

Up From Kitty Hawk

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



1954

Feb. 15, 1954. President Dwight D. Eisenhower nominates Charles A. Lindbergh to be a brigadier general in the Air Force Reserve.

Feb. 24, 1954. President Eisenhower approves the National Security Council's recommendation for construction of the Distant Early Warning (DEW) Line. Operational control of the DEW Line will be transferred from the Air Force to the Royal Canadian Air Force on Feb. 1, 1959.

Feb. 28, 1954. Company pilot Tony LeVier makes the first flight of the Lockheed XF-104 Starfighter at Edwards AFB, Calif. A landing gear retraction problem cuts the flight short, however. A full flight will be made March 4. Designed as a supersonic air superiority fighter, the F-104 will set a number of records for the US, but it will find greater utility for a number of other countries than it will for USAF.

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

March 1, 1954. The Air Reserve Personnel Center is established in Denver. ARPC moved to Lowry AFB, Colo., in 1976.

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

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

May 25, 1954. A Navy ZPG-2 airship, commanded by Cmdr. M.H. Eppes, lands at NAS Key West, Fla., after staying aloft for 200.1 hours. Eppes is later awarded the Distinguished Flying Cross.

June 22, 1954. The Douglas A4D (A-4) Skyhawk makes its first flight from Edwards AFB, Calif., with company pilot Robert Rahn at the controls. Some 2,960 aircraft had been produced when the last aircraft was delivered in 1979. The Navy's Blue Angels flew the A-4 Skyhawk II from 1974 to 1986. They were still flown by several foreign countries into the mid 1990s.

June 28, 1954. Company test pilot George Jansen makes the first flight of the Douglas RB-66A Destroyer

at Long Beach, Calif. Developed from the Navy's A3D Skywarrior, the RB/B-66 variant is intended to provide the Air Force with a tactical light bomber and reconnaissance aircraft.

July 15, 1954. The Boeing Model 367-80 makes its first flight, with company pilot A.M. "Tex" Johnston in command. The aircraft is the prototype for the Air Force's C/KC-135 series and the progenitor of the 707, which will become the first civilian jetliner to see wide use.

Aug. 23, **1954.** Lockheed pilots Stanley Beltz and Roy Wimmer crew the first flight of the YC-130 Hercules at Burbank, Calif.

The Immortal Hercules

Aug. 25, 1954. Capt. Joseph McConnell, the leading American ace of the Korean War, is killed in a crash of a North American F-86H Sabre while testing it at Edwards AFB, Calif.

Aug. 26, 1954. Maj. Arthur "Kit" Murray reaches a record height of 90,440 feet in the Bell X-1A, which was released from a B-29 over Edwards AFB, Calif.

Sept. 1, 1954. Continental Air Defense Command—a Joint command composed of Air Force, Army, Navy, and Marine forces—is established at Colorado Springs, Colo. USAF's Air Defense Command was the Air Force component and main element. CADC was under the Joint Chiefs of Staff and became the US component in the North American Air (now Aerospace) Command (NORAD) upon its creation in 1957.

The Rise of Air Defense

Sept. 29, 1954. Company pilot Robert Little makes the first flight of the McDonnell F-101A Voodoo at Edwards AFB, Calif. Originally conceived as a long range bomber escort, the "One Oh Wonder" will go on to a lengthy career as an interceptor and USAF's first supersonic reconnaissance aircraft.

Oct. 12, 1954. The Cessna XT-37 Tweet trainer prototype is flown for the first time at Wichita, Kan. The T-37 will still be flying more than 40 years as the Air Force's primary trainer. (The Air Force and Navy selected a new joint primary trainer, the Raytheon T-6A Texan II, with deliveries beginning in 1999.)

Oct. 27, 1954. Benjamin O. Davis Jr., son of the first black general officer in the US Army, becomes the first black general officer in the US Air Force. He retires Jan. 31, 1970, as a lieutenant general.

Benjamin Davis, American

Oct. 27, 1954. The Douglas X-3 Stiletto research aircraft inadvertently provides an understanding of the aerodynamic condition of inertia (or roll) coupling, as NACA pilot Joe Walker manages to recover the aircraft after it diverged during an abrupt aileron roll in a flight at Edwards AFB, Calif.

Nov. 2, 1954. Company test pilot J.F. Coleman, flying in the radical, turboprop-driven tail-sitting Convair XFY-1, makes a vertical takeoff, changes to horizontal flight, and then returns to vertical for a landing in San Diego.

Nov. 7, 1954. The Air Force announces plans to build a \$15.5 million research laboratory for atomic aircraft engines. To be built in Connecticut, the plant is to be run by Pratt & Whitney and will be finished in 1957.

Dec. 10, 1954. To determine if a pilot could eject from an airplane at supersonic speed and live, Lt. Col. John Paul Stapp, a flight surgeon, rides a rocket sled to 632 mph, decelerates to zero in 1.4 seconds, and survives 40 times the force of gravity.

Valor: The Track to Survival

1955

Feb. 7, 1955. After 131 shows, the Thunderbirds, the Air Force's aerial demonstration team, perform their last show in the Republic F-84G Thunderjet at Webb AFB, Tex. In April, the team will convert to sweptwing F-84F Thunderstreaks.

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

Feb. 24, 1955. The first fully instrumented flight of the Boeing XF-99 (later redesignated CIM-10) BOMARC surface-to-air intercept missile is carried out from Patrick AFB, Fla.

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

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

The Class of 50 Years Ago

July 26, 1955. Capital Airways puts its first Vickers Viscount forty-passenger airliner into revenue service, being flown on the airline's Washington, DC to Chicago route. Capital is the first US carrier to purchase the Viscount, the world's first turboprop-powered airliner, and this flight marks the first time since World War I that a British-built aircraft is being flown in regular service over the United States.

Aug. 4, 1955. Company pilot Tony LeVier makes the first official flight of the Lockheed U-2 spyplane at Groom Lake, Nev. An inadvertent hop had been made on July 29.

Aug. 15, 1955. Donald A. Quarles becomes Secretary of the Air Force.

Oct. 22, 1955. Company test pilot Russell M. "Rusty" Roth makes the first flight of the Republic YF-105 Thunderchief at Edwards AFB, Calif. The aircraft, commonly known as the "Thud," is the largest single-engine, single-seat fighter ever built.

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

50 Years of Space and Missiles

How the Air Force Got the ICBM

1956

Jan. 9, 1956. The Ye-5, the first true prototype of the MiG-21 supersonic point defense fighter, makes its first flight. Later given the NATO reporting name "Fishbed," more than 8,000 MiG-21s will be built, including license production in Warsaw Pact countries, and the type will be flown by at least 35 countries. Upgraded versions remain in service in the early part of the 21st century.

- Jan. 17, 1956. DOD reveals the existence of SAGE, an electronic air defense system.
- **Feb. 16, 1956.** The Lockheed YF-104A Starfighter makes its first public appearance. This is the second of the 17 service test aircraft ordered by the Air Force. (The XF-104 first flew March 4, 1954.)
- **Feb. 17, 1956.** The YF-104A flies for the first time with Lockheed pilot Herman "Fish" Salmon at the controls.
- **March 10, 1956.** The recognized absolute speed record passes the 1,000 mph barrier, as company pilot Peter Twiss hits 1,132.13 mph in the Fairey Delta 2 research aircraft at Sussex, England.
- **May 20, 1956.** After 91 shows in a little more than a year, the Thunderbirds perform their last demonstration in the Republic F-84F Thunderstreak at Bolling AFB, D.C.
- **May 21, 1956.** An Air Force crew flying Boeing B-52B Stratofortress at 40,000 feet air-drops a live hydrogen bomb over Bikini Atoll in the Pacific. The bomb has a measured blast of 3.75 megatons.
- **May 28, 1956.** Company pilot Pete Girard makes the first flight of the Ryan X-13 Vertijet Vertical Takeoff and Landing (VTOL) research aircraft in hover mode at Edwards AFB, Calif. He had also made the type's first conventional flight on Dec. 10, 1955.
- **June 30, 1956.** The USAF Thunderbirds fly their first show in the supersonic North American F-100 Super Sabre, the type the team would fly for most of the next 13 years.
- **Aug. 1, 1956.** President Eisenhower signs into law a bill permitting the armed forces to include flight instruction in ROTC programs.
- **Aug. 23–24, 1956.** A US Army crew, flying a modified Vertol H-21 Shawnee nicknamed Amblin-Annie, makes the first nonstop helicopter flight across the United States. The flight from San Diego to Washington, D.C., takes 31 hours and 40 minutes, covers 2,610 miles, and requires six air refuelings.
- **Aug. 31, 1956.** The KC-135, the first jet-powered tanker, makes its first flight. Numerous variants have been flown and the type has been used for everything from electronic surveillance to becoming an airborne laser laboratory. The KC-135 series remains the Air Force's primary refueling airplane today.
- **Sept. 27, 1956.** Capt. Milburn Apt, USAF, reaches Mach 3.196 in the Bell X-2, becoming the first pilot to fly three times the speed of sound. Apt is killed, however, when the aircraft tumbles out of control.
- **Oct. 1, 1956.** NASA awards its Distinguished Service Medal to Richard T. Whitcomb, inventor of the "area rule" concept, which results in aircraft (such as the Convair F-102) having Coke bottle-shaped fuselages in order to reduce supersonic drag.
- **Oct. 26, 1956.** Less than 16 months after design work began, and ironically, the same day that legendary designer Larry Bell dies, company pilot Floyd Carlson makes the first flight of the Bell XH-40 at Fort Worth, Tex. Later redesignated UH-1, the Iroquois, or "Huey" as it is more popularly known, will go on to be one of the significant helicopters of all time.
- **Oct. 31, 1956.** A ski-equipped Douglas R4D (Navy C-47) Skytrain lands at the South Pole, becoming the first aircraft to land at the bottom of the world.
- **Nov. 7, 1956.** Units equipped with the US Air Force's first operational surface-to-surface missile—the mobile, winged Matador, capable of striking targets in the Warsaw Pact from sites in West Germany—deploy from their fixed day-to-day sites to unannounced dispersed launch locations. This alert is in response to the crisis posed by the major Soviet attack on Hungary, which brutally suppresses the Hungarian Revolution.

Nov. 11, 1956. Company test pilot Beryl A. Erickson along with J.D. McEachern (flight test observer) and Charles Harrison (flight test engineer) makes the first flight of the Convair XB-58A Hustler at Fort Worth, Tex. The delta winged B-58 is the Air Force's first supersonic bomber.

Dec. 26, 1956. Company pilot Richard L. "Dick" Johnson makes the first flight of the first Convair F-106 Delta Dart at Edwards AFB, Calif. The F-106, a substantially redesigned and much improved version of the F-102 interceptor, would remain in service until 1988 and would later be modified into target drones.

1957

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

April 11, 1957. With company pilot Pete Girard at the controls, the jet-powered Ryan X-13 Vertijet makes its first full-cycle flight. He takes off vertically from the aircraft's mobile trailer, transitions to horizontal flight, performs several maneuvers, and then lands vertically.

May 1, 1957. James H. Douglas Jr. becomes Secretary of the Air Force.

June 11, 1957. The first Convair XSM-65A (later redesignated CGM-16A) Atlas ICBM is launched from Cape Canaveral AFS, Fla.

July 1, 1957. Gen. Thomas D. White becomes Air Force Chief of Staff.

July 1, 1957. Pacific Air Forces is established.

July 13, 1957. President Eisenhower becomes the first chief executive to fly in a helicopter as he takes off from the White House lawn in a Bell UH-13J Sioux. Maj. Joseph E. Barrett flies the President a short distance to a military command post at a remote location as part of a military exercise.

July 19, 1957. A Douglas MB-1 Genie unguided aerial rocket is fired from a Northrop F-89J Scorpion crewed by Capt. Eric Hutchinson (pilot) and Capt. Alfred Barbee (radar operator). This marked the first time in history that an air-to-air rocket with a nuclear warhead is launched and detonated. The test, the "John" shot of Operation Plumbbob, takes place at 20,000 feet over the Nevada Test Site.

July 30, 1957. In Washington, D.C., a Ryan company pilot takes off vertically from a street in front of the Pentagon in the Ryan X-13 Vertijet VTOL research aircraft, transitions to horizontal flight, retraces the route that Orville Wright and Lt. Benjamin Foulois made on the final acceptance flight of the 1909 Military Flyer, and returns for a vertical landing.

July 31, 1957. The DEW Line, a distant early warning radar defense installation extending across the Canadian Arctic, is reported to be fully operational.

A Line in the Ice

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

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

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

Nov. 3, 1957. The first animal in space, a dog named Laika, is carried aboard Sputnik 2. The satellite is carried aloft by a modified ICBM.

Nov. 11–13, 1957. Gen. Curtis E. LeMay and crew fly a Boeing KC-135 from Westover AFB, Mass., to Buenos Aires, Argentina, to set a world jet-class record distance in a straight line of 6,322 miles. The crew will set a class speed record on the trip back.

Nov. 27, 1957. To demonstrate the capability of the new McDonnell RF-101A Voodoo, four pilots take off from March AFB, Calif., as part of Operation Sun Run. Refueled in flight, two of the pilots land at McGuire AFB, N.J., and two turn around and land back at March. Lt. Gustav Klatt sets an eastbound coast to coast record of three hours, seven minutes, and 43 seconds, while Capt. Robert Sweet sets a westbound coast to coast record (3:36:33) and Los Angeles–New York–Los Angeles record (6:46:36).

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

Dec. 12, 1957. Flying a McDonnell F-101A Voodoo, USAF Maj. Adrian Drew sets the recognized absolute world speed record of 1,207.34 mph at Edwards AFB, Calif.

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

Dec. 20, 1957. The first AIM-9 Sidewinder heat seeking air to air missile launched from an USAF aircraft is fired by Capt. Joe Gordon, flying a Lockheed F-104 Starfighter. Sidewinder, originally developed by the Navy in 1953 but modernized regularly since, will still be both services' primary short range missile until well after the turn of the century.

1958

Jan. 31, 1958. Explorer I, the first US satellite, is launched by the Army at Cape Canaveral, Fla. The satellite, launched on a Jupiter-C rocket, will later play a key role in the discovery of the Van Allen radiation belt.

Feb. 4, 1958. The keel of the world's first nuclear-powered aircraft carrier, USS *Enterprise* (CVN-65), is laid at the Newport News Shipbuilding and Drydock Co. yards in Virginia.

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

March 6, 1958. The first production Northrop SM-62 Snark intercontinental missile is accepted by the Air Force after four previous successful launchings.

April 8, 1958. An Air Force KC-135 Stratotanker crew flies 10,229.3 miles nonstop and unrefueled from Tokyo to Lajes Field, Azores, in 18 hours, 50 minutes.

May 7, 1958. USAF Maj. Howard C. Johnson sets a world altitude record of 91,243 feet in a Lockheed F-104A Starfighter.

May 16, 1958. USAF Capt. Walter W. Irwin sets a world speed record of 1,404.09 mph, also in an F-104.

- **May 27, 1958.** The first flight of the McDonnell XF4H-1 (F-4) Phantom II is made by company pilot Robert Little (who was wearing street shoes at the time) at the company's facility in St. Louis, Mo.
- **June 17, 1958.** Boeing and Martin are named prime contractors to develop competitive designs for the Air Force's X-20 Dyna-Soar boost-glide space vehicle. This project, although later canceled, is the first step toward the space shuttle.
- **July 15, 1958.** The first Boeing Vertol VZ-2A tilt wing research aircraft makes its first successful transition from vertical to horizontal flight and vice versa.
- **July 26, 1958.** Capt. Iven C. Kincheloe Jr., USAF, holder of the world altitude record (126,200 feet, set in the Bell X-2, Sept. 7, 1956), is killed in an F-104 crash.
- **August 1958.** The term "aerospace" is used publicly for the first time by Gen. Thomas D. White, USAF Chief of Staff, in an Air Force Magazine article. The term was coined by Frank W. Jennings, a civilian writer and editor for the Air Force News Service.
- **Aug. 6, 1958.** A Department of Defense Reorganization Act removes operational control of combat forces from the individual services and reassigns the missions to unified and specified commands on a geographic or functional basis. The main role of the services becomes to organize, train, and equip forces.

American Chieftains

- Sept. 1, 1958. A new enlisted supergrade, senior master sergeant (E-8), is created.
- **Sept. 26, 1958.** A Boeing B-52D crew sets a world distance record of 6,233.98 miles and a speed record of 560.75 mph (over a 10,000-meter course) during a two-lap flight from Ellsworth AFB, S.D., to Douglas, Ariz., to Newburg, Ore., and back.
- **Oct. 1, 1958.** The National Aeronautics and Space Administration (NASA) is officially established, replacing NACA.
- **Dec. 16, 1958.** The Pacific Missile Range begins launching operations with the successful flight of the Chrysler PGM-19 Thor missile, the first ballistic missile launched over the Pacific Ocean and the first free world firing of ballistic missile under simulated combat conditions.
- **Dec. 18, 1958.** Project Score, an Atlas booster with a communications repeater satellite, is launched into Earth orbit. The satellite carries a Christmas message from President Eisenhower that is broadcast to Earth, the first time a human voice has been heard from space.

1959

- **Jan. 8, 1959.** NASA requests eight Redstone-type launch vehicles from the Army for Project Mercury development flights. Four days later, McDonnell Aircraft Co. is selected to build the Mercury capsules.
- **Jan. 22, 1959.** Air Force Capt. William B. White sets a record for the longest nonstop flight between points in the US, as he flies a Republic F-105 Thunderchief 3,850 miles from Eielson AFB, Alaska, to Eglin AFB, Fla., in five hours, 27 minutes.
- **Feb. 6, 1959.** An Air Force Systems Command crew launches the first Martin XSM-68A (later redesignated HGM-25A) Titan ICBM from Patrick AFB, Fla.

- **Feb. 12, 1959.** The last Convair B-36 Peacemaker is retired from USAF service. The aircraft, a B-36J assigned to the 95th Bomb Wing at Biggs AFB, Tex., is flown to Amon Carter Field in Fort Worth, Tex., to be placed on display. The retirement of the B-36 leaves the Air Force with an all-jet bomber force.
- **Feb. 28, 1959.** USAF successfully launches the Discoverer I satellite into polar orbit from Vandenberg AFB, Calif.
- **April 2, 1959.** Chosen from a field of 110 candidates, seven test pilots—Air Force Capts. L. Gordon Cooper Jr., Virgil I. "Gus" Grissom, and Donald K. "Deke" Slayton; Navy Lt. Cmdrs. Walter M. Schirra Jr., and Alan B. Shepard Jr., and Lt. M. Scott Carpenter; and Marine Lt. Col. John H. Glenn Jr.—are announced as the Project Mercury astronauts.
- **April 12, 1959.** The Air Force Association's World Congress of Flight is held in Las Vegas, Nev.—the first international air show in US history—with 51 foreign nations participating. NBC-TV telecasts an hour-long special, and Life Magazine gives it five pages of coverage.
- **April 15, 1959.** Capt. George A. Edwards sets a recognized 500 kilometer closed course speed record of 826.28 mph in a McDonnell RF-101C Voodoo at Edwards AFB, Calif.
- **April 20, 1959.** The prototype Lockheed UGM-27A Polaris sea-launched ballistic missile successfully flies a 500-mile trajectory in a Navy test. Three days later, the Air Force carries out the first flight test of the North American GAM-77 Hound Dog air-launched strategic missile at Eglin AFB, Fla.
- **April 30, 1959.** Now officially retired, a Convair B-36J Peacemaker is flown to the Air Force Museum at Wright–Patterson AFB, Ohio. This is the last flight of the mammoth—and controversial—B-36.
- **May 28, 1959.** Astrochimps Able and Baker are recovered alive in the Atlantic after their flight to an altitude of 300 miles in the nosecone of a PGM-19 Jupiter missile launched from Cape Canaveral Missile Test Annex, Fla.
- June 3, 1959. The first class is graduated from the Air Force Academy.

First Class

- **June 8, 1959.** The Post Office enters the missile age, as 3,000 stamped envelopes are carried aboard a Vought RGM-6 Regulus I missile launched from the submarine USS *Barbero* (SSG-317) in the Atlantic. The unarmed missile lands 21 minutes later at the Naval Auxiliary Air Station at Mayport, Fla.
- **June 8, 1959.** After several attempts, North American Aviation pilot Scott Crossfield makes the first nonpowered flight in the X-15.
- **July 1, 1959.** The first experimental reactor (Kiwi-A) in the nuclear space rocket program is operated successfully in a test at Jackass Flats, Nev.
- **Aug. 7, 1959.** First intercontinental relay of a voice message by satellite takes place. The voice is that of Mai. Robert G. Mathis, later USAF Vice Chief of Staff.
- Aug. 7, 1959. Two USAF F-100Fs make the first flight by jet fighter aircraft over the North Pole.
- **Sept. 9, 1959.** The Atlas missile is fired for the first time by a SAC crew from Vandenberg AFB, Calif., and the missile type is declared operational by the SAC commander in chief. The shot travels about 4,300 miles at 16,000 mph.

The Man Who Built the Missiles

- Sept. 12, 1959. The Soviet Union launches Luna 2, the first man-made object to reach the moon.
- **Sept. 17, 1959.** Company pilot Scott Crossfield makes the first powered flight of the North American X-15 rocket powered research aircraft at Edwards AFB, Calif. He reaches a speed of Mach 2.11 and an altitude of 52,341 feet.
- **Sept. 24, 1959.** Company test pilot Robert C. Little makes the first flight of the McDonnell F-101A Voodoo at Edwards AFB, Calif. The "One-oh-Wonder" hits Mach 1.2 on its first flight and will go on to fill several roles for a number of Air Force commands.
- **Nov. 16, 1959.** Air Force Capt. Joseph W. Kittinger Jr., after ascending to an altitude of 76,400 feet in Excelsior I, an open-gondola balloon (setting three unofficial altitude records on the way), makes the longest free-fall parachute jump in history (64,000 feet) in two minutes, 58 seconds at White Sands, N.M.
- Dec. 1, 1959. A new enlisted grade E-9, chief master sergeant, is created.
- Dec. 11, 1959. Dudley C. Sharp becomes Secretary of the Air Force.
- **Dec. 15, 1959.** Maj. Joseph W. Rogers regains the recognized absolute speed record for the US, as he pilots a Convair F-106A Delta Dart to a speed of 1,525.965 mph at Edwards AFB, Calif. Rogers received the Distinguished Flying Cross, the Thompson Trophy, and French de la Vaux Medal for the feat.
- **Dec. 30, 1959.** The first US ballistic missile-carrying submarine, USS *George Washington* (SSBN-598), is commissioned at Groton, Conn.

1960

- **Jan. 25, 1960.** In what is billed as the first known shootdown of a ballistic missile, an Army MIM-23 HAWK anti-aircraft missile downs an unarmed MGR-1 Honest John surface-to-surface unguided rocket.
- **March 18, 1960.** The 702nd Strategic Missile Wing, and the first and only USAF unit equipped with the Northrop SM-62 Snark air breathing intercontinental cruise missile, puts its first missile on nuclear alert. The unit is based at Presque Isle AFB, Maine.
- **March 29, 1960.** The Naval Weapons Station Annex at Charleston, S.C., opens. It will provide a final assembly capability for UGM-27 Polaris sea-launched ballistic missiles and also a capability for loading them on submarines.
- **April 1, 1960.** The RCA-built TIROS 1 (Television Infrared Observation Satellite), the world's first meteorological satellite, is successfully launched from Cape Canaveral Missile Test Annex, Fla., atop a Thor launch vehicle.
- **April 4, 1960.** Project Ozma is initiated at the National Radio Astronomy Observatory at Green Bank, W.Va., to listen for possible signal patterns from outer space other than "natural" noise.
- **April 19, 1960.** The Grumman A2F-1 attack aircraft prototype makes its first flight at the company's Calverton, Long Island, NY facility. Later designated the A-6 Intruder, it would carry the brunt of the Navy's bombing effort in Vietnam. It also sees action in Operation Desert Storm in 1991. More than 680 Intruders are built and the type remains in service until 1996.
- **April 22**, **1960.** A federal court of appeals upholds a Federal Aviation Administration order that automatically grounds pilots over 60 years old.

- **May 1, 1960.** Central Intelligence Agency (CIA) pilot Francis Gary Powers, flying a Lockheed U-2 reconnaissance aircraft, is shot down over the Soviet Union near Sverdlovsk. He is captured and later put on trial for espionage. The incident creates an international furor, and a superpower summit scheduled for later in the month is canceled. On Feb. 10, 1962, Powers will be exchanged for Soviet KGB agent Rudolf Abel.
- **May 20, 1960.** The Air Force launches from Cape Canaveral Missile Test Annex, Fla., a Convair HGM-16 Atlas ICBM that carries a 1.5-ton payload 9,040 miles to the Indian Ocean. This is the greatest distance ever flown by a US ICBM.
- **May 21, 1960.** The last World War II—era B-25 Mitchell medium bomber, a VB-25 staff transport, is retired from active Air Force service at Eglin AFB, Fla.
- **July 20, 1960.** The first underwater launch of a Lockheed UGM-27 Polaris ballistic missile is successfully carried out from USS *George Washington* (SSBN-598) off Cape Canaveral Missile Test Annex, Fla.
- **Aug. 16, 1960.** At an altitude of 102,800 feet over Tularosa, N.M., Air Force Capt. Joseph W. Kittinger Jr., makes the ultimate leap of faith. In the 4.5 minutes between stepping out of the balloon's open gondola and opening his parachute, he free falls 84,700 feet, reaching a speed of 614 mph. Kittinger lands unharmed 13 minutes, 45 seconds after jumping. This the highest jump and longest free fall ever recorded.

Valor: The Longest Leap

- **Aug. 18, 1960.** A USAF crew flying a specially modified Fairchild C-119J Flying Boxcar makes the first successful mid-air retrieval of a then-classified Corona program satellite imagery capsule re-entering the atmosphere. The crew uses two wire hooks trailing from the aircraft's cargo hold to snag the parachute of the Discoverer XIV imagery capsule over the Pacific.
- **Sept. 21, 1960.** Tactical Air Command formally accepts the first Republic F-105D Thunderchief all-weather fighter in ceremonies at Nellis AFB, Nev. The aircraft will not officially enter service until the following year, when deliveries to Seymour Johnson AFB, N.C., begin.
- **Oct. 1, 1960.** Ballistic Missile Early Warning System radar post at Thule, Greenland, begins regular operations, part of chain of three planned installations to warn of air or missile attacks on North America over an Arctic route.

1961

- **Jan. 12, 1961.** A B-58 Hustler piloted by Maj. Henry J. Deutschendorf Jr., sets six international speed and payload records on a single flight, thus breaking five previous records held by the Soviet Union.
- Jan. 14, 1961. Another B-58 from the same wing breaks three of the records set two days earlier.
- **Jan. 17, 1961.** President Eisenhower's farewell address will be best remembered for a phrase—"the military industrial complex"—it contained, but few would remember what he actually said about it.

What Ike Really Said.

Jan. 24, 1961. Eugene M. Zuckert becomes Secretary of the Air Force.

Zuckert Remembers

Jan. 31, 1961. A chimpanzee named Ham is launched atop a Redstone booster from Cape Canaveral Missile Test Annex, Fla., in a test of the Mercury manned capsule.

Feb. 1, 1961. The first Boeing LGM-30A Minuteman ICBM is launched from Cape Canaveral Missile Test Annex, Fla. It travels 4,600 miles and hits the target area. This is the first time a first-test missile is launched with all systems and stages functioning.

Minuteman Turns 40

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

March 3, 1961. In a full range operational test, a pair of Boeing BOMARC surface-to-air missiles equipped with conventional warheads are launched from Eglin AFB, Fla., and intercept both a supersonic GQM-15 Regulus II drone and a subsonic, radio controlled QB-47 drone over the Gulf of Mexico.

March 10, 1961. The Ye-155, the prototype of the MiG-25, a Mach 3 capable interceptor and reconnaissance platform, makes its first flight. Later given the NATO reporting name "Foxbat," the MiG-25 is developed in response to the US development of the B-70 bomber. The B-70 project is limited to research prototypes, but development of the MiG-25 continues. About 700 MiG-25s are eventually built.

March 28, 1961. President John F. Kennedy directs that the Northrop SM-62 Snark missile be phased out as it is "obsolete and of marginal military value." The main reason the Snark, the Air Force's first and only air breathing intercontinental cruise missile, is to be retired is that ballistic missiles are proving more practical and considerably more accurate.

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

April 15, 1961. The Lockheed P3V-1 Orion makes its first flight at Burbank, Calif. A development of the turboprop-powered Electra airliner, the Orion is the Navy's new land-based patrol aircraft. In November 1962, VP-8, the first operational P-3 unit (as it was redesignated in 1962) goes into action during the Cuban Missile Crisis. The P-3 was still in frontline service in the US and in 13 other countries at the beginning of the 21st century.

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

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

June 25, 1961. The 702nd Strategic Missile Wing at Presque Isle AFB, Maine is inactivated. The Air Force's first and only unit to be equipped with the Northrop SM-62 Snark air breathing intercontinental cruise missile, had been fully operational for only four months.

June 30, 1961. Gen. Curtis E. LeMay becomes Air Force Chief of Staff.

"The Airman Who Shook the World," Air Force Magazine, January 1987 (not yet online)

LeMay

- **July 21, 1961.** Capt. Virgil I. "Gus" Grissom becomes the first Air Force astronaut in space. He attains an altitude of 118.3 miles on the second Mercury mission.
- **Aug. 6–7, 1961.** Flying in the Vostok 2 spacecraft, Soviet Air Force Capt. Gherman Titov becomes the first person to orbit the Earth for more than a day. He also becomes the first person to get spacesick.
- **Sept. 20, 1961.** A Marine Corps hero becomes national president of the Air Force Association. AFA elects Joe Foss, leading Marine Corps ace in World War II, recipient of the Medal of Honor, and two-term governor of South Dakota. Foss left the Marine Corps as a major in 1946 and joined the Air National Guard, in which he rose to the grade of brigadier general in 1954. In 1988, Foss will be elected president of the National Rifle Association.

1962

- **Jan. 10–11, 1962.** Maj. Clyde P. Evely sets a recognized class record for great circle distance without landing (jet aircraft) of 12,532.28 miles from Kadena AB, Okinawa, to Madrid, Spain, in a Boeing B-52H Stratofortress.
- **Jan. 12, 1962.** Maj. Henry J. Deutschendorf Jr., sets two recognized class records for 2,000-kilometer speed over a closed circuit with payload (jet aircraft) of 1,061.81 mph in a Convair B-58A Hustler at Edwards AFB, Calif.
- **Jan. 17, 1962.** Defense Secretary Robert S. McNamara announces the Air Force will adopt the Navy's McDonnell F4H-1 Phantom II as an interim replacement for the F-105. The aircraft is later designated the F-110 Spectre. The first two aircraft, on loan from the Navy, will be flying in USAF colors by March. In June, the designation would be changed to F-4 to conform with the new DOD system, and Spectre would be dropped and the Navy nickname retained.
- **Feb. 2, 1962.** A Fairchild C-123, used as part of Operation Ranch Hand and crewed by Capt. Fergus C. Groves, Capt. Robert D. Larson, and SSgt. Milo B. Coghill, crashes while spraying defoliant on a Viet Cong ambush site. It is the first Air Force crew and aircraft lost in South Vietnam.

Ranch Hand

- **Feb. 20, 1962.** Marine Lt. Col. John H. Glenn Jr., becomes the first US astronaut to orbit the Earth. His Friendship 7 flight lasts nearly five hours.
- **March 5, 1962.** Capts. Robert G. Sowers, Robert MacDonald, and John T. Walton, flying in a Convair B-58A Hustler bomber, are the only contestants in the 21st and last Bendix Trophy transcontinental race. Called Operation Heatrise, the crew completes the Los Angeles to New York course with an average speed of 1214.71 mph, and total elapsed time is two hours, 56 seconds.
- **April 30, 1962.** Company pilot Louis Schalk makes the first official flight of the Lockheed A-12, the forerunner of the SR-71 high-speed reconnaissance aircraft, at Groom Lake, Nev. Two earlier hops had been made on April 25 and 26.

The Oxcart Story

Black Shield

May 24, 1962. Navy Lt. Cmdr. Scott Carpenter makes the fourth flight of the Mercury space program. The flight is less than perfect, as a number of in-flight problems leads to the astronaut overshooting the recovery ship, the USS *Intrepid* (CVS-11) by more than 250 miles.

- **June 30, 1962.** The Department of Defense adopts a common designation system for all military aircraft. The new system is based on existing (and much simpler) Air Force designation methods. The designations for most Air Force aircraft are unchanged, but all Navy, Marine, and Coast Guard aircraft are redesignated, as the Navy's practice of including a letter to designate manufacturers is eliminated.
- **July 17, 1962.** Maj. Robert White pilots the North American X-15 research aircraft to an altitude of 314,750 feet, thus making the first spaceflight in a manned aircraft. The flight also sets the recognized absolute altitude record for aircraft launched from a carrier airplane.
- **Aug. 13, 1962.** Coast Guard Cmdr. Wallace C. Dahlgren sets three recognized class records (piston-engine amphibian aircraft) for speed over a 1,000 kilometer closed course (with payload) of 231.96 mph while flying a Grumman UF-2G Albatross from Floyd Bennett Field, N.Y., to CGAS Elizabeth City, N.C.
- **Sept. 12, 1962.** Navy Lt. Cmdrs. Don Moore and Fred Franke separately set two recognized class records for altitude with 1,000- and 2,000-kilogram payloads (piston-engine amphibians) of 29,475 feet and 27,404.93 feet, respectively, in a Grumman UF-2G Albatross, assigned to the Coast Guard at Floyd Bennett Field, N.Y.
- **Sept. 14**, **1962.** Maj. F.L. Fulton sets a recognized class record for altitude with a 5,000-kilogram payload (jet aircraft) of 85,360.8 feet in a Convair B-58A Hustler at Edwards AFB, Calif.
- **Sept. 16, 1962.** Coast Guard Cmdr. Richard A. Hoffman sets a recognized class record (piston-engine amphibian aircraft) for average speed over a 5,000 kilometer course (with payload) of 151.39 mph in a Grumman UF-2G Albatross from Floyd Bennett Field, N.Y., to Plattsburg, N.Y., to Dupress, S.D. and back to Floyd Bennett Field.
- **Oct. 3, 1962.** Navy Cmdr. Walter M. "Wally" Schirra Jr., makes what is described as a textbook orbital flight during the fifth flight in the Mercury program. He flies in a 100x176-mile orbit, the highest to date, and completes nearly six orbits. He is also the first astronaut to splash down in the Pacific Ocean.
- **Oct. 14, 1962.** Maj. R.S. Heyser, flying a Lockheed U-2E, returns to the United States with photographic evidence that Soviet SS-4 intermediate range nuclear missiles are being erected near San Christobal, Cuba. A Navy crew, flying a Lockheed P2V Neptune, returns later in the day carrying reconnaissance photographs of the Soviet freighter Omsk with oblong crates lashed to the deck that are likely missile containers. The Cuban Missile Crisis would end on Oct. 28.

Airpower and the Cuban Missile Crisis

- **Oct. 22, 1962.** Before President John F. Kennedy publicly announces the Soviet buildup of offensive intermediate range missiles in Cuba, Strategic Air Command goes on actual airborne alert. B-52 crews are sent on 24-hour flights, fully armed, to areas within striking distance of possible enemy targets. These highly classified flights, which are continued until 1968, are called "Chrome Dome" missions.
- **Oct. 23, 1962.** Air Force pilots from the 363rd Tactical Reconnaissance Wing at Shaw AFB, S.C., flying McDonnell RF-101C Voodoos, make the first low level photo reconnaissance flights during the Cuban Missile Crisis.
- **Oct. 25, 1962.** Coast Guard Cmdr. William G. Fenlon sets a recognized class record for great circle distance without landing (piston-engine amphibians) of 3,571.65 miles from Kodiak, Alaska, to Pensacola, Fla., in a Grumman UF-2G Albatross.
- **Oct. 26, 1962.** The 744th and last Boeing B-52 Stratofortress is delivered to Strategic Air Command. The aircraft, an H model (serial # 61-040) is assigned to 4136th Strategic Wing at Minot AFB, N.D. Also on this date, SAC takes delivery of the last three (of 116) Convair B-58 Hustlers. The aircraft are assigned to the 305th Bomb Wing at Bunker Hill AFB, Ind.

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

Valor: The First Air Force Cross

Nov. 30, 1962. The first tethered hovering flight is made by the Lockheed XV-4A Hummingbird vertical takeoff and landing airplane at Marietta, Ga.

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

1963

Jan. 17, 1963. NASA pilot Joe Walker qualifies for astronaut wings by flying the North American X-15 to an altitude of 271,700 feet or 51.46 miles. He is the 11th man to pass the 50-mile mark.

Feb. 9, 1963. The Boeing 727 tri-jet airliner makes its first flight, from Seattle to Everett, Wash. The 727 was the most-produced airliner of all time until surpassed by the Boeing 737.

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

March 19, 1963. Capt. Glenn A. Higginson sets a recognized class record (piston-engine amphibian aircraft) for average speed over a 1,000 kilometer course (with payload) of 153.65 mph in a Grumman HU-16B Albatross from Eglin AFB, Fla., to Albany, Ga.

March 20, 1963. Capt. Henry E. Erwin Jr. sets two recognized class records for altitude (19,747 feet) with a 5,000-kilogram payload and greatest payload (12,162.9 pounds) carried to an altitude of 6,600 feet in a Grumman HU-16B Albatross at Eglin AFB, Fla.

April 11, 1963. The first successful launch of a Boeing LGM-30 Minuteman I is conducted at Vandenberg AFB, Calif.

May 15, 1963. Maj. L. Gordon Cooper Jr. becomes the second Air Force astronaut in space as he makes nearly 22 orbits in his spacecraft, Faith 7. He is the last American to be launched into space alone, he is the first to spend a complete day in orbit, and because of a failure of the automatic system, he is the first to perform an entirely manual re-entry. This is the last Project Mercury space mission.

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

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

Sept. 22, 1963. The Air Force Academy chapel—destined to become world famous—is dedicated. Six years earlier, the design was almost scrapped as an "insult to religion and Colorado."

"The Chapel That Nearly Wasn't," Air Force Magazine, December 1985 (not yet online)

Oct. 17, 1963. The first LGM-30A Minuteman I operational test launch is carried out at Vandenberg AFB.

Calif., by a crew from Malmstrom AFB, Mont. The shot is a partial success. The re-entry vehicle overshoots the target.

Oct. 22, 1963. In Exercise Big Lift, the Air Force airlifts more than 15,000 men of the 2nd Armored Division and its supporting units from Ft. Hood, Tex., to bases near Frankfurt, West Germany. In completing the movement in 63 hours, five minutes, Military Air Transport Service (MATS) flies 223 missions without a fatality.

Oct. 30, 1963. Navy Lt. James H. Flatley lands a Lockheed KC-130F Hercules on the aircraft carrier USS *Forrestal* (CVA-59) in the Atlantic off Boston, Mass., in a test to see if the Hercules could be used as a "Super COD" (carrier on-board delivery) aircraft. Flatley and crew will eventually make 21 unarrested full-stop landings and a like number of unassisted takeoffs from the carrier.

Nov. 7, 1963. The Northrop-developed three-parachute landing system for the Apollo command module is successfully tested at White Sands, N.M.

Dec. 17, 1963. With company pilots Leo Sullivan and Hank Dees at the controls, the Lockheed C-141A Starlifter, USAF's first jet-powered transport makes its first flight at Marietta, Ga.

Dec. 17, 1963. The Thunderbirds, the Air Force's aerial demonstration squadron, fly their 690th and last show in the North American F-100C Super Sabre.