the Silver Star for locating the downed pilot, who was rescued by helicopter the same day.

### [The Night They Saved Vega 31](#)

**March 28, 1999.** The Allied Force air campaign escalates to Phase 2, as the target list expands to include industrial targets throughout Serbia.

**April 6, 1999.** Two weeks into the air campaign, 24-hour strike operations finally begin. However, gradualism still marks NATO's approach to the conflict. It will be another month before sortie rates and the number of aircraft in action reach the level required.

### [The NATO Way of War](#)

**April 4, 1999.** A USAF C-17 begins airlifting relief supplies from Dover AFB, Del., to Tirana, Albania, for refugees from Kosovo at the start of Operation Sustain/Shining Hope, humanitarian counterpart to Allied Force. In the first month, allied transports, including USAF C-5s, C-17s, and C-130s, airlift more than 3,000 tons of food, medicine, tents, supplies, cots, blankets, sleeping bags, and other relief cargo.

**April 17, 1999.** For the first time, USAF sends the RQ-1 Predator RPA on flights in a combat zone, flying reconnaissance over Serbia during Allied Force. (The Army employed the ACTD Predator over Bosnia for Deliberate Force in 1995.)

### [The Little Predator That Could](#)

**May 1, 1999.** The Allied Force air campaign intensifies as the target list is expanded again. The combat sortie rate for US aircraft reaches 150 per day.

**May 2, 1999.** Serbian ground forces shoot down a USAF F-16 over Yugoslavia, the second and last USAF aircraft lost to enemy fire in Allied Force. An MH-60 helicopter crew rescues the pilot, Capt. Scott O'Grady.

**May 7, 1999.** A B-2 bomber—provided the wrong target coordinates by headquarters—accidentally hits the Chinese embassy in Belgrade.

**May 23, 1999.** NATO begins bombing the Yugoslav electricity grid, disrupting power and affecting many military related activities.

**June 10, 1999.** Operations against the Federal Republic of Yugoslavia are suspended and end formally on June 20.

### [Victory in Kosovo](#)

**June 23-27, 1999.** USAF Lt. Col. Eileen M. Collins is the first woman to command a space shuttle mission, STS-93 *Columbia*.

**July 30, 1999.** CMSgt. Frederick J. Finch becomes Chief Master Sergeant of the Air Force.

**Sept. 20, 1999.** USAF C-130s begin airlifting peacekeeping troops from Australia to Dili in East Timor under UN Operation Stabilise, following East Timor's declaration of independence from Indonesia and subsequent war. In all, USAF C-130s, C-17s, C-141, and KC-135s participate.

**Oct. 1, 1999.** Air Education and Training Command initiates "Warrior Week" at Lackland AFB, Tex., to give basic military trainees a taste of the Expeditionary Aerospace Force concept. It marks the biggest change in basic military training in more than 50 years.

### [Warrior Week](#)

**Oct. 1, 1999.** First regular Aerospace Expeditionary Force rotational cycle begins. The full cycle is 15 months, divided into five three-month periods. During each of these, two of the 10 Aerospace Expeditionary Forces will be vulnerable to deployment.

### [The EAF Turns One](#)

**Oct. 6, 1999.** Destruction of 150 Minuteman III silos, in accordance with START agreement, begins near Langdon, N.D.

**Nov. 2, 1999.** USAF announces the official transfer of Howard Air Base to Panama, following terms of the Panama Canal Treaty of 1977. The US had operated the base in the Canal Zone for 82 years.

**Dec. 20–28, 1999.** Several USAF C-130s, a C-5, and two MH-60 aircraft participate in a humanitarian operation to Venezuela where a flood left some 200,000 people homeless.



## Up From Kitty Hawk 2000-2009

*F-22 Raptor, IOC Dec. 15, 2005.*

Articles noted throughout the chronology are hyperlinked to the online archive for *Air Force Magazine* and the *Daily Report*.



### 2000

**March 2, 2000.** Operation Atlas Response begins to aid flood victims—an estimated one million people left homeless—in Mozambique. USAF C-5s and C-17s fly supplies 4,600 miles from a base in Germany to southern Africa, where C-130s and MH-53 and HH-60 helicopters distribute the food, water, medicine, and tents.

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

**May 23, 2000.** Air Education and Training Command receives its first production T-6A Texan II for training pilots at Randolph AFB, Tex.

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

**Sept. 18, 2000.** The first CV-22 Osprey arrives at Edwards AFB, Calif., where it will undergo testing.

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

#### [Heavyweight Contender](#)

**Sept. 27, 2000.** USAF changes the standard uniform for space and missile operators from the blue, one-piece flight suit to the green flight suit worn by aircrews.

**Oct. 13-14, 2000.** USAF crews from the 75th Airlift Squadron and the 86th Aeromedical Evacuation Squadron launch two C-9 Nightingales within one hour of alert to provide aeromedical evacuation for survivors of the Oct. 12 terrorist attack on the USS *Cole* docked at Aden, Yemen. The crews, including Critical Care Air Transport Teams (CCATT), receive the 2000 Mackay Trophy.

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

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

**Oct. 31, 2000.** Two Russian cosmonauts and one US astronaut launch from Baikonur Cosmodrome in Kazakhstan to become the first residents of the International Space Station.

## 2001

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

### [The Space Commission Reports](#)

**Jan. 20, 2001.** Lawrence J. Delaney named acting Secretary of 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.

**Feb. 3, 2001.** USAF C-17s airlift relief equipment and supplies from Guam to India after a devastating Jan. 26 earthquake that killed some 20,000, injured nearly 170,000, and left nearly 600,000 homeless. USAF C-5s delivered the cargo to Guam from California.

**Feb. 21, 2001.** A Predator unmanned aerial vehicle—up to then strictly a surveillance platform—hits a stationary Army tank with a live Hellfire-C missile at Indian Springs Air Force Auxiliary Field, Nev.

### [How the Predator Grew Teeth](#)

**Feb. 24, 2001.** Lt. Col. Stayce D. Harris takes command of the Air Force Reserve Command's 729th Airlift Squadron at March ARB, Calif., becoming the first black woman to command a USAF flying squadron.

**March 23, 2001.** After more than 15 years in orbit, Russia's *Mir* space station re-entered the atmosphere, falling into the South Pacific.

**April 1, 2001.** Over international waters 80 miles off the Chinese coast, two Chinese fighters intercept a US Navy EP-3 surveillance aircraft. One of the fighters collides with the EP-3 and the fighter pilot is lost at sea. The EP-3 is forced to land on Hainan, where its 24 member crew, including one USAF airmen, is held for 12 days.

### [The Last Flight of Wang Wei](#)

**April 22-23, 2001.** A development version of USAF's Global Hawk UAV takes off from Edwards AFB, Calif., flies 22-hour, 8,600-mile mission, nonstop and unrefueled, to a precision landing near Adelaide, Australia.

**May 8, 2001.** The Department of Defense designates the Air Force as DOD executive agent for space.

**May 24, 2001.** Maj. Gen. James E. Sherrard III, commander of the Air Force Reserve Command, receives a third star, a first for the Air Force Reserve.

**June 1, 2001.** James G. Roche is named Secretary of the Air Force.

**Aug. 24, 2001.** The Air Force implodes the last Minuteman III missile silo under START reductions at Grand Forks AFB, N.D. It is also the last silo at Grand Forks.

**Sept. 6, 2001.** Gen. John P. Jumper becomes Air Force Chief of Staff.

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

### [The Return of NORAD](#)

### [Black September 11](#)

**Sept. 27, 2001.** Secretary of Defense Donald Rumsfeld announces that President George W. Bush has given authority to certain military commanders to order the destruction of hijacked civilian airliners.

**Sept. 29, 2001.** The US launches satellites from Alaska for the first time, using the Kodiak Launch Complex.

**Sept. 30, 2001.** The Quadrennial Defense Review replaces the official force-sizing standard—in effect since 1993—that said the armed forces should be prepared to fight two Major Theater Wars almost simultaneously. (In reality, the forces were never sized or funded to meet that standard.) The new standard is called “4-2-1”: The force should be sized to deter aggression in four critical theaters (Europe, Northeast Asia, the East Asia littoral, Middle East/Southwest Asia), defeat aggression in any two theaters at the same time, and preserve the option for one major counteroffensive. The new standard is more demanding, especially of air and space power, than the old one was.

### [The Evolution of the Bush Doctrine](#)

**October 2001.** USAF deploys the RQ-4 Global Hawk unmanned aerial vehicle to participate in Southwest Asia operations. By Feb. 10, 2010, the UAV had flown 1,500 combat sorties.

**Oct. 1, 2001.** The Space and Missile Systems Center transfers from Air Force Materiel Command to Air Force Space Command, thereby placing cradle-to-grave oversight of acquisition and operation of space systems under a single command.

**Oct. 1, 2001.** USAF Gen. Richard B. Myers assumes command as Chairman of the Joint Chiefs of Staff, becoming the first USAF general to hold the highest military office in 19 years.

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

### [An Air War Like No Other](#)

**Oct. 8, 2001.** NATO announces that five of its AWACS aircraft will patrol off the east coast of the United States, marking the first time NATO forces have deployed to the US for a real contingency operation. Patrols for Operation Eagle Assist begin Oct. 12 and end May 16, 2002.

**Oct. 17, 2001.** Pentagon announces that it is employing armed Predator drones, equipped with Hellfire missiles, in Afghanistan.

### [The Little Predator That Could](#)

### [How the Predator Grew Teeth](#)

**Oct. 26, 2001.** The Air Force awards the Joint Strike Fighter contract to Lockheed Martin, which had competed with Boeing for it.

### [A Strike Fighter for the Future](#)

**Nov. 2, 2001.** An MH-53 Pave Low helicopter crew (Knife 04) from the 20th Special Operations Squadron rescues another 20th SOS MH-53 crew whose helicopter had gone down while the two were on a rescue mission in extremely hazardous weather conditions in the mountains of Afghanistan. Knife 04 received the 2001 Mackay Trophy.

**Nov. 9, 2001.** With Taliban forces in retreat from air attacks, Northern Alliance allies capture the strategically important northern city of Mazar-e-Sharif, surge across Northern Afghanistan, and sweep south.

**Nov. 13, 2001.** Taliban forces, hammered hard by airpower, abandon the Afghan capital of Kabul.

**Nov. 25, 2001.** Operations in Afghanistan enter new phase as US Marines deploy in country, setting up at an expeditionary base dubbed Camp Rhino. (Navy SEALs first secured Rhino on Nov. 21.)

**Nov. 28, 2001.** USAF C-17s land in Afghanistan on an airstrip about 80 miles south of Kandahar to deliver Navy Seabees as part of Operation Swift Freedom.

**Dec. 9, 2001.** Taliban rule in Afghanistan officially ends as the final province slips from its control.

**Dec. 12, 2001.** A B-1B on a bombing mission to Afghanistan crashes in the Indian Ocean about 10 miles north of its island base, Diego Garcia, but the crew survived. It was the first USAF aircraft lost in the war in Afghanistan and the first B-1B lost in combat.

**Dec. 13, 2001.** President George W. Bush informs Russia that the US will withdraw from the Antiballistic Missile Treaty of 1972, which prevented the US from developing and implementing a missile defense system.

**Dec. 17, 2001.** USAF C-17s began airlifting French troops from Istres AB, France, to Afghanistan as part of Operation Enduring Freedom.

**Dec. 26, 2001.** DOD announces Pentagon approval of low-rate initial production of the one-ton Joint Air-to-Surface Standoff Missile (JASSM), which can penetrate enemy air defenses at ranges beyond 200 miles and destroy enemy targets with precision.

## 2002

**March 1, 2002.** US and coalition partners launch Operation Anaconda, part of Operation Enduring Freedom, in eastern Afghanistan. USAF A-10s, AC-130s, B-1Bs, B-52s, and F-15s support Anaconda to stop Taliban and al Qaeda forces regrouping south of Gardez. USAF aircraft drop laser-guided thermo-baric bombs, designed to suck out all the air from cave complexes and kill the enemy inside.

**March 1, 2002.** USAF Brig. Gen. Teresa M. Peterson takes command of the 305th Air Mobility Wing at McGuire AFB, N.J., becoming the first active duty woman to command an operational flying wing.

**March 4, 2002.** During Operation Anaconda in Afghanistan, TSgt John Chapman, an Air Force Special Operations Command combat controller, charged a frontal gun emplacement, killing several of the enemy, in an effort to rescue a fallen comrade. His actions save the lives of his entire team. Chapman will receive the Air Force Cross posthumously. (See Jan. 10, 2003.) (Also see Sept. 13, 2002, noting award of posthumous Air Force Cross to SrA. Jason D. Cunningham, a pararescue jumper (PJ), for his actions during Anaconda.)

[To the Top of Takur Gar](#)



**April 18, 2002.** The Electronic Systems Center at Hanscom AFB, Mass., conducts the first flight of the experimental MC2A-X, designed to provide electronic communications and command and control over a combat area. It is dubbed "Paul Revere."

**April 19, 2002.** Air Force Space Command becomes a four-star Air Force command in its own right. Previously, the four-star commander of US Space Command and NORAD also commanded Air Force Space Command

**April 22, 2002.** USAF announces a new standard wing structure that would include four groups: operations, maintenance, mission support, and medical.

**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 on-board computer preprogrammed with flight instructions.

**May 24, 2002.** President George W. Bush and Russian President Vladimir Putin sign the Strategic Offensive Reductions Treaty (SORT), known as the Moscow Treaty that will reduce strategic nuclear weapons by about two-thirds to between 1,700 and 2,200 warheads by Dec. 31, 2012. (The treaty entered into force June 1, 2003.)

**July 1, 2002.** CMSgt. Gerald R. Murray becomes Chief Master Sergeant of the Air Force.

#### [Top Chief](#)

**July 22, 2002.** The YAL-1A Airborne Laser aircraft completes its first flight. The modified Boeing 747 is being designed to employ a chemical laser to destroy enemy missiles in their boost phases.

**Aug. 21, 2002.** The first Lockheed Martin Atlas V Evolved Expendable Launch Vehicle (EELV) lifts off from Cape Canaveral AFS, Fla.

**Sept. 13, 2002.** The Air Force awards the Air Force Cross posthumously to SrA. Jason D. Cunningham, a pararescue jumper (PJ), for his heroic actions March 4, 2002, during Operation Anaconda in Afghanistan.

#### [Air Force Posthumously Honors Pararescueman](#)

#### [To the Top of Takur Gar](#)



**Sept. 17, 2002.** The F-22 fighter is re-designated the F/A-22 to emphasize its multiple roles, including attack.

**Oct. 1, 2002.** USAF forms its first "blended" wing arrangement, uniting active duty and Air National Guard airmen in a single wing, the 116th Air Control Wing, to operate and maintain the E-8C JSTARS surveillance aircraft fleet.

#### [The Blended Wing Goes to War](#)

**Oct. 1, 2002.** DOD activates US Northern Command, a new unified command to be led by USAF Gen. Ralph Eberhart, who also remains commander of the North American Aerospace Defense Command. NORTHCOM includes elements of all the US armed services and assumes responsibility for the military protection of North America.

**Oct. 1, 2002.** Gen. John Jumper, Air Force Chief of Staff, authorizes deactivation of the Peacekeeper ICBM, originally designed to carry 10 independently targeted warheads.

**Oct. 7, 2002.** Operation Noble Eagle, combat air patrols above American cities, marks the end of its first year, with 25,100 total sorties flown. Of these, 17,600 were fighter sorties. Most of the missions were flown by the Air National Guard: 74 percent of the fighter sorties, 62 percent of the tanker sorties, and 37 percent of the airlift sorties.

**Nov. 20, 2002.** Boeing launches its first Delta IV EELV, boosting a commercial satellite into orbit from Cape Canaveral, Fla. (This is medium variant; first launch of Delta IV Heavy is Dec. 21, 2004.)

## 2003

**Jan. 10, 2003.** The Air Force awards the Air Force Cross posthumously to TSgt. John Chapman. During Operation Anaconda in Afghanistan, TSgt John Chapman, a combat controller, charged a frontal gun emplacement, killing several of the enemy, in an effort to rescue a fallen comrade. Ultimately, his actions on March 4, 2002, saved the lives of his entire special operations team.



[To the Top of Takur Gar](#)

[The Ground Warriors of Airpower](#)

**Jan. 10, 2003.** DOD assigns US Strategic Command (STRATCOM) responsibility for four new missions: global strike; integrated missile defense; integrated information operations; and global command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR). The new incarnation of STRATCOM, headquartered at Offutt AFB, Neb., is combination of the “old” STRATCOM, whose responsibility was primarily nuclear strike, and US Space Command (SPACECOM).

**Feb. 1, 2003.** Seven astronauts are lost as the space shuttle *Columbia* breaks up on re-entry, 200,000 feet above East Texas, on its return from a 16-day mission in space. This was the 113th shuttle flight, and the 28th for *Columbia*. Crew members were Air Force Col. Rick D. Husband, *Columbia*’s commander, Navy Capt. David M. Brown, Kalpana Chawla, Navy Cmdr. William C. McCool, Israeli Air Force Col. Ilan Ramon, Air Force Lt. Col. Michael P. Anderson, and Navy Cmdr. Laurel Blair Salton Clark.

**March 11, 2003.** USAF drops a precision-guided Massive Ordnance Air Blast weapon from a C-130 aircraft in a test at Eglin AFB, Fla. At 21,500 pounds, it is the largest non-nuclear weapon in existence.

**March 17, 2003.** Operation Northern Watch flies its last mission over Iraq. (Formal end comes on May 1.)

**March 19, 2003.** Operation Southern Watch flies its last mission over Iraq.

**March 19, 2003.** Operation Iraqi Freedom begins (9:35 p.m. EST) as battlefield preparation air strikes take out air defense threats, radar communication sites, and artillery. Two Air Force F-117 fighters and cruise missiles from six US warships strike “leadership targets of opportunity” in Iraq at (5:35 a.m., March 20, Baghdad time). At 10:16 p.m. EST, President George W. Bush announces to the American people that operations in Iraq have commenced. Coalition ground forces move from Kuwait into Iraq (8 a.m., March 20, Baghdad time), marking the start of G-Day, the ground campaign.

[Aerospace World Special: Desert Triumph](#)

[The Baghdad Strikes](#)

**March 21, 2003.** Coalition air forces launch nearly 1,000 strike sorties as A-Day, the air campaign, begins at 9 p.m. (Baghdad time).

[Aerospace World Special: The Road to Victory](#)

**April 8, 2003.** The last Milstar II communications satellite in a five-satellite constellation reaches space aboard a Titan IVB rocket.

**April 9, 2003.** Baghdad falls to coalition ground troops, the strength of Iraq's Republican Guard and other forces having been negated or destroyed by airpower south of Baghdad.

[The US Air Force at War](#)

**April 12, 2003.** A new world's speed record on land is set as a Missile Defense Agency payload reaches 6,416 mph at the high speed test track at Holloman AFB, N.M.

**April 16, 2003.** US Central Command officials declare the end of major combat action in Iraq.

**April 30, 2003.** The Air Force announces plans to transfer the combat search and rescue forces from Air Combat Command to Air Force Special Operations Command, effective Oct. 1, 2003.

**May 1, 2003.** US and coalition officials formally end Operation Northern Watch, the US-Turkey-UK operation to enforce UN resolutions by patrolling the northern no-fly zone in Iraq. It began as Operation Provide Comfort shortly after the end of Gulf War I in 1991. ONW flew its last combat mission on March 17, 2003.

**July 7, 2003.** President George W. Bush formally nominates Air Force Secretary James G. Roche to become the Secretary of the Army. (Roche withdraws his name from consideration in March 2004.)

**July 31, 2003.** The Senate confirms Air Force Gen. Richard B. Myers for a second two-year term as Chairman of the Joint Chiefs of Staff.

**Aug. 1, 2003.** The first production version of the RQ-4A Global Hawk UAV rolls out at the Northrop Grumman facility at Palmdale, Calif. (Development versions were used in combat operations in Southwest Asia.)

**Aug. 26, 2003.** USAF officially ends its presence at Prince Sultan Air Base near Riyadh, Saudi Arabia, where it had operated for the past 13 years since Gulf War I.

**Aug. 29, 2003.** USAF launches last Defense Satellite Communications System III satellite into orbit aboard a Delta IV EELV from Cape Canaveral AFS, Fla.

**Oct. 1, 2003.** Air Mobility Command undergoes a major restructuring, creating a single numbered air force—18th Air Force, headquartered at Scott AFB, Ill.—and transforming 15th AF at Travis AFB, Calif., and 21st AF at McGuire AFB, N.J., into expeditionary mobility task forces reporting to 18th AF.

**Oct. 18, 2003.** USAF launches its final Titan II booster from Vandenberg AFB, Calif. It was the 13th of 14 Titan II ICBMs refurbished for launch duty.

**Nov. 11, 2003.** The first C-5 Galaxy to be retired arrives at the Aerospace Maintenance and Regeneration Center (the Boneyard) at Davis-Monthan AFB, Ariz.

**December 2003.** USAF declares full operational capability for the B-2 bomber force.

## 2004

**March 10, 2004.** Defense Secretary Donald Rumsfeld announces that Air Force Secretary James Roche has withdrawn his name from contention for the Secretary of the Army position. (Also see July 7, 2003.)

**March 19, 2004.** The first new C-130J tactical airlifter destined for an active duty unit arrives at Little Rock AFB, Ark., home to the 314th Airlift Wing.

**July 19, 2004.** Lt. Col. Martha McSally, an Air Force Academy graduate and A-10 pilot, becomes the first active duty woman to lead an Air Force combat flying squadron when she takes command of the 354th Fighter Squadron at Davis-Monthan AFB, Ariz.

**Aug. 31, 2004.** The 63rd and last Atlas II booster launches from Cape Canaveral AFS, Fla. Lockheed Martin notes a sustained perfect launch record since 1991.

### [The Day of the Atlas](#)

**Sept. 16, 2004.** USAF retires the last two C-141 Starlifters in active duty service. The C-141 first flew on Dec. 17, 1963. Air Force Reserve Command expects to continue to fly its 20 remaining C-141Cs, which have upgraded avionics, through 2006.

**Oct. 1, 2004.** The Air Force formally assumes control of the Naval Space Surveillance System, commonly called the Navy Fence, with operations based at Dahlgren, Va. Now the Air Force Fence, it is a series of nine antenna sites across the southern US that help provide space situational awareness.

**Oct. 1, 2004.** The Air National Guard takes over operation of NORAD's region air operations center at Elmendorf AFB, Alaska, from the active duty Air Force.

**Oct. 1, 2004.** Air Force Space Command establishes the National Security Space Institute in Colorado Springs, Colo., to serve as DOD's focal point for space education and training.

**Oct. 14, 2004.** The Air Force changes the name of its lead official museum from the US Air Force Museum to the National Museum of the US Air Force. It is located at Wright-Patterson AFB, Ohio.

### [Big Plans for the Air Force Museum](#)

**Oct. 28, 2004.** The first production Global Hawk UAV arrives at its home with the 12th Reconnaissance Squadron at Beale AFB, Calif. The squadron has been operating developmental versions to support combat operations in Southwest Asia.

**Nov. 5, 2004.** Adm. Timothy J. Keating takes command of NORAD and US Northern Command, becoming the first Navy officer to hold the NORAD position, which traditionally went to the Air Force.

**Nov. 16, 2004.** Air Force Secretary James G. Roche announces his resignation. He has served in the top USAF civilian post since June 1, 2001 and will officially leave on Jan. 20, 2005.

**Nov. 16, 2004.** NASA's experimental X-43A Hyper X hypersonic research vehicle shatters the speed record for an air-breathing vehicle when it flies to nearly 10 times the speed of sound. Flying from Edwards AFB, Calif., NASA's B-52B mothership transports the X-43A to a launch location off the Pacific coast.

#### [In Search of Spaceplanes](#)

#### [Mission to Mach 5](#)

**Dec. 1, 2004.** USAF announces plans to reactive the Air Force District of Washington to provide support to US Northern Command's new Joint Force Headquarters-National Capital Region.

**Dec. 7, 2004.** USAF deactivates the first of five Peacekeeper ICBM launch control centers (LCCs), part of the deactivation of all 50 Peacekeepers begun in October 2002.

**Dec. 10, 2004.** The first missile defense interceptor at Vandenberg AFB, Calif., is installed, joining six interceptors already in the ground at Ft. Greeley, Alaska, as the initial units in the Missile Defense Agency's ground-based system for protection against ballistic missile attack.

**Dec. 13, 2004.** The Small Diameter Bomb, a satellite-guided, 250-pound class munition, passes its first live weapons tests. Carried aboard an F-15E Strike Eagle at 15,000 feet, the SDB successfully strikes a scoring board at White Sands Missile Range, N.M. Two days later, in its second test, the SDB destroys a Russian rocket launcher.

#### [Smaller Bombs for Stealthy Aircraft](#)

#### [Building Better Razor Blades](#)

**Dec. 17, 2004.** The last major USAF presence in France ceases operations more than a decade after USAF's 774th Expeditionary Air Base Group set up shop at Istres Air Base on the French Riviera to support NATO military operations in the Balkans.

**Dec. 17, 2004.** An Air Force Reserve Command officer, Lt. Col. John Breeden, takes command of the 11th Reconnaissance Squadron at Indian Springs AFAF, Nev., marking the first time a Reservist has led a permanent active duty operational Air Force unit. The 11th trains Predator UAV crews.

**Dec. 20, 2004.** The Air Force inactivates the 20th Fighter Squadron, the service's last operational F-4 Phantom unit, at Holloman AFB, N.M., where it had trained German Luftwaffe crews for 33 years. (The Luftwaffe continues training at Holloman, employing Tornado aircraft.)

#### [F-110: USAF's New Tactical Fighter](#)

**Dec. 30, 2004.** USAF airlifters, part of a joint task force, begin delivering relief supplies and equipment, including helicopters, to South Asia region nations hard hit by a devastating Dec. 26 earthquake and subsequent tsunamis. C-5s and C-17s deliver cargo to airports, from which C-130s and helicopters provide tactical transport.

## 2005

**Feb. 3, 2005.** The last Atlas III successfully boosts a National Reconnaissance Office payload into orbit from Cape Canaveral, Fla.

**Feb. 9, 2005.** Air Force Materiel Command formally reorganizes its largest product center, the Aeronautical Systems Center at Wright-Patterson AFB, Ohio, into wings, groups, and squadrons. AFMC will move its other entities, including Air Logistics Centers, into wing structures later in the year. (The command will start reversing these changes in 2010.)

### [Operational Acquisition](#)

### [Organizational Facelift](#)

**March 1, 2005.** The MQ-1 Predator UAV achieves initial operational capability.

**March 16, 2005.** Maj. Gen. Stephen Goldfein, commander of the Air Warfare Center at Nellis AFB, Nev., announces plans for USAF to create a UAV Center of Excellence at Indian Springs AFAF, Nev.

### [Smashing the UAV Stovepipe](#)

**March 25, 2005.** Peter B. Teets, acting Secretary of the Air Force, resigns. He has served as undersecretary of the Air Force, director of the National Reconnaissance Office, and DOD executive agent for space since late 2001 and, in addition, assumed the role of acting Secretary on Jan. 20, 2005.

**March 25, 2005.** Michael L. Dominguez becomes acting Secretary of the Air Force. He became the Assistant Secretary of the Air Force for Manpower and Reserve Affairs in August 2001 and continued in that role, following his stint as acting SECDEF, until July 2006.

**April 8, 2005.** The Navy names a 670-foot-long ship after Air Force TSgt. John A. Chapman, the combat controller who was killed in 2002 in Afghanistan. The pre-positioning ship, used to forward deploy Air Force munitions and other supplies, is one of 35 of its type that the Navy's Military Sealift Command operates.

**April 12, 2005.** Two C-17s airdrop fuel to National Science Foundation scientists at the North Pole. It is the first polar airdrop mission for the C-17.

**April 16, 2004.** Two USAF HH-60G crews from the 38th and 41st Rescue Squadrons at Moody AFB, Ga., rescue five soldiers from the crash of a US Army CH-47 helicopter in Iraq despite battling a blinding sandstorm and being attacked by surface-to-air missiles and small arms fire. The USAF airmen receive the 2004 Mackay Trophy.

**April 26, 2005.** USAF consolidates Air Force Space Command's Space Warfare Center at Schriever AFB, Colo., and Air Combat Command's Air Warfare Center at Nellis AFB, Nev., into the Air Force Warfare Center, located at Nellis.

**May 2, 2005.** Pacific Air Forces moves 13th Air Force from Guam to Hickam AFB, Hawaii.

**May 12, 2005.** Langley AFB, Va., receives its first combat-ready F/A-22 Raptor.

### [The F/A-22, in Fire and Flak](#)

**May 18, 2005.** USAF announces plans to create a Global Strike Task Force at Andersen AFB, Guam. The proposal would place KC-135R tankers and RQ-4 Global Hawk UAVs at the base with a rotating force of fighter and bomber strike aircraft.

#### [Presence, Not Permanence](#)

**June 20, 2005.** USAF redesignates Indian Springs AFAF, Nev., as Creech Air Force Base.

**June 29, 2005.** The B-52 bomber reaches 50 years of operational service.

#### [SAC's Newest Recruit—the Stratofort](#)

**June 29, 2005.** The B-1B bomber reaches 20 years of operational service.

**July 7, 2005.** USAF formally reactivates the Air Force District of Washington, headquartered at Bolling AFB, D.C., as a direct reporting unit.

**July 8, 2005.** DOD announces it will create a Joint UAV Center of Excellence at Creech AFB, Nev. Three days later, USAF announces it will stand down its UAV COE at Creech. DOD plans initial operational capability for the Joint UAV COE on Oct. 1, 2005.

#### [The Clash of the UAV Tribes](#)

**July 29, 2005.** Preston M. Geren, special assistant to Defense Secretary Donald H. Rumsfeld, becomes acting Secretary of the Air Force. Geren returns to his former post in March 2005, and then becomes Undersecretary of the Army, and, in 2007, Army Secretary.

**Aug. 4, 2005.** The U-2 Dragon Lady high-flying reconnaissance aircraft marks 50 years since its first flight.

**Aug. 9, 2005.** USAF's RC-135 Rivet Joint team marks 15 years of continuous operations supporting missions in Southwest Asia.

**Aug. 29, 2005.** Hurricane Katrina strikes the US Gulf Coast, devastating New Orleans and surrounding area. USAF and other services begin massive relief operations, including aeromedical evacuation, command and control, and airlifting supplies and rescue forces.

#### [USAF and the Recovery Effort](#)

#### [USAF and Katrina Relief](#)

**Sept. 2, 2005.** Gen. T. Michael Moseley becomes Air Force Chief of Staff.

**Sept. 19, 2005.** The last Peacekeeper ICBM ends its operational status.

#### [Bush's Nuclear Blueprint](#)

**Sept. 19, 2005.** USAF accepts the first production CV-22 Osprey at the Bell Helicopter facility in Amarillo, Tex.

**Sept. 20, 2005.** The last active duty C-9 Nightingale ends its service.

**Sept. 26, 2005.** An Air Force Reserve Command C-141, from the 445th Airlift Wing, flies the last C-141 combat mission, transporting wounded from Southwest Asia to Germany. AFRC will continue to operate its C-141s stateside until their retirement in 2006.



**Sept. 29, 2005.** A USAF C-17 airdrops a dummy rocket to simulate the DARPA-USAF "QuickReach"—a proposed new small satellite booster—demonstrating that the booster would not impact the cargo bay on the way out.

**Sept. 30, 2005.** USAF ends operations at Rhein-Main AB, Germany, which served as the primary hub for the Berlin Airlift. The formal departure takes place Oct. 10.

**Oct. 3, 2005.** The director of the National Reconnaissance Office takes on an additional title— Assistant to the Secretary of the Air Force for Intelligence Space Technology. For more than 40 years, the Air Force Undersecretary also served as NRO chief, but DOD severed that tie earlier in the year in revamping its intelligence structure.

**Oct. 7, 2005.** USAF announces that Brig. Gen. (select) Susan Y. Desjardins, a 1980 Air Force Academy graduate, will become the Commandant of Cadets, the first woman to hold that post.

**Oct. 10, 2005.** USAF C-17 and C-130 transports airlift relief aid to Pakistan following a devastating Oct. 8 earthquake. USAF C-5s transport Army helicopters as part of a joint task force that soon had international assistance. As of Oct. 21, USAF had airlifted more than 1,200 tons.

**Oct. 15-28, 2005.** The 1st Fighter Wing, Langley AFB, Va., makes the first deployment—to Hill AFB, Utah—with the new F/A-22 Raptors.

**Oct. 19, 2005.** The last Titan IVB launches. It boosts a National Reconnaissance Office payload into orbit from Vandenberg AFB, Calif.

**Nov. 1, 2005.** Management of the Joint Unmanned Combat Air System (J-UCAS) transfers from DARPA to joint Air Force-Navy leadership. (The Quadrennial Defense Review issued in 2006 would cede the program to the Navy alone.)

### [Toward an Unmanned Bomber](#)

**Nov. 3, 2005.** Michael W. Wynne becomes Secretary of the Air Force.

**Nov. 4, 2005.** USAF turns the lights out at Satellite Operations Center-52 at Onizuka AFS, Calif. SOC-52—also called the "blue cube"—had operated for 36 years, supporting both USAF and civil space operations. Its functions transferred to Schriever AFB, Colo., in 2004.

**Nov. 5, 2005.** USAF receives its first TH-1H helicopter, a modified UH-1H to be used for training.

**Dec. 7, 2005.** A new Air Force mission statement adds cyberspace to the current combat domains of air and space: to fly and fight in air, space, and cyberspace.

**Dec. 13, 2005.** USAF announces that it is changing the F/A-22 Raptor designation back to F-22.

**Dec. 15, 2005.** F-22 fighter achieves initial operational capability. The first combat-ready unit is the 27th Fighter Squadron, part of the 1st Fighter Wing at Langley AFB, Va.

## 2006

**Jan. 25, 2006.** A ceremony at Aeronautical Systems Center, Wright-Patterson AFB, Ohio, takes note of the airworthiness certification FAA has awarded to the RQ-4 Global Hawk Block 10 unmanned aerial vehicle. It is the first UAV to receive approval to fly within the entire US national airspace.

**Feb. 27, 2006.** USAF announces it plans to switch its Combat Search and Rescue (CSAR) forces from Air Force Special Operations Command back to Air Combat Command. The service moved CSAR from ACC to AFSOC in October 2003.

#### [Giving CSAR a Whiplash](#)

**March 1, 2006.** Air Force accepts the first combat-configured CV-22 tilt-rotor aircraft at the Bell facility in Amarillo, Tex.

#### [The Osprey Factor](#)

#### [Dark and Deep](#)

#### [Finally, the Osprey](#)

**March 6, 2006.** The Missouri Congressional delegation announce that USAF has selected the Air National Guard's 131st Fighter Wing to become the first B-2 bomber associate unit. After BRAC 2005 strips the wing of its F-15 fighters, it will become the 131st Bomb Wing and help operate and maintain the B-2s of the 509th BW at Whiteman AFB, Mo.

**March 17, 2006.** USAF and Army officials announce that they will jointly work the new Joint Cargo Aircraft program, merging their individual programs—the Air Force's Light Cargo Aircraft and the Army's Future Cargo Aircraft.

**March 20, 2006.** The 58th Special Operations Wing at Kirtland AFB, N.M., receives its first operational CV-22 Osprey. The wing provides special operator training.

**March 31, 2006.** USAF activates the Nuclear Weapons Center at Kirtland AFB, N.M., to oversee nuclear weapon sustainment. It is an Air Force Materiel Command direct reporting unit. (It is redesignated Air Force Nuclear Weapons Center on Feb. 29, 2008.)

**April 3, 2006.** Combat Search and Rescue (CSAR) forces shift from Air Force Special Operations Command to Air Combat Command. (See Feb. 27, 2006 entry.)

#### [Which CSAR Go Back to ACC](#)

**April 13, 2006.** DOD approves USAF's acquisition plan for its next generation tanker aircraft.

**May 6, 2006.** C-141 "Hanoi Taxi" retires to the National Museum of the United States Air Force at Wright-Patterson AFB, Ohio. The aircraft, famed for its role in Operation Homecoming in the return of American POWs from Vietnam, was the last C-141 on active duty.

**May 18, 2006.** FAA approves use of Predator UAVs to support domestic disaster relief operations.

**May 28, 2006.** USAF begins support to Indonesia following the May 27 earthquake, which reportedly killed more than 5,000, seriously injured 6,500, and left some 100,000 homeless. USAF sends a contingency response team from Guam, followed by airlift and medical support.

**June 1, 2006.** USAF's 56th Rescue Squadron at NAS Keflavik in Iceland officially transfers to RAF Lakenheath in the United Kingdom.

**June 7, 2006.** USAF and NRO leaders sign a statement of intent to improve cooperation. Among the new terms, the Air Force will assign a two-star general officer to serve as NRO's principal military advisor and third in command, and the NRO will assign a civilian to work with Air Force Space Command as its deputy director of operations.

**June 28, 2006.** USAF inactivates the 85th Group at NAS Keflavik, Iceland, where it had supported USAF fighter rotations. NAS Keflavik closes Sept. 8, 2006.

**June 30, 2006.** CMSgt. Rodney J. McKinley becomes the 15th Chief Master Sergeant of the Air Force.

#### [Chief McKinley](#)

**July 7, 2006.** Air Force Chief of Staff Gen. T. Michael Moseley announces that the F-35 Joint Strike Fighter will be called the Lightning II at a ceremony unveiling the first flight-test model at Lockheed Martin's Fort Worth, Tex., facility.

**July 8, 2006.** A ceremony at the Cheyenne Municipal Airport in Wyoming marks the stand up of the Air Force's first active duty associate unit, the 30th Airlift Squadron, which will work with Air National Guard's 153rd Airlift Wing in Cheyenne. USAF officially activated the 30th AS on July 1.

**Aug. 10, 2006.** USAF announces plans to host the international-joint schoolhouse for F-35 pilot training at Eglin AFB, Fla.

**Aug. 31, 2006.** The KC-135 tanker marks 50 years since its first flight. USAF receives the first production KC-135 in June 1957.

**Aug. 31, 2006.** An Air National Guard C-130 crew deployed from the 144th Airlift Squadron in Alaska to Afghanistan makes the first combat air drop employing the Joint Precision Air Drop System (JPADS), which has been under develop by the Air Force and Army since 1993.

**Sept. 8, 2006.** NAS Keflavik closes in Iceland. USAF fighters had provided defense support there since 1951.

**Sept. 11, 2006.** USAF announces plans to scrap its remaining 110 T-3A Firefly training aircraft, which had been grounded formally since Oct. 9, 1999 following failed attempts to ensure airworthiness. The service had suspended T-3A operations in July 1997 after three fatal accidents. USAF planned to replace its T-41 pre-pilot flight screening aircraft with the British-made trainer and had received 113 aircraft from 1993-1995.

**Oct. 2, 2006.** Air Combat Command declares initial operational capability for the GBU-39 Small Diameter Bomb.

**Oct. 10, 2006.** USAF begins flight tests of a C-130H employing the Advanced Tactical Laser concept, which it believes could lead to a new laser gunship.

**Oct. 14, 2006.** USAF dedicates the new Air Force Memorial in Arlington, Va.

#### [A Memorial on the High Ground](#)

**Oct. 16, 2006.** Air Mobility Command declares initial operational capability for the C-130J. The Maryland Air National Guard's 135th Airlift Group deployed the first two J-model Hercules to Southwest Asia in December 2004.

**Nov. 9, 2006.** USAF selects Boeing for the CSAR-X combat search and rescue replacement aircraft program. Boeing offered the HH-47, a variant of the CH-47 Chinook. (Protests upheld by the Government Accountability Office would force USAF to re-do the competition with the original three competitors—Boeing, Lockheed Martin, and Sikorsky. On April 6, 2009, known as "Black Monday," Defense Secretary Robert Gates ended the CSAR-X program, among numerous weapons cuts.)

#### [The Struggle Over CSAR-X](#)

**Nov. 16, 2006.** First CV-22 Osprey arrives for duty at Hurlburt Field, Fla., where it is assigned to the 8th Special Operations Squadron.

**Nov. 28, 2006.** The Air National Guard formally stands up its first UAV unit, redesignating the 163rd Air Refueling Wing to the 163rd Reconnaissance Wing, at March ARB, Calif. The 163rd initially will operate MQ-1 Predators.

**Dec. 1, 2006.** US Air Forces in Europe activates 3rd Air Force again at Ramstein AB, Germany, and redesignates 16th Air Force as 16th Air Expeditionary Task Force, with headquarters at Izmir, Turkey. The Air Force had inactivated 3rd AF in November 2005.

**Dec. 15, 2006.** The first flight of the Lockheed Martin F-35 Lightning II Joint Strike Fighter takes place. The conventional takeoff and landing (CTOL) version, piloted by company test pilot Jon Beesley, flew for 30 minutes from the company facility at Fort Worth, Tex.

**Dec. 18, 2006.** Robert Gates becomes the new Secretary of Defense, replacing Donald H. Rumsfeld, who had served since January 2001. (It was Rumsfeld's second tour in the post; he first served under President Gerald Ford from November 1975 to January 1977.)

## 2007

**Jan. 7, 2007.** Air Force Special Operations Command AC-130 gunships attack al Qaeda-led terrorist base in Somalia (Jan. 8 local time).

**Feb. 3, 2007.** F-22 Raptors participate in a Red Flag exercise at Nellis AFB, Nev., for the first time. The 94th Fighter Squadron at Langley AFB, Va., deployed 14 Raptors and 197 airmen for the exercise.

**Feb. 6, 2007.** President George W. Bush announces the creation of the new unified command US Africa Command (AFRICOM). It will perform some missions previously shared among US Central Command, US European Command, and US Pacific Command.

**March 13, 2007.** Air Combat Command's Creech AFB, Nev., receives its first MQ-9 Reaper RPA.

**March 29, 2007.** Tuskegee Airmen awarded Congressional Gold Medal.

[Gold for Tuskegee Airmen](#)

[Tuskegee Airmen](#)

[Benjamin Davis, American](#)

**May 24, 2007.** USAF employs the Joint Precision Airdrop System with a screamer steerable GPS feature for the first time in combat on a C-17 Globemaster III.

**Aug. 1, 2007.** This date marks the centennial of the founding of the Aeronautical Division of the US Army Signal Corps, the genesis of the US Air Force.

**Aug. 21, 2007.** Air Combat Command declares initial operational capability for the A-10C—Warthogs with new glass cockpits, precision-engagement capability, and more. The Maryland Air National Guard's 175th Wing operates the first of these "new" A-10s.

**Aug. 31, 2007.** The Air Force notifies Defense Secretary Robert Gates about the mistaken transport of six nuclear-equipped cruise missiles from Minot AFB, N.D., to Barksdale AFB, La., aboard a Barksdale B-52 bomber. The Air Force began immediate investigations and, at an unprecedented news briefing on Oct. 19, acknowledged publicly that the Incident Involved nuclear weapons, terming it a Bent Spear.

### No More Bent Spears

**Sept. 19, 2007.** An A-10C of the 104th Fighter Squadron flies the first combat sortie for the newly modified Warthog in action over Iraq. The 104th FS is part of the Maryland Air National Guard's 175th Wing.

**Sept. 24, 2007.** Air Force Secretary Michael Wynne tells reporters that USAF would limit the new bidding war over the CSAR-X combat search and rescue aircraft replacement program to the original three contractors. Boeing won the program last year (see Nov. 9, 2006), but the Government Accountability Office upheld two successive protests by losing bidders—Lockheed Martin and Sikorsky. (On April 6, 2009, Defense Secretary Robert Gates ended the CSAR-X program.)

**Sept. 25, 2007.** The MQ-9 Reaper remotely piloted vehicle, operating in Afghanistan, flies its first combat sortie.

### Rise of the Reaper

**Oct. 1, 2007.** Air Force Special Operations Command takes control of Cannon AFB, N.M., from Air Combat Command and stands up the 27th Special Operations Wing, preserving the 27th Fighter Wing's heritage.

**Oct. 1, 2007.** DOD activates US Africa Command, with its initial headquarters in Stuttgart, Germany.

**Oct. 5, 2007.** The CV-22 participates in its first search and rescue mission. The aircraft and its crew, assigned to the 58th Special Operations Wing at Kirtland AFB, N.M., was in the air within 1.5 hours of notification.

**Nov. 2, 2007.** An F-15C of the Missouri Air National Guard's 131st Fighter Wing on a training sortie breaks apart in mid-air, prompting USAF to ground the entire F-15 fleet. (The pilot ejected, sustaining injuries.) Air Combat Command officials would call the incident a "catastrophic structural failure." ACC lifted the grounding in December, but days later reinstated it for A-D models when a continuing review of the fleet showed more aircraft with longeron cracks. Younger F-15Es continued operations. ACC discovered nine F-15s it considered beyond saving. The command gradually returned the F-15A-D models to operational service, releasing the final 150 or so on Feb. 15, 2008.

**Dec. 12, 2007.** The F-22 reaches full operational capability. The first two FOC F-22 units, with a total of 40 aircraft, are the 27th Fighter Squadron and 94th FS, part of the 1st Fighter Wing at Langley AFB, Va.

## 2008

**Jan. 28, 2008.** Airmen at several bases began a wear test of a new dress uniform, dubbed the Heritage Coat.

**Feb. 29, 2008.** USAF selects Northrop Grumman-EADS North America team in the KC-X tanker competition. Competitor Boeing protests.

**March 7, 2008.** Air Force Reserve Command activates its first space wing, the 310th Space Wing at Schriever AFB, Colo.

**March 24, 2008.** Senior defense and Air Force officials announce they learned the week before about a mistaken shipment in 2006 of ICBM-related parts to Taiwan instead of the helicopter batteries that country had expected to receive. The Taiwan government reported the error at the time, but it took service and DOD officials more than a year to actually realize what had been shipped. It is the second (or first, by date) nuclear enterprise problem involving the Air Force within a year (see Aug. 31, 2008).

**March 25, 2008.** DOD and Intelligence Community cancel the Space Radar program as too costly.

**April 21, 2008.** USAF retires the F-117 Nighthawk, the service's first stealth combat aircraft, ending a 27-year career that included critical action during Operation Desert Storm.

**June 5, 2008.** Air Force Secretary Michael Wynne and Chief of Staff Gen. Michael Moseley resign from their posts.

### [Air Force Leadership Resigns](#)

### [Get In Formation](#)

**June 9, 2008.** President Bush announces intention to nominate Michael B. Donley for Secretary of the Air Force and name him as Acting Secretary, pending Senate confirmation.

**June 18, 2008.** The Missouri Air National Guard's 131st Bomb Wing (formerly the 131st Fighter Wing) flies the wing's first solo B-2 bomber sortie since taking on the new mission. The Air Force decided in 2006 to pair the ANG unit with the active duty 509th BW at Whiteman AFB, Mo., after BRAC 2005 stripped the wing of its F-15 fighters. The 131st BW is the first ANG unit to fly bombers since 2001, when USAF reorganized its B-1B bomber, eliminating two ANG wings.

**June 18, 2008.** The Government Accountability Office upholds the Boeing protest over the KC-X award to Northrop Grumman-EADS North America.

**June 21, 2008.** President Bush formally names Michael B. Donley as Acting Air Force Secretary.

**July 10, 2008.** President Bush formally nominates Gen. Norton A. Schwartz, head of US Transportation Command, to become Air Force Chief of Staff.

**Aug. 12, 2008.** Gen. Norton A. Schwartz formally takes the reins as the 19th Air Force Chief of Staff.

**Sept. 10, 2008.** Defense Secretary Robert Gates terminates the newly restarted KC-X tanker competition, explaining he didn't believe the process could yield a new winner by January and preferred to leave it for the new Administration.

**Sept. 30, 2008.** Air Force Special Operations Command ends operational use of the MH-53 Pave Low helicopter. The last six in service completed combat operations in Southwest Asia on Sept. 27 and were being transported back to the states for retirement. The Pave Lows had served for 40 years, including combat in the Vietnam War.

**Oct. 1, 2008.** The first F-35 Lightning II Joint Strike Fighter test aircraft—dubbed AA-1—in the Air Force's conventional takeoff and landing configuration arrives at Edwards AFB, Calif., for three weeks of testing. AA-1 is not a production-equivalent version. (See the Dec. 19, 2008 entry on AF-1.)

**Oct. 1, 2008.** USAF activates 17th Air Force as the air component for US Africa Command. It is headquartered at Ramstein AB, Germany.

**Oct. 2, 2008.** The Senate confirms the promotion of Lt. Gen. Craig R. McKinley, director of the Air National Guard, to four-star rank and to head the National Guard Bureau, making him the first officer to hold that post as a four-star general. McKinley is the first Air Force officer to lead the National Guard since 2002.

**Oct. 17, 2008.** Acting Air Force Secretary Michael B. Donley formally takes the oath of office as the 22nd Secretary of the Air Force.

**Nov. 3, 2008.** The first group of recruits to undergo USAF's new 8.5-week basic training regimen arrives at Lackland AFB, Tex. USAF leaders decided in 2006 to change the basic military training course from 6.5 weeks—in being since the 1960s—to 8.5 weeks to incorporate war skills training.

#### [The Harder Line in Training](#)

#### [Preparing for a New Way of War](#)

**Nov. 13, 2008.** AA-1, the test aircraft for the conventional takeoff and landing version of the F-35, flies supersonic for the first time during testing over northern Texas, flying out of the Lockheed Martin Fort Worth, Tex., facility. It reached Mach 1.05 at 30,000 feet, carrying weight to simulate a full weapons load.

**Nov. 17, 2008.** Gen. Craig R. McKinley receives his fourth star from Defense Secretary Robert M. Gates and takes charge of the National Guard Bureau. He is the first four-star general to head the NGB and the first Air Force officer since 2002.

**Dec. 15, 2008.** The first recruits enter the newly constructed Basic Expeditionary Airman Skills Training (BEAST) course at Lackland AFB, Tex., for a week-long series of increasingly difficult activities in a simulated combat environment.

#### [The Harder Line in Training](#)

**Dec. 16, 2008.** Northrop Grumman rolls out the Navy's X-47B—the first aircraft under the former J-UCAS (Joint Unmanned Combat Air System) program that had been a joint Air Force-Navy project until the 2006 Quadrennial Defense Review.

**Dec. 19, 2008.** Lockheed Martin rolls out AF-1, the first weight-optimized F-35 Joint Strike Fighter in the Air Force's conventional takeoff and landing configuration. This test aircraft is structurally equivalent to a production F-35A CTOL.

## 2009

**March 10, 2009.** The Air Force awards the Air Force Cross to TSgt. Zachary J. Rhyner, a combat controller, for his heroic actions during a combat mission in Afghanistan's Shok Valley on April 6, 2008.

#### [Cliffhanger](#)

**March 19, 2009.** The Air Force accepts the first MC-12W Liberty Project Aircraft at Hawker Beechcraft's Wichita, Kan., facility. It's the first of 37 modified King Air aircraft USAF plans to acquire to quickly bolster intelligence-surveillance-reconnaissance coverage in Southwest Asia.



**April 4, 2009.** The Predator C remotely piloted aircraft flies for the first time. The Avenger is the latest in the Predator family, including USAF's MQ-1 Predator (Predator A) and MQ-9 Reaper (Predator B), offered by General Atomics Aeronautical Systems. The Avenger is slightly larger than the Reaper and is designed to be more survivable in higher threat environments.



**April 6, 2009.** Defense Secretary Robert Gates announces sweeping cuts to acquisition programs, including ending the buy of the Air Force's new F-22 air superiority fighter at 187 aircraft and new C-17 airlifters at 205, postponement of the Next Generation Bomber, and termination of the Combat Search and Rescue helicopter replacement program (CSAR-X), the Transformational Satellite, and the second Airborne Laser aircraft. The announcement also notes USAF's plan to retire early some 250 legacy fighters. (Day becomes known as "Black Monday.")

**May 20, 2009.** The Senate passes legislation to bestow a Congressional Gold Medal upon the Women Airforce Service Pilots (WASPs), the group of women who served as instructor, transport, and ferrying pilots during World War II. The House would pass a companion bill on June 16, 2009. Sen. Kay Bailey Hutchison (R-Tex.) and Rep. Ileana Ros-Lehtinen (R-Fla.) sponsored the respective Senate and House measures.

### [The WASPs](#)

**June 10, 2009.** USAF flies its first combat sortie with the new twin-engine turboprop MC-12W intelligence-surveillance-reconnaissance aircraft during a mission out of Joint Base Balad, Iraq. The first of the so-called Liberty Project Aircraft arrived in Iraq on June 8, 2009, following an accelerated acquisition effort. USAF plans to deploy six MC-12s to Iraq.

**June 18, 2009.** USAF announces its selection of Barksdale AFB, La., as the permanent location for the new Air Force Global Strike Command.

**June 23, 2009.** US Strategic Command gets green light from Defense Secretary Robert Gates to "immediately" establish a subordinate US Cyber Command. The new subunified command will be located at Ft. Meade, Md., the site of the National Security Agency.

**June 30, 2009.** CMSgt. James A. Roy becomes the 16th Chief Master Sergeant of the Air Force.

### [Chief Roy](#)

**July 2, 2009.** US Army Gen. Stanley McChrystal, new commander of NATO's International Security Assistance Force (ISAF) and US forces in Afghanistan, issues a "Tactical Directive" that calls for greater restraint in employing air strikes against and engaging in firefights with Taliban insurgents as a means to limit civilian casualties.

**Aug. 7, 2009.** The Air Force activates Air Force Global Strike Command, a new nuclear-centric major command, at Barksdale AFB, La. The new command, headed by a three-star general, will take responsibility for USAF's nuclear-capable bombers and ICBM force. It also will inherit the lineage for Strategic Air Command, inactivated in June 1992. The first commander of AFGSC is Lt. Gen. Frank G. Klotz.

**Aug. 18, 2009.** Air Force Space Command activates 24th Air Force, the new numbered air force that will oversee USAF cyber operations from its headquarters at Lackland AFB, Tex.

**July 31, 2009.** USAF formally retires the T-37 Tweet training aircraft during a ceremony at Sheppard AFB, Tex. The T-6A has replaced the T-37, which served for more than 50 years as part of the Air Force's undergraduate pilot training force.

**Sept. 3, 2009.** Air Force Global Strike Command activates the 69th Bomb Squadron at Minot AFB, N.D., where it will serve as USAF's fourth operational B-52H squadron.

**Sept. 13, 2009.** A C-5M Super Galaxy, a C-5 refurbished with new engines and avionics among other upgrades, sets 41 US and world records on a flight during its operational test and evaluation phase.

**Sept. 24, 2009.** USAF releases a draft request for proposals in its revitalized KC-X tanker replacement program.

**Nov. 12, 2009.** Six CV-22 Ospreys and their operators, maintainers, and support airmen from the 1st Special Operations Wing return to their home base at Hurlburt Field, Fla., from a previously undisclosed three-month deployment in Southwest Asia supporting Operation Iraqi Freedom. It was the first combat employment for Air Force Special Operations Command's new CV-22 tilt-rotor aircraft.

**Nov. 14, 2009.** The first production-equivalent F-35A conventional takeoff and landing Joint Strike Fighter (designated AF-1) takes its first flight—an 89-minute stroll during which Lockheed Martin test pilot Doc Nelson flew it from the company's Fort Worth plant to 20,000 feet, reached 0.6 Mach, and conducted some 360-degree rolls.

**Nov. 16, 2009.** The Air Force RQ-4 Global Hawk Block 40 unmanned aerial vehicle (designated AF-18) makes its first flight, flying for about two hours from Northrop Grumman's production facility in Palmdale, Calif., to Edwards AFB, Calif. The Block 40 version will carry the MP-RTIP (multi-platform radar technology insertion program) all-weather radar sensor that Northrop and Raytheon are developing for enhanced detection and tracking of moving ground targets.

**Dec. 1, 2009.** The Air Force formally transfers its Minuteman III ICBM force from Air Force Space Command to the new Air Force Global Strike Command.

**Dec. 4, 2009.** USAF reveals existence of new stealth reconnaissance remotely piloted aircraft, the RQ-170 Sentinel, built by Lockheed Martin and operated by the 30th Reconnaissance Squadron, Tonopah Test Range, Nev. (USAF [statement](#)) On Dec. 7, 2009, the Air Force confirms to *Air Force Magazine's* Daily Report that the RQ-170 Sentinel is the same mystery aircraft that has been photographed near Kandahar AB, Afghanistan.



### [Why Now?](#)

**Dec. 27, 2009.** The first of 24 MC-12W Liberty Project Aircraft destined for operations in Afghanistan arrives at Bagram Airfield.



## Up From Kitty Hawk 2010-2013

*F-35 strike fighters, first production F-35A flies Feb. 25, 2011.*

Articles noted throughout the chronology are hyperlinked to the online archive for *Air Force Magazine* and the *Daily Report*.



### 2010

**Jan. 27, 2010.** USAF flies its MQ-1 Predator RPA in its first humanitarian mission, assisting in post-earthquake operations in Haiti.

**Feb. 1, 2010.** The Air Force formally transfers its B-2 and B-52 bomber forces from Air Combat Command to the new Air Force Global Strike Command.

#### [Strike Command Steps Up](#)

**Feb. 11, 2010.** The Airborne Laser successfully destroys a boosting ballistic missile, culminating a long-awaited proof-of-concept demonstration for directed energy technology.

**Feb. 24, 2010.** USAF releases its final request for proposals in its revitalized KC-X tanker replacement program.

**March 8, 2010.** Northrop Grumman announces its decision not to pursue the KC-X tanker program.

**March 10, 2010.** Congress awards a Congressional Gold Medal to the WASP (Women Airforce Service Pilots), recognizing them for their trailblazing contributions during World War II when they flew military aircraft in non-combat roles to free up male pilots for combat. More than 200 surviving members attended the Capitol Hill ceremony.

#### [The WASPs](#)

**March 16, 2010.** The Pentagon releases an unclassified version of the executive summary of the Mobility Capabilities and Requirements Study 2016, recently sent to Congress. Contrary to previous mobility reviews, the MCRS-2016 finds the US has more than enough strategic airlift capability, certifying Pentagon plans to end C-17 production and eliminate some older C-5s.

#### [The Double Life of Air Mobility](#)

**March 31, 2010.** The Pentagon announces it is willing to extend the KC-X tanker program proposal filing deadline from May 10 to July 9, providing EADS North America formally commits to bidding before the original May 10 deadline. (EADS NA did so on April 20.)

**April 7, 2010.** President Barack Obama and Russian President Dmitry Medvedev sign the new Strategic

Arms Reduction Treaty in Prague, Czech Republic. Upon entry into force of the "New START Treaty," each side would slash its deployed nuclear warhead levels to 1,550 and reduce to 800 its total number of ICBMs, submarine-launched ballistic missiles, and nuclear-capable bombers. Officials say the US will reduce the nuclear warheads on each of its Minuteman III ICBMs to a single payload. Plans also called for reducing the number of MMIIIs from the current 450 to about 420.

### Arms Control, On a Schedule

**April 20, 2010.** EADS North America formally announces it plans to pursue the KC-X tanker program without former partner Northrop Grumman (Northrop opted out in March). DOD had agreed to a proposal extension, moving the filing date from May 10 to July 9.

**April 22, 2010.** An Air Force-industry team launches the Boeing-built X-37B orbital test vehicle, the first of a new unmanned, reusable space test platform, into space at 7:52 p.m. EDT from Cape Canaveral AFS, Fla., via a United Launch Alliance Atlas V expendable booster.

**May 26, 2010.** USAF's X-51A unmanned hypersonic air vehicle makes first flight, flying further on its own power than any other scramjet in history. A B-52 mothership carried aloft the Boeing-built X-51, which flew at Mach 5 for about 200 seconds before program officials terminated the flight. Pratt & Whitney-Rocketdyne developed the vehicle's revolutionary SJY61 engine. USAF officials later revealed that testers had to prematurely terminate the flight because of a breached seal in the interface between the air vehicle and its engine.

**May 27, 2010.** The Air Force and its industry partners successfully launch the first Global Positioning System Block IIF satellite into space aboard a Delta IV rocket from Cape Canaveral AFS, Fla. The Boeing-built spacecraft features a more robust and higher power military signal—first included on GPS Block IIR-M satellites—and a new L5 civil signal for aviation safety of flight.

**June 6, 2010.** The first Navy F-35C test aircraft (designated CF-1) makes its inaugural flight from NAS-JRB Fort Worth, Tex., with Lockheed Martin test pilot Jeff Knowles at the controls for the 57-minute flight.

**June 10, 2010.** The F-35B, USMC's short takeoff and vertical landing variant of the Joint Strike Fighter, reaches supersonic speeds for the first time, flying out of NAS Patuxent River, Md., and reaching Mach 1.07.

**June 12, 2010.** Air Force Space Command assumes control of TacSat-3 from the Air Force Research Lab's Space Vehicles Directorate, following nearly 13 months of drills since its launch in May 2009. In that time, its primary payload an imaging spectrometer (dubbed ARTEMIS) responded to combatant commander taskings, including providing overhead imagery of earthquake relief efforts in Chile and Haiti.

**July 9, 2010.** The Air Force announces it recently completed deployment of all 30 MC-12W Liberty intelligence-surveillance-reconnaissance aircraft to Southwest Asia, thus completing the initial deployment of the entire operational fleet in only 13 months.

**July 14, 2010.** Air Force Chief Scientist Werner Dahm rolls out [Technology Horizons](#) report, which lays out the service's science and technology priorities for the next decade and beyond. It is the culmination of a year-long, comprehensive review. (USAF made public release of the 150-page report on July 21, 2010.)

**July 14, 2010.** The first RQ-4 Global Hawk outfitted with the battlefield airborne command node (BACN) to serve as an aerial communications relay platform makes its maiden flight, flying from Northrop Grumman's Palmdale, Calif., facility to Edwards AFB, Calif.

**July 29, 2010.** The first USAF HC-130J model combat rescue tanker makes its maiden flight, operating from Lockheed Martin's Marietta, Ga., facility.

**Aug. 9, 2010.** The RC-135 Rivet Joint force of the 55th Wing, based at Offutt AFB, Neb., surpasses 20 years of continuous support to operations in Southwest Asia, beginning with Operation Desert Shield (August 1990) and continuing through Operation Deny Flight and post-9/11 operations in Iraq and Afghanistan.

### [21st Century Rivet Joint](#)

**Aug. 9, 2010.** The Air Force announces its selection of Raytheon to supply the Small Diameter Bomb Increment II.

**Aug. 14, 2010.** The Air Force and industry partners successfully launch the first Advanced Extremely High Frequency satellite (AEHF-1) aboard a United Launch Alliance Atlas V rocket operating from Cape Canaveral AFS, Fla. AEHF is replacing Milstar communications satellites.

**Aug. 26, 2010.** Air Force Secretary Michael B. Donley issues a memo to initiate reorganization of the service's top space apparatus, moving space acquisition under the assistant secretary for acquisition and other space matters under the undersecretary of the Air Force. SECAF also establishes an Air Force Space Board to coordinate acquisition, plans, requirements, operations, training, and international affairs related to space.

**Aug. 30, 2010.** Boeing announces that USAF has declared the first GPS IIF satellite is operational.

**Aug. 31, 2010.** President Barack Obama declares an end to Operation Iraqi Freedom and the start of Operation New Dawn in Iraq, marking an end to formal combat operations that began on March 19, 2003.

**Sept. 1, 2010.** The first of three RQ-4 Global Hawk unmanned aerial vehicles planned for Andersen AFB, Guam, arrives at its new home.

**Sept. 14, 2010.** DARPA signs an agreement with Boeing to develop and fly the company's SolarEagle under DARPA's Vulture II demonstration program, designed to produce an unmanned aircraft that can operate continuously on-station in the stratosphere for at least five years. Boeing expects first flight in 2014.

**Sept. 17, 2010.** The Air Force retires the last of its T-43A training aircraft during a ceremony at Randolph AFB, Tex. The service flew the T-43 from 1973 as a flying classroom for navigators. Training in T-1 Jayhawks and T-6A Texan IIs replaced that in the T-43.

**Sept. 19, 2010.** The first production C-5M Super Galaxy makes its maiden flight from Lockheed Martin's Marietta, Ga., facility. It will join three pre-production aircraft already in operational service at Dover AFB, Del.

### [The Super Galaxy](#)

**Sept. 21, 2010.** SMSgt. Richard L. Etchberger posthumously receives the Medal of Honor from President Barack Obama during a White House ceremony that recognized Etchberger's heroism during combat March 11, 1968 at Lima Site 85, a top-secret Air Force radar facility in the mountains of Laos during the Vietnam War. At the time, the Air Force declined to award the MOH to preserve the secrecy of the operation in a supposedly neutral country, but it allowed posthumous presentation of an Air Force Cross in a non-public ceremony.

### [Etchberger, Medal of Honor](#)

### [The Fall of Lima Site 85](#)

**Sept. 25, 2010.** The first Space Based Space Surveillance (SBSS) satellite reaches orbit, launched aboard an Orbital Sciences Corp. Minotaur IV booster from Vandenberg AFB, Calif.

**Sept. 30, 2010.** Air Force Global Strike Command reaches full operational capability, less than 14 months after its initial activation to oversee USAF's nuclear-capable bomber force and ICBMs.

**Oct. 7, 2010.** The Air Force announces its new motto: Aim High ... Fly-Fight-Win. The service selected the new motto based on inputs from airmen gathered over an eight-month period.

**Oct. 25, 2010.** Aeronautical Systems Center at Wright-Patterson AFB, Ohio, begins seeking industry input for technologies leading to a next-generation tactical airlifter, dubbed the Joint Future Theater Lift (JFTL) capability. USAF could field this notional replacement to the C-130 in the mid-2020s.

**Nov. 3, 2010.** Aeronautical Systems Center begins industry research toward a replacement for the F-22, dubbing the aircraft the Next Generation Tactical Aircraft (NGTA), which USAF might field around 2030.

### [The Sixth Generation Fighter](#)

**Nov. 3, 2010.** DOD announces that US Cyber Command, headquartered at Fort Meade, Md., has reached full operational capability. Defense Secretary Robert Gates directed US Strategic Command on June 23, 2009, to immediately establish the new command, which celebrated initial operational capability on May 21, 2010.

**Dec. 3, 2010.** The X-37B, USAF's first unmanned re-entry space vehicle, returns to Earth, following its maiden voyage of 220 days, during which time it conducted risk reductions and reusable space vehicle technology concept development experiments.

**Dec. 7, 2010.** Air Force Space Command's 24th Air Force changes from Air Forces Strategic to Air Forces Cyber (AFCYBER) to better reflect its mission in support of the newly formed US Cyber Command, a subunified command under US Strategic Command.

**Dec. 22, 2010.** President Barack Obama signs the Don't Ask, Don't Tell Repeal Act of 2010 into law, overturning the policy crafted in the Clinton Administration that prevented homosexuals from openly serving in the US military. However, before the law can take effect, DOD has to craft new policies and regulations that the President, Secretary of Defense, and Chairman of the Joint Chiefs of Staff must certify.

**Dec. 22, 2010.** The Senate ratifies the New START arms reduction treaty with Russia by a margin of 71 to 26, delivering President Barack Obama a key foreign policy victory. The Russian Duma still needs to ratify the accord for it to enter into force. Under it, both the United States and Russia would reduce their strategic nuclear arsenals to 1,550 deployed warheads, 700 deployed launchers, and 800 launchers overall. President Obama and Russian President Dmitry Medvedev signed New START on April 8, 2010.

**Late December 2010.** Images begin appearing on the Web showing China's new stealth fighter, the J-20, in high-speed taxi tests.

### [China Joins the Stealth Club](#)

### [Maybe Not a Fighter](#)

**Dec. 26, 2010.** Geraldine Hoff Doyle, the iconic face of "Rosie the Riveter" depicted on a World War II "We Can Do It!" poster, dies at age 86. In 1942, she was 17 and working at a metal-pressing plant in Michigan when a United Press photographer snapped her photo, which an artist later used—unknown to Doyle at the time—as the inspiration for the now-classic support-the-war-effort poster.





## 2011

**Jan. 6, 2011.** Defense Secretary Robert Gates announces the service shares of a \$100 billion cut planned over the next five years. The Air Force share is about \$34 billion. To reach that amount, USAF planned to implement new efficiencies. There were no additional major program cuts planned.

**Jan. 6, 2011.** Defense Secretary Robert Gates announces that the command billet for US Air Forces in Europe would be reduced from a four-star to a three-star post with the next command change. He announces the same rank reduction for the US Army and Navy components for US European Command.

**Jan. 7, 2011.** USAF announces it has removed the rated requirement for becoming an Air Liaison Officer in an effort to more rapidly increase the number of ALOs.

**Jan. 11, 2011.** Photos begin appearing on the Internet of the Chinese J-20 stealth fighter in its first flight.

**Jan. 20, 2011.** A United Launch Alliance Delta IV heavy lift evolved expendable launch vehicle launches for the first time from the Vandenberg AFB, Calif. West Coast launch range.

**Jan. 20, 2011.** Gen. Donald Hoffman, commander of Air Force Materiel Command, declares full operational capability for the Air Force Nuclear Weapons Center at Kirtland AFB, N.M. AFNWC was March 31, 2006.

**Jan. 31, 2011.** Air Force Space Command takes operational control of the Space Tracking and Surveillance System Advanced Risk Reduction Technology satellite from the Missile Defense Agency. The ARRT will aid AFSPC's space situation awareness mission to monitor on-orbit spacecraft.

**Feb. 4, 2011.** Northrop Grumman's X-47B naval unmanned combat demonstrator aircraft flies for the first time, completing a 29-minute mission at Edwards AFB, Calif. The UCAS-D program is designed to demonstrate that a tailless, fighter-sized aircraft can safely takeoff and land on a carrier deck.



**Feb. 4, 2011.** Air Force Space Command opens its new Standard Space Trainer Integrated Space Center at Schriever AFB, Colo., where it has been under development since 2006. The SST offers common training architecture for satellite operators.

**Feb. 5, 2011.** Secretary of State Hillary Clinton and Russian Foreign Minister Sergei Lavrov exchange the instruments of ratification for the New START nuclear arms control agreement during the Munich Security Conference in Munich, Germany.

**Feb. 14, 2011.** The Air Force rolls out a new acquisition strategy, dubbed EASE—evolutionary acquisition for space efficiency—with release of the Fiscal 2012 budget. Air Force Space Command expects EASE, which requires Congressional approval, to provide an incremental funding approach, utilizing block buys and fixed-price contracting to help prevent requirements creep and escalating cost for space systems.

**Feb. 24, 2011.** USAF announces Boeing has won the KC-X tanker replacement program with the company's 767-based NewGen Tanker beating the A330-based aircraft offered by EADS North America. USAF expects Boeing to deliver 18 new tankers by 2017 as part of the 179-aircraft buy in the KC-X contract. USAF plans to follow with KC-Y and KC-Z programs to replace its entire KC-135 fleet and KC-10 tankers. USAF designates the KC-X tanker, KC-46A.





**Feb. 25, 2011.** The first production version F-35A, dubbed AF-6, makes its first flight. AF-6 flew for one hour out of Lockheed Martin's Fort Worth, Tex., production facility.

**Feb. 25, 2011.** USAF announces that 1st Lt. Candice Killian is the service's first female to qualify as a CV-22 tilt-rotor aircraft pilot. She is Osprey pilot No. 97.

**March 2011.** Air Force Chief of Staff Gen. Norton A. Schwartz tells *Air Force Magazine* USAF will no longer use traditional force-sizing metrics—tactical fighter wings, fighter wing equivalents, or combat wings—but will instead use the number of platforms by category, such as high-performance or strike aircraft, to fit DOD's current operational scenarios.

**March 3, 2011.** USAF accepts its final Predator remotely piloted aircraft, tail No. 268. The General Atomics Aeronautical Systems medium-altitude RPA, originally dubbed RQ-1, progressed from first flight in July 1994 as an intelligence-surveillance-reconnaissance-only asset to an MQ-1 version armed with Hellfire missiles. The Air Force continues to buy its successor, the larger, more-capable MQ-9 Reaper.

**March 11, 2011.** Massive 9.0 earthquake strikes Japan; major tsunami follows. US military aid efforts include assistance to Japanese forces, delivery of more than two million gallons of water, 189 tons of food, 11,960 gallons of fuel, and 100 tons of other relief supplies via air and sea under the Japan Self-Defense Force-led Operation Tomodachi. US military assistance includes some 140 aircraft, more than 20 ships, and about 20,000 personnel—above those already stationed in Japan.

**March 14, 2011.** Defense Secretary Robert Gates issues a memorandum outlining his latest efficiency decisions, including eliminating 22 general officers positions from the Air Force. The Army and Navy (not including USMC) will each lose 11. (Also see Jan. 6, 2011, entry.) In all, Gates' memo outlines: 102 eliminations (44 service billets, 58 joint), 23 reductions in grade, 10 reallocations (within Joint pool), and five reductions in rank for health profession (requires legislation).

**March 14, 2011.** Lockheed Martin announces USAF's new HC-130J rescue tanker has completed developmental testing.

**March 15, 2011.** Senior Air Force officials tell Congress the projected initial operational capability date for the F-35A likely could slip up to two years, from 2016 to 2018, under the Pentagon's latest restructure of the Joint Strike Fighter program. (On April 7, 2011, Gen. Norton A. Schwartz, USAF Chief of Staff, would tell Congress the projected IOC is now at least late 2017.)

**March 19, 2011.** Coalition forces launch US-led Operation Odyssey Dawn in Libya to enforce UN Security Council Resolution 1973 to protect the Libyan people from the country's ruler, including enforcing a no-fly zone. Three B-2 bombers, flying from Whiteman AFB, Mo., and four F-15Es and eight F-16CJs are among the first wave of strike forces, following US and British cruise missile attacks on Libyan air defense sites. USAF Maj. Gen. Margaret Woodward, commander of 17th Air Force, serves as joint force air component commander. In all US forces would fly more than 600 strike missions out of a total of some 1,600 sorties overall, including aerial refueling and airlift sorties.

**March 24, 2011.** NATO assumes responsibility for enforcement of the no-fly zone over Libya under UN Security Council Resolution 1973.

**March 24, 2011.** DOD issues a 90-day stop work order against the General Electric-Rolls Royce F136 engine, effective March 31 when its government funding runs out. The Pentagon has repeatedly tried to kill the alternate F-35 engine program, but Congress in the past continued funding it.

**March 29, 2011.** Lockheed Martin rolls out USAF's first new-build MC-130J Combat Shadow II. The company is under contract to provide 15 aircraft to Air Force Special Operations Command.

**March 31, 2011.** NATO assumes command of coalition operations in Libya with the transition from the US-led Operation Odyssey Dawn to NATO-led Operation Unified Protector.

**April 6, 2011.** President Obama approves changes to the Unified Command Plan that place Alaska and the Arctic region under US Northern Command's responsibility. Previously, NORTHCOM and US Pacific Command shared responsibility for Alaska.

**April 8, 2011.** The Air Force announces plans to base its MC-12W Liberty intelligence-surveillance-reconnaissance aircraft at Beale AFB, Calif. (The base will receive the first of its planned seven training aircraft June 10, 2011; the bulk of the 37-aircraft fleet are expected to be deployed overseas.)

**April 13, 2011.** President Obama announces plans to cut about \$400 billion from the defense budget by 2023 as part of an effort to reduce the overall federal deficit by \$4 trillion. This comes on top of the \$400 million defense reduction identified over the past two years in current and future defense spending.

**April 20, 2011.** Lockheed Martin announces the first flight of USAF's MC-130J Combat Shadow II aircraft. The flight takes place from the company's Marietta, Ga., production facility.

**April 25, 2011.** The Pentagon notifies the General Electric-Rolls Royce F136 team that it has terminated the contract for the engine's development. The two companies announce May 5 their intention to continue funding the F-35 strike fighter alternate engine development program through Fiscal 2012 out of pocket.

**April 27, 2011.** Boeing's Phantom Ray unmanned airborne system flies for the first time under its own power. The 17-minute flight at a speed of 178 knots and altitude of 7,500 feet takes place under the auspices of NASA's Dryden Flight Research Center at Edwards AFB, Calif., and demonstrates the vehicle's airworthiness.



**May 5, 2011.** USAF accepts its first production F-35A strike fighter, AF-7, the second production version off the Lockheed Martin assembly line, but the first to complete acceptance testing.

**May 7, 2011.** Air Force Space Command announces launch of GEO-1, the first Space Based Infrared System geosynchronous satellite. A United Launch Alliance Atlas V booster launched from Cape Canaveral AFS, Fla., carrying the Lockheed Martin satellite into orbit. GEO-1 joins SBIRS sensors already operating on host satellites. The Air Force expects SBIRS to complement and eventually replace its Defense Support Program missile warning satellites. (Lockheed Martin announces May 24 that GEO-1 has reached its operational orbit.)

**May 9, 2011.** Northrop Grumman unveils the Firebird, a new intelligence-gathering aircraft capable of operating in manned or unmanned configurations and employing multiple sensors at the same time. Northrop provided the universal payload interface and missions systems for Firebird, which Scaled Composites designed, built, and tested



**May 9, 2011.** USAF's B-52H bomber fleet surpasses 50 years of operations. On May 9, 1961, Boeing delivered the first B-52H, dubbed State of Michigan, to Strategic Air Command 379th Bomb Wing at Wurtsmith AFB, Mich.

**June 5-6, 2011.** On a mission from Dover AFB, Del., to Bagram AB, Afghanistan, a combined active duty and Air Force Reserve crew flies a C-5M Super Galaxy on a direct, non-stop 15-hour, flight—with one aerial refueling—over the Arctic, marking the first time a USAF aircraft has flown this northern route. Use of the route by military aircraft was made possible by an agreement reached with Russia in 2009.

**June 6, 2011.** Maj. Gen. John R. "Johnny" Alison, USAF (Ret.), a highly decorated World War II combat ace, Korean War veteran, and lifetime airpower advocate, dies at age 98. Born in Micanopy, Fla., on Nov. 21, 1912, Alison entered the Army Air Corps after graduating from the University of Florida in 1936. He served on active duty and later in the Air Force Reserve until his retirement in 1972. Alison



was an outstanding pilot, whose World War II achievements include six official kills while flying with and later commanding the 75th Fighter Squadron, part of the famed "Flying Tigers," in the China-Burma-India theater. He later became co-commander, with Col. Phil Cochran, of the newly formed 1st Air Commando Group that fought behind Japanese lines in Burma, flying one of the first gliders in. He is credited with being the father of Air Force special operations. After the war, he served as the assistant secretary of commerce for aeronautics in the Truman Administration before returning to service during the Korean War. He served as the Air Force Association's President from 1954 to 1955 and as AFA's Chairman of the Board from 1955 to 1956. He remained engaged in AFA as director emeritus thereafter. In 2005, he was enshrined in the National Aviation Hall of Fame. He was a founding Member of the Air Force Memorial Foundation.

#### [Valor: They Said It Couldn't Be Done](#)

#### [The All-American Airman](#)

#### [Alison](#)

**June 14, 2011.** Mississippi's Congressional delegation announces that Key Field Air National Guard Base in Meridian, Miss., home to the 186th Air Refueling Wing, will become USAF's C-27J schoolhouse. The schoolhouse, expected to be fully operational in 2015, will train pilots, loadmasters, and maintainers.

**June 14, 2011.** The Civil Air Patrol receives a World Peace Prize from the World Peace Corps Mission, honoring CAP as its Roving Ambassador for Peace in 2010, during a ceremony at the US Capitol.

#### [The Citizen Air Fleet](#)

#### [Valor: A CAP for the Sub Threat](#)

**June 16, 2011.** An Electronic Systems Center spokesman at Hanscom AFB, Mass., confirms that USAF plans to purchase a Bombardier BD-700 aircraft to serve in Southwest Asia as an overhead communications-relay platform, dubbing it E-11A. USAF has been leasing the aircraft, to which it added Northrop Grumman's Battlefield Airborne Communications Node (BACN) to enable disparate battlefield communications systems to share data.

**June 29, 2011.** A Minotaur I rocket successfully boosts the Operationally Responsive Space-1 (ORS-1) satellite into space from NASA's Wallops Island launch facility on Virginia's eastern shore. ORS-1 is designed to provide additional overhead imagery to commanders in Southwest Asia.

**July 1, 2011.** Leon Panetta replaces Robert Gates at Secretary of Defense. Gates had led the Defense Department since December 2006, serving both President George W. Bush and President Barack Obama. Panetta previously was Director of Central Intelligence.

**July 8, 2011.** Space Shuttle *Atlantis* blasts off from Kennedy Space Center in Florida on the space shuttle program's final space mission, the 135th flight over a span of 30 years.

**July 12, 2011.** Rockwell Collins delivers the final C/KC-135 upgraded with the Global Air Traffic Management (GATM) system during a ceremony at Kelly Field in San Antonio. GATM-equipped aircraft are certified to international communication, navigation, surveillance/air traffic management standards.

**July 21, 2011.** *Atlantis* touches down at NASA's Kennedy Space Center in Cape Canaveral, Fla., after its final flight, signaling the end to 30 years of space shuttle flights.

**July 22, 2011.** President Obama signs the document certifying the Department of Defense has met the requirements for repeal of the 1993 law known as Don't Ask, Don't Tell, starting the 60-day countdown toward the Sept. 20 end to the ban on homosexuals serving openly in the US military.

**July 25, 2011.** Retired Col. Arthur W. "Kit" Murray, the USAF test pilot who flew the X-1A to a record-setting 90,440 feet on Aug. 26, 1954, dies at age 92.

**Aug. 4, 2011.** DOD officially disestablishes US Joint Forces Command, which stood up in 1999, a casualty of Pentagon cost-cutting measures.

**Aug. 4, 2011.** The C-27J Spartan flies first combat mission on deployment to Afghanistan. Several C-27Js from the Ohio Air National Guard's 179th Airlift Wing at Mansfield are being operated by ANG and Army aircrews to support ground operations.

**Aug. 10, 2011.** Air Combat Command declares initial operational capability with the RQ-4 Global Hawk Block 30 unmanned aerial vehicle. (A Northrop Grumman official on Aug. 16 announces that a Block 30 Global Hawk led the opening air strikes during Operation Odyssey Dawn in Libya.)

**Sept. 21, 2011.** An Ariane V rocket lifting off from Kourou, French Guiana, boosts into orbit the SES-2 communications satellite, which hosts USAF's first payload on a commercial satellite. The experimental Air Force payload, dubbed Commercially Hosted Infrared Payload (CHIRP), also is the first wide-field-of-view infrared staring payload in space.

**Sept. 22, 2011.** Boeing announces the company and the Air Force Research Lab successfully completed the first flight test of a new high-powered microwave weapon at the Utah Test and Training Range earlier in the year (no specific data given). The Counter-electronics High-powered Microwave Advanced Missile Project (CHAMP) began in April 2009 with award of a three-year contract to demonstrate the ability to neutralize electronic targets while minimizing collateral damage.

**Sept. 23, 2011.** The 50th Space Wing at Schriever AFB, Colo., accepted control authority for ORS-1, which went into orbit June 29 and is designed to provide ISR support for troops in Southwest Asia.

**Sept. 24, 2011.** USAF Chief of Staff Gen. Norton A. Schwartz pilots the first HC-130J Combat King II personnel recovery aircraft to its home at Davis-Monthan AFB, Ariz.

**Sept. 25-26, 2011.** A USAF C-5M Super Galaxy from the 436th Airlift Wing, Dover AFB, Del., flies for the first time a new non-stop route from the US to Afghanistan, proving the ability to airlift troops and supplies more quickly and efficiently.

**Sept. 27, 2011.** The Navy-led TacSat-4 experimental communications satellite program, under the Operationally Responsive Space joint office at Kirtland AFB, N.M., launches aboard a Minotaur IV+ booster from Kodiak, Alaska. TacSat-4's planned one-year mission is to enable ground troops to remain in contact via legacy hand-held radios even when they are operating in difficult mountainous and urban terrain in Southwest Asia.

**Sept. 29, 2011.** USAF receives the first new-build MC-130J Combat Shadow II (renamed Commando II on March 9, 2012), now part of the 27th SOW at Cannon AFB, N.M.

**Sept. 30, 2011.** USAF activates the 461st Air Control Wing at Robins AFB, Ga., changing the nine-year-old 116th ACW "blended" wing operation with the Air National Guard to an active associate arrangement between the two wings. ANG takes sole control of the 116th and ownership of the E-8C JSTARS aircraft, which the 461st helps operate and maintain.

### [The Blended Wing Goes to War](#)

**Oct. 7, 2011.** This day marks the 10th anniversary since the start of Operation Enduring Freedom in Afghanistan.

**Oct. 24, 2011.** The first Advanced Extremely High Frequency (AEHF-1) military communications satellite reaches its intended operational orbit, after a 14-month delay. A thruster malfunction forced USAF and industry to devise an alternate orbit-raising plan, which employed different thrusters but did not impact the satellite's planned 14-year service life.

**Oct. 27, 2011.** SSgt. Robert Gutierrez Jr., an Air Force Special Operations Command combat controller, receives the Air Force Cross for his actions Oct. 5, 2009, in Afghanistan. During a lengthy firefight, Gutierrez accurately guided close air support at a "danger-close" range helping to decimate the enemy and allow his team to escape the kill zone without additional casualties. Even though wounded, losing more than five pints of blood, and having a burst eardrum (following close-in strafing by A-10s he directed), he continued to direct aircraft overhead, called in his own medevac, and walked himself to the landing zone.



### [Once More Unto the Breach](#)

**Oct. 31, 2011.** The UN Security Council approves a resolution ending Operation Unified Protector, NATO's seven-month military intervention in Libya.

**Nov. 1, 2011.** Administration officials celebrate the dismantlement of the final B53 nuclear bomb in the US inventory. Retired in 1997, the Cold War-era bomb, which was about the size of a mini-van and weighed some 10,000 pounds, was carried by B-47, B-52, and B-58 bombers.

**Nov. 7, 2011.** Lt. Col. Donald Cornwell, Lt. Col. Dylan Wells, Capt. Leigh Larkin, and Capt. Nicholas Tsougas receive the 2010 Mackay Trophy for the most meritorious flight in 2010, marking their heroic actions on a combat mission over Afghanistan April 6, 2010. Flying F-15E Strike Eagles with call signs Dude-01 and Dude-02, the four performed show-of-force passes and released six Joint Direct Attack Munitions to protect a task force of some 30 coalition troops under attack by approximately 100 Taliban fighters in Bala Morgab. The F-15E strikes killed more than 80 Taliban, saving the task force members' lives.

**Nov. 8, 2011.** The US relinquishes control of Joint Base Balad in Iraq with departure of the last members of USAF's 332nd Air Expeditionary Wing.

**Nov. 14, 2011.** Air University awards its first doctorate degree from an AU school at Maxwell AFB, Ala.

**Dec. 2, 2011.** Officials speaking for the F136 Fighter Engine Team of General Electric and Rolls Royce announce they will cease self-funding the F136, ending a long-running battle between the makers of the F-35 strike fighter alternate engine and DOD, which wanted to continue with only the Pratt & Whitney F135 engine for the F-35.

**Dec. 8, 2011.** Pentagon officials confirm that the US lost a remotely piloted aircraft during a mission over Afghanistan, but they do not confirm that it is an RQ-170, a new stealthy RPA first publicly revealed Dec. 4, 2009. However, unnamed US defense and intelligence officials tell news media that the RPA went down due to a malfunction in eastern Iran. Iran has claimed it shot down an RQ-170.



### [Lost and Found?](#)

### [USAF fact sheet for RQ-170](#)

**Dec. 13, 2011.** The final F-22 Raptor rolls off the assembly line at Lockheed Martin's Marietta, Ga., facility. It is tail #4195 and completes the 187 production aircraft USAF ultimately orders. Lockheed built a total of 195 F-22s, including eight test aircraft. Two production aircraft have crashed.

#### [The Last Raptor](#)

#### [Raptors for the Long Haul](#)



**Dec. 15, 2011.** Pentagon leaders officially end the US military mission in Iraq. Nearly 4,500 US military personnel were killed in Operation Iraqi Freedom (March 19, 2003 - Aug. 31, 2010) and the follow-on Operation New Dawn (Aug. 31, 2010 – Dec. 15, 2011) and more than 32,000 were wounded. (The last US troops left Iraq Dec. 18, 2011.)

#### [Iraq War Comes to an End](#)

#### [The Last Days in Iraq](#)

**Dec. 31, 2011.** President Obama signs the Fiscal 2012 defense authorization act into law and with it provides a permanent seat on the Joint Chiefs of Staff for the Chief of the National Guard Bureau.

## 2012

**Jan. 3, 2012.** Air Force Space Command declares the Operationally Responsive Satellite-1 satellite has reached final operational capability. Reaching orbit in June 2011, ORS-1 has provided additional situational awareness for troops in Afghanistan, employing a modified electro-optical/infrared imagery sensor similar to that on the U-2 reconnaissance aircraft.

**Jan. 5, 2012.** President Obama unveils a new defense strategy, which places greater emphasis on the Asia-Pacific region. ([Sustaining US Global Leadership: Priorities for 21st Century Defense](#))

**Jan. 26, 2012.** Pentagon leaders outline budget cuts stemming from the new defense strategy and planned reduction of \$487 billion over the next 10 years; USAF cuts include eliminating six tactical air squadrons and one training squadron, retiring a number of aircraft (including 102 A-10s, 21 F-16s, all A model C-5s, and 65 of the oldest C-130s), divesting the 38 C-27J transport fleet, and reducing end strength in the Total Force (some 3,900 Active; 5,100 ANG; 900 AFRC over five years).

**Feb. 3, 2012.** USAF releases a [white paper](#) outlining its planned force structure changes. Gen. Norton Schwartz, Chief of Staff, tells reporters USAF will accept a slightly higher than moderate risk under these changes.

**Feb. 9, 2012.** The Air Force releases its [Energy Horizons](#) science and technology vision paper.

**Feb. 15, 2012.** Boeing and the Air Force celebrate roll-out of the first re-winged A-10 Warthog. Boeing is under contract to produce 233 wing sets to re-wing the so-called thin-skin wings on some A-10s, making them prone to cracking.

**Feb. 16, 2012.** The Air Force F-35A conventional takeoff and landing variant flies for the first time with wing-mounted weapons, two AIM-9X Sidewinders.



**Feb. 16, 2012.** Boeing and USAF roll out the first re-winged A-10 Warthog in a ceremony at Hill AFB, Utah. Officials expect the new wings to ensure service into 2040.

**Feb. 28, 2012.** Aeronautical Systems Center officials at Wright-Patterson AFB, Ohio, issue the military flight release signaling the F-35A strike fighter is cleared to begin initial operations at Eglin AFB, Fla.

**Feb. 29, 2012.** Lockheed Martin announces it has concluded on-orbit testing for the Air Force's first Advanced Extremely High Frequency military communications satellite, now designated SV-1, paving the way for transfer of control to Air Force Space Command's 50th Space Wing.

**March 12, 2012.** Air Mobility Command's 9th Airlift Squadron at Dover AFB, Del., becomes the first all-C-5M Super Galaxy squadron in the Air Force.

**March 14, 2012.** The Air Force's final F-22 Raptor—tail No. 4195—conducts its first test flight in Marietta, Ga., flown by company test pilot Bret Luedke. No. 4195 is the last of 187 production F-22s. Lockheed will deliver 4195 to USAF on May 2, 2012.

**March 15, 2012.** Air Force Special Operations Command announces a name change for its new MC-130J aircraft, from Combat Shadow II to Commando II.

**April 12, 2012.** Chief of Staff Gen. Norton Schwartz awards Capt. Barry Crawford the Air Force Cross—the second highest honor for valor in combat—during a Pentagon ceremony. An Air Force Special Operations Command special tactics officer, Crawford was assigned to an Army SOF unit in Afghanistan on May 4, 2010, when he "placed himself at grave risk on four occasions while controlling over 33 aircraft and more than 40 airstrikes on a well-trained and well-prepared enemy force" during an intense 10-hour-plus firefight, according to his citation.



#### [Caught in the Crossfire](#)

**April 20, 2012.** USAF inactivates 17th Air Force (Air Forces Africa), US Africa Command's air component since October 2008, during a ceremony at Ramstein AB, Germany. At the same time, US Air Forces in Europe assumes the air component role, becoming US Air Forces in Europe-Air Forces Africa.

**April 25, 2012.** T-1, the Air Force's prototype C-17 transport, arrives at the National Museum of the US Air Force in Dayton, Ohio, from Edwards AFB, Calif., where it endured a 21-year test career.

**June 1, 2012.** Col. Jeannie Leavitt becomes the Air Force's first female fighter wing commander when she takes command of the 4th Fighter Wing at Seymour Johnson AFB, S.C. She is an F-15E Strike Eagle pilot with more than 2,500 hours, including 300 combat hours.

**June 1, 2012.** Boeing's Phantom Eye liquid-hydrogen-powered remotely piloted aircraft completes its first autonomous flight, reaching an altitude of more than 4,000 feet and a cruising speed of 62 knots during its 28-minute flight at Edwards AFB, Calif. Boeing expects the RPA to deliver intelligence, surveillance, and reconnaissance coverage for up to four days in unrefueled, autonomous flight.



**June 4, 2012.** USAF merges three San Antonio-based Field Operating Agencies into one, consolidating the Air Force Manpower Agency, Air Force Personnel Center, and Air Force Services Agency into the new Air Force Personnel Center.



**June 5, 2012.** Gen. Janet C. Wolfenbarger—the Air Force's first female four-star general—assumes command of Air Force Materiel Command, headquartered at Wright-Patterson AFB, Ohio.

**June 12, 2012.** Air Force Special Operations Command activates the 24th Special Operations Wing in a ceremony at Hurlburt Field, Fla. The mission of the new wing, AFSOC's third, is to provide Air Force special tactics forces for rapid global employment.

**July 12, 2012.** Air Education and Training Command inactivates 19th Air Force, the NAF which oversaw AETC's flying mission for nearly two decades, as part of an Air Force efficiency move to reduce overhead spending.

**June 15, 2012.** Capt. Francis Gary Powers posthumously receives the Silver Star medal during a Pentagon ceremony, more than 50 years after the Soviets shot down the U-2 pilot. Air Force Chief of Staff Gen. Norton Schwartz presented the decoration to Powers' grandson Francis Gary Powers III and granddaughter Lindsey Berry. Powers, who died in 1977, received the medal for the gallantry and sustained courage he displayed while in Soviet captivity from May 1960 to February 1962 after the Soviets shot down his U-2 reconnaissance aircraft during a top-secret overflight of Soviet military installations. Despite harsh interrogation, Powers refused all attempts to give sensitive information or be exploited for propaganda purposes.



### Silver Star for Francis Gary Powers

### When the U-2 Fell to Earth

**June 16, 2012.** OTV-2, the Air Force's second unmanned X-37B reusable spaceplane, returns to Earth after 469 days in orbit during its maiden mission.

**June 20, 2012.** The Air Force and its industry partners successfully launch a National Reconnaissance Office payload into space aboard a United Launch Alliance Atlas V rocket, marking the Air Force's 50th successful launch of a national security payload aboard an evolved expendable launch vehicle.

**June 22, 2012.** During a ceremony at Cannon AFB, N.M., Air Force Special Operations Command retires the MC-130E Combat Talon I aircraft (tail No. 64-0523) that led the Son Tay Raid to free US prisoners of war from North Vietnam in August 1970. The aircraft, which had served in recent years with Air Force Reserve Command's 919th Special Operations Wing at Duke Field, Fla., was to undergo several months of demilitarization before being placed on permanent display at Cannon's airpark

### The Son Tay Raid

**July 26, 2012.** Air Combat Command declares the Raytheon-built Miniature Air Launched Decoy has achieved initial operational capability and is available for real-world use.

**July 30, 2012.** Lt. Gen. James Jackson becomes Chief of the Air Force Reserve and Commander of Air Force Reserve Command. He succeeded Lt. Gen. Charles E. Stenner Jr., who held those titles since June 2008.

**Aug. 1, 2012.** USAF announces that Luke AFB, Ariz., will be the site for its F-35A pilot training center.

**Aug. 6, 2012.** USAF officials announce the service has created a new enlisted aviator field—1A9X1 Special Missions Aircraft—that will encompass aerial gunners and flight engineers who serve aboard the HH-60G Pave Hawk and CV-22 Osprey and loadmasters who serve on AC-130 gunships and special operations non-standard aircraft.

**Aug. 10, 2012.** Gen. Mark A. Welsh III succeeds Gen. Norton A. Schwartz as USAF Chief of Staff.

**Aug. 17, 2012.** Air Force Space Command declares the Boeing-Ball Aerospace Space Based Surveillance Satellite (SBSS) has reached initial operational capability and is ready to provide space situational awareness data.

**Aug. 25, 2012.** Neil Armstrong, the first human to walk on the moon, dies at age 82. He made his famous walk July 20, 1969, during NASA's Apollo 11 lunar landing mission, saying as he stepped onto the moon: "That is one small step for man, one giant leap for mankind."

**Sept. 7, 2012.** Army Gen. Frank J. Grass replaces Air Force Gen. Craig R. McKinley as Chief of the National Guard Bureau. McKinley, who had served as NGB Chief since November 2008, formally retired Nov. 1, 2012.

**Sept. 28, 2012.** USAF inactivates 13th Air Force, transferring its mission directly to Pacific Air Forces, as part of the service's overhead streamlining efforts. PACAF still has 5th Air Force (Japan), 7th Air Force (South Korea), and 11th Air Force (Alaska).

**Oct. 1, 2012.** Air Force Materiel Command announces its new five-center organizational construct has reached initial operational capability. AFMC's new structure comprises the Air Force Life Cycle Management Center (including the former Aeronautical Systems Center, Armament Systems Center, and Electronic Systems Center) based at Wright-Patterson AFB, Ohio; Air Force Nuclear Weapons Center at Kirtland AFB, N.M.; Air Force Research Lab; Air Force Sustainment Center (including the three former Air Logistics Centers—Ogden, Oklahoma City, and Warner Robins—now called Air Logistics Complexes), based at Tinker AFB, Okla.; and Air Force Test Center, based at Edwards AFB, Calif.

**Oct. 1, 2012.** USAF transfers responsibility for Tyndall AFB, Fla., from Air Education and Training Command to Air Combat Command as part of its F-22 fleet reorganization. Tyndall, home to F-22 training, is to receive a combat-coded F-22 squadron from Holloman AFB, N.M.

**Oct. 1, 2012.** The Air Force activates a new Field Operating Agency, the Air Force Civil Engineer Center at JBSA-Lackland, Tex., to oversee the service's civil engineering functions worldwide, merging the San Antonio-based Air Force Center for Engineering and the Environment and Air Force Real Property Agency with the Tyndall AFB, Fla.-based Air Force Civil Engineer Support Agency.

**Oct. 15, 2012.** USAF announces it had upgraded the award of a Bronze Star with Valor to a Silver Star for MSgt. James Calfee, who was killed in combat during a firefight March 11, 1968, at Lima Site 85, a top secret radar facility in Laos. Calfee was seriously injured when North Vietnamese troops stormed the site, but he continued firing to enable five of his fellow airmen to reach a rescue helicopter. He died at the site. Rep. Ron Paul (R-Tex.) presented the new medal to Calfee's sisters during a private ceremony in his office Aug. 16, 2012. The Air Force on Oct. 15 formally recognized Calfee's Silver Star during a memorial ceremony at Barksdale AFB, La., for the Lima Site airmen.

### **The Fall of Lima Site 85**

**Oct. 26, 2012.** Boeing announces the youngest B-52H (serial No. 61-040) delivered to USAF has reached 50 years of operational service. It is still in service at Minot AFB, N.D.

**Nov. 14, 2012.** The multi-national Strategic Airlift Capability Heavy Airlift Wing declares full operational capability with its C-17s at Pápa AB, Hungary.

**Dec. 7, 2012.** Korean War double ace retired Col. Ralph S. Parr dies in New Braunfels, Tex., at age 88. He received a Distinguished Service Cross in the Korean War and an Air Force Cross in the Vietnam War.

### **Valor: The Pinnacle of Professionalism**

## 2013

**Jan. 7, 2013.** The first class of legacy aircraft pilots transitioning to the F-35 begins training at Eglin AFB, Fla.

**Jan. 24, 2013.** CMSgt. James A. Cody becomes the 17th Chief Master Sergeant of the Air Force.

### [Chief Cody](#)

**Jan. 24, 2013.** Pentagon officials announce plans to open more combat roles to women in the military. Defense Secretary Leon Panetta and Chairman of the Joint Chiefs of Staff Army Gen. Martin Dempsey sign an official memorandum rescinding the 1994 direct ground combat exclusion rule for women.

### [Pentagon Expanding Roles for Women in Combat](#)

**Feb. 27, 2013.** USAF awards the Light Air Support contract for 20 aircraft to Sierra Nevada Corp. and Embraer Defense and Security, selecting the Embraer A-29 Super Tucano, which is to be built in Jacksonville, Fla.

**Feb. 27, 2013.** Chuck Hagel becomes Secretary of Defense. He is the first enlisted combat veteran to lead DOD; he served with the Army in Vietnam as an infantry squad leader in 1968. He was also a Senator from Nebraska from 1996 to 2009.

**March 22, 2013.** Lt. Gen. Stanley E. Clarke III becomes Director of the Air National Guard, succeeding Lt. Gen. Harry M. "Bud" Wyatt III, who retired after some 40 years in service.

**March 28, 2013.** Two B-2 bombers fly more than 6,500 miles nonstop to drop inert bombs on a South Korean training range on March 28 as part of the ongoing bilateral Foal Eagle exercise. The nuclear-capable bombers flew from their home station at Whiteman AFB, Mo., released their dummy munitions, and returned to Whiteman—part of a US Strategic Command demonstration of US extended deterrence capability to support Asia-Pacific allies.

**April 4, 2013.** Air Force Special Operations Command announces it has inactivated 23rd Air Force as one of USAF's overhead efficiency efforts.

**April 14, 2013.** The Air Force Reserve turns 65. President Harry Truman signed legislation to establish the Air Force Reserve on April 14, 1948.

**April 29, 2013.** Eric Fanning takes office as Undersecretary of the Air Force, a position that had been vacant since June 2012. The previous USECAF, Erin Conaton, had already taken a new post as Undersecretary of Defense for Personnel and Readiness.

**April 25, 2013.** Airmen gather to mark the retirement of the last five MC-130E Combat Talon I aircraft during a ceremony at Duke Field, Fla. The Combat Talon I flew its first combat mission in 1966 and participated in all major US conflicts since then.

**May 1, 2013.** The fourth and final mission of the Boeing X-51A WaveRider unmanned hypersonic vehicle sets the record for the longest ever air-breathing hypersonic flight. The X-51A traveled more than 230 nautical miles in slightly more than six minutes off the coast of southern California. A B-52 starting from Edwards AFB, Calif., carried the WaveRider aloft, releasing it at approximately 50,000 feet in altitude. The X-51's rocket booster accelerated the vehicle to Mach 4.8, when the X-51 separated and ignited its supersonic combustion ramjet engine to propel itself to Mach 5.1 at 60,000 feet.

**May 14, 2013.** The Navy and prime contractor Northrop Grumman successfully catapult the X-47B Unmanned Combat Air System (UCAS) demonstrator from the deck of the USS *George H.W. Bush*. It flew for 65 minutes and then landed at NAS Patuxent River, Md.

**May 17, 2013.** Air Force Space Command declares the first Space Based Infrared Systems geosynchronous satellite (GEO-1) fully operational. The SBIRS constellation eventually will replace the legacy Defense Support Program satellites.

**May 22, 2013.** The Navy's MQ-4C Triton remotely piloted aircraft, a variant of USAF's RQ-4 Global Hawk, completes its first flight, flying for 1.5 hours over Palmdale, Calif. Northrop Grumman develops both RPAs.

**June 3, 2013.** USAF names its first female Chief Scientist—Mica R. Endsley.

**June 4, 2013.** The congressionally mandated National Commission on the Structure of the Air Force holds its first public hearing. Retired Marine Corps Lt. Gen. Dennis McCarthy is chairman of the eight-member panel, and former Air Force Undersecretary Erin Conaton is the vice chair. Lawmakers created the panel to address concerns over USAF's force structure plans for its reserve components. Congress directed the commission to provide a report with its recommendations by Feb. 1, 2014.

**June 26, 2013.** Boeing begins production of the first KC-46A aerial refueler at its facility in Everett, Wash. The company is slated to begin installing military-unique systems onto the aircraft in June 2014. First flight of a fully provisioned KC-46A is scheduled for early 2015 with first delivery in 2016.

**June 27, 2013.** A new Air Force policy takes effect that requires commanders who have made a sexual assault disciplinary decision to refer that decision to the commander's servicing general court-martial convening authority for review. (Also see July 2, 2013.)

**July 2, 2013.** A new Air Force policy takes effect that requires immediate discharge of any airman, officer or enlisted, found to have committed a sexual assault. (Also see June 27, 2013.)

**July 2, 2013.** USAF releases [Global Horizons](#), a science and technology study designed to articulate projected changes through 2050 that may influence global stability and identifies necessary investments to ensure freedom of maneuver in global domains. It is the last report by former Air Force Chief Scientist Mark Maybury, succeeded by Mica Endsley in June.

**July 10, 2013.** The Northrop Grumman-built X-47B Unmanned Combat Air System (UCAS) demonstrator aircraft, a tailless remotely piloted aircraft, completes its first carrier-based arrested landing, landing on the USS *George H.W. Bush* off the coast of Virginia. (Also see May 14, 2013.)