

25 Years Ago, March 1981

March 1 The West German company Orbital Transport und Raketen Aktiengesellschaft (Otrag) successfully launches its latest test rocket from its new test site at the Seba Oasis in the Libyan desert. Otrag, founded in 1974, had been testing its rockets in Zaire during 1977-1978 but was forced to leave after the Soviet Union exerted political pressure based on concerns that the rocket technology would be used for military purposes. Otrag is seeking to develop a low-cost single-stage launch vehicle. *Aviation Week*, March 23, 1981, p. 25.



March 12 Soyuz T-4 is launched by the Soviet Union and carries Viktor Savinikh, the world's 100th space traveler. By this time, there have been 43 U.S. astronauts; one each from Czechoslovakia, East Germany, Poland, Hungary, Bulgaria, Cuba, and Vietnam; the rest have been from the USSR. *NASA, Astronautics and Aeronautics, 1979-84*, p. 577.

March 26 The Japanese National Space Development Agency successfully fires its large liquid oxygen/liquid hydrogen LE5 rocket engine for the first time. It is to power the second stage of the H-1 launcher. Japan is the fourth nation with a liquid oxygen/liquid hydrogen engine, after the U.S., ESA, and China, although China's Long March 3 is not yet operational. *NASA, Astronautics and Aeronautics, 1979-84*, pp. 262, 299.

50 Years Ago, March 1956

March 5 NACA engineers Alfred J. Eggers and C.A. Syvertson submit a concept for the attainment of "interference lift" (also termed "compression lift") for supersonic aircraft. This influential paper is later published as NACA RM-A55105. E. Emme, ed., *Aeronautics and Astronautics 1915-60*, p. 81.

March 7 The first production McDonnell F3H-2N Demon all-weather fighters are delivered to fighter squadron VF-14, based at Cecil Field Naval Air Station. C. Van Vleet, L. Pearson, and A. Van Wyen, *U.S. Naval Aviation, 1910-1970*.

March 8 Burbank's Lockheed Aircraft announces that KLM Royal Dutch Airlines has ordered a dozen Lockheed Electra IIs. This is the first European order for U.S. propeller-turbine airliners—Electra II is powered by four Allison 501 propeller-turbine engines. L. Payne, *Air Dates*, p. 510.

March 10 British test pilot Peter Twiss sets a new world's airspeed record of 1,132 mph in the experimental Fairey FD2 Delta jet, flying from Boscombe Down, Wiltshire, England. Powering the plane is a single afterburning Rolls-Royce Avon engine rated at 12,000 lb static thrust. The aircraft has a sharply swept delta wing, and its nose, like that of the later Concorde SST, droops for landing and takeoff. The FD2 is the first jet to take off from the ground under its own power and exceed 1,000 mph, as recognized by the Fédération Aéronautique Internationale. Twiss beats by 300 mph the previous record set by U.S. Col. Horace Hanes in a North American F-100 Super Sabre jet on Aug. 20, 1955. P. Twiss, *Faster Than the Sun*, pp. 123-142; C. Burnet, *Three Centuries to Concorde*, pp. 150-162.



Fairey FD2 Delta

March 12 The Navy's first combat squadron equipped with air-to-air guided missiles goes to sea. Attack Squadron VA-83, flying Vought F7U3M Cutlass fighters that carry the new Sparrow I missiles, embarks on the carrier USS Intrepid at Norfolk, Va., for a Mediterranean cruise. C. Van Vleet, L. Pearson, and A. Van Wyen, *U.S. Naval Aviation*, p. 206.

March 14 The first attempt to launch a Jupiter A research test vehicle succeeds at Cape Canaveral, Fla. It is essentially a modified Redstone. SAC, *SAC Missile Chronology*.



March 14 A new Northrop Scorpion twin-jet all-weather fighter is in production, it is announced. The aircraft is to be designated the F-89H, placed in service with the Air Force, and armed with the Falcon air-to-air missile. L. Payne, *Air Dates*, p. 511.

March 15 Headquarters USAF issues General Operational Requirement 148 covering development of an air-to-surface missile to be carried by the Boeing B-52 as a standoff weapon. The move leads to the Hound Dog cruise missile. SAC, *SAC Missile Chronology*.

March 20 The Ballistic Missile Committee of the Office of the Secretary of Defense approves a Navy plan for development of solid-fuel ship-based ballistic missiles. Eventually, the Polaris program results. E. Emme, ed. *Aeronautics and Astronautics, 1915-60*, p. 81.

March 22 Headquarters USAF splits responsibility for the initial operational capability of the Thor IRBM jointly between the Air R&D Command (for actions in the U.S.) and Strategic Air Command, or SAC (for actions in the U.K.). SAC expects to have eight squadrons with a total of 120 missiles at three bases in the U.K. be-

Past

An Aerospace Chronology
by Frank H. Winter and
Robert van der Linden
National Air and Space Museum

tween October 1958 and July 1959. SAC, *SAC Missile Chronology*.

March 27 In a bid to improve coordination and consolidate missile development, the secretary of defense establishes a special "missile czar" post, the Office of Special Assistant for Guided Missiles, headed by E.V. Murphee. E. Emme, ed., *Aeronautics and Astronautics, 1915-60*, p. 81.

March 30 The Dept. of Defense asks the Atomic Energy Commission to examine the possibility of adapting an atomic warhead to the AIM-47A Falcon GAR-11 air-to-air missile. Eventually, this model becomes operational and has a yield of 0.01-1 kiloton. It ceases service by 1972. D. Baker, *Spaceflight and Rocketry: A Chronology*, p. 59.

75 Years Ago, March 1931

March 2 Flying a new Blériot monoplane, French pilots Lucien Bossoutrot and Maurice Rossi set a new duration and distance record of 75 hr 22 min and 5,500 mi. flying between Oran and Senia. *Flight*, March 6, 1931.

March 5 Imperial Airways opens up the first section of its planned Cairo-to-Cape Town route between Cairo and Mwanza in central Africa. The airline hopes to link the entire British Empire by air. It has adopted a set of uniforms and rank insignia as elaborate as those in the Royal Navy and merchant marine services. First and second pilots, different grades of mechanics, and airport managers each wear different combinations of blue and white half-inch-wide sleeve bands. *Aviation*, April 1931, p. 202.

March 6 American pilot Ruth Nichols establishes a new altitude record for women by flying her Lockheed Vega for an hour over Manhattan at an altitude of 28,743 ft.



Elinor Smith held the previous record at 27,418 ft. *Flight*, March 13, 1931, p. 219; *Aviation*, May 1931, p. 269.

March 10 Farman's large type-302 monoplane drone flies to two new duration and distance records over a circuit between Le Bourget and Chartres Etampes. Guided by French veteran aviators Marcel Lalouette and Georges Reginensi and carrying 2,000 kg, it remains aloft for 17 hr 4 min while covering 1,664 mi. at an average speed of 98 mph. *Flight*, March 27, 1931, p. 265.

March 13 German rocket experimenter Karl Poggensee, an engineering student at the Ingenieur Akademie of the University of Oldenburg, successfully launches a solid-propellant rocket to 1,500 ft. The payload consists of a radio transmitter for helping to locate the rocket, an altimeter, a camera, and a velocity meter. It thus may be considered the world's first successful sounding rocket. Robert Goddard in 1929 fired a liquid-propellant rocket carrying a camera and a barometer, but that vehicle crashed shortly after takeoff. Karl Poggensee file, National Air and Space Museum.



March 14 Johannes Winkler, a founder of the German Rocket Society and its first president, successfully launches a liquid-propellant rocket on the Gross-Kuehnau drill ground near Dessau. Winkler built the liquid oxygen and methane powered HW-1, which is probably Europe's first liquid-propellant rocket to fly. Weighing 11 lb and standing about 24 in. tall, the HW-1 goes up 180 ft and lands 570 ft away. An earlier launch attempt in February failed. F. Winter, "Birth of the VFR: The Start of Modern Astronautics," *Spaceflight*, July-August 1977, pp. 243, 248.

March 24 Seven world's records for speed, distance, and duration for planes carrying 2,000 kg over a closed circuit fall to Joseph Lebrix, Marcel Doret, and their Dewoitine D. 33, named the Trait d'Union. The aircraft is powered by a 650-hp Hispano-Suiza engine. Lebrix and Doret set new records for endurance with loads of 500, 1,000, and 2,000 kg, for distance with the same loads, and for speed over a distance of 2,000 km carrying a weight of 2,000 kg. They cover a total distance of 2,895 mi. over the Istres-Montpellier-Nimes circuit and other towns, at an average speed of 94 mph. *Aero Digest*, April 1931, p. 201.



Dewoitine 33

March 31 A baby is born in an airplane 4,000 ft above Le Pas, Manitoba, Canada. The craft was carrying the mother to a hospital when the boy arrived. *Flight*, April 3, 1931, p. 301.

March 31 Famed Notre Dame football coach Knute Rockne is killed in the crash of a TWA Fokker F-10 in Bazaar, Kansas. The fatal accident prompts a controversial investigation that implicates a structural failure of the aircraft's wooden wing. This hastens the demise of wooden commercial aircraft, which are replaced by more reliable all-metal designs. R. Davies, *Airlines of the United States Since 1914*, pp. 93-94.

100 Years Ago, March 1906

March 18 Trajan Vuia tests the first tractor monoplane. Although it is not successful, it establishes the monoplane tradition. Among the first to adopt this configuration is Louis Blériot. C. Gibbs-Smith, *Flight*, p. 243.