

## Timeline of the Space Race

Date	Event	Actor
Oct. 4, 1957	Sputnik 1, the first human made object to orbit the Earth, was launched by the USSR. It remained in space until January 4, 1958.	USSR
Nov. 3, 1957	Sputnik 2, carrying a dog, was launched by the USSR. It remained in orbit until April 13, 1958.	USSR
Jan. 31, 1958	Explorer 1, the first U.S. satellite in orbit, was launched into space. It discovered the Earth's radiation belt.	USA
Mar. 5, 1958	Explorer 2 was launched and failed to reach orbit.	USA
Mar. 17, 1958	Vanguard 1 satellite was launched into orbit. Although communication with it was lost in 1964, it remains the oldest human made satellite still in orbit.	USA
May 15, 1958	Sputnik 3 was launched by the USSR.	USSR
Oct. 1, 1958	NASA was founded.	USA
Oct. 11, 1958	Pioneer 1 became the first launch by NASA.	USA
Jan. 2, 1959	Luna 1, the first human made satellite to orbit the moon, was launched by the USSR.	USSR
Mar. 3, 1959	Pioneer 4 was launched and fell into a solar orbit, becoming the first U.S. sun orbiter.	USA
Sept. 12, 1959	Luna 2 was launched and hit the moon on September 13, becoming the first human made object to hit the moon.	USSR
Oct. 4, 1959	Luna 3 translunar satellite was launched, orbiting the moon and photographing 70 percent of the far side of the moon.	USSR
Apr. 1, 1960	Tiros 1, the first successful weather satellite was launched by the United States.	USA
Aug. 18, 1960	Discoverer XIV launched the first U.S. camera equipped Corona spy satellite.	USA
Apr. 12, 1961	Vostok 1 was launched by the USSR, carrying cosmonaut Yuri	USSR

	A. Gargarin, the first man in space. He orbits the Earth once.	
May 5, 1961	Mercury Freedom 7 carried Alan Shepard, the first U.S. astronaut into space in a suborbital flight.	USA
Aug. 6, 1961	Vostok 2 was launched by the USSR carrying Gherman Titov, the first day long Soviet space flight.	USSR
Feb. 20, 1962	Mercury Friendship 7 took off with John Glenn, Jr. the first American in orbit, and orbited the Earth three times.	USA
May 24, 1962	Mercury Aurora 7 was launched with M. Scott Carpenter, making three orbits.	USA
July 10, 1962	Telstar 1, U.S. satellite, beamed the first live transatlantic telecast.	USA
Dec. 14, 1962	U.S. Mariner 2, the first successful planetary spacecraft flew past Venus, and entered a solar orbit.	USA
June 16, 1963	Vostok 6 carried Valentia Tereshkova, the first woman in space and orbited the Earth 48 times.	USSR
July 31, 1964	U.S. Ranger 7 relayed the first close-range photographs of the Moon.	USA
Mar. 18, 1965	The first space walk was made from Soviet Vostok 2 by Alexei A. Leonov. Duration was 12 minutes.	USSR
Mar. 23, 1965	First staffed flight of the Gemini program, Gemini 3 carrying Virgil I. Grissom and John W. Young. It made three orbits around the Earth.	USA
Mar. 24, 1965	Ranger 9 transmitted high-quality images of the moon, many of which were shown live in the first television spectacular about the moon.	USA
June 3, 1965	Edward White made the first U.S. space walk from Gemini 4. Duration was 22 minutes.	USA
July 14, 1965	U.S. Mariner 4 returned the first close-range images of Mars.	USA
Nov. 16, 1965	Soviet Venus 3 was launched, becoming the first craft to hit Venus on March 1, 1966.	USSR

Dec. 4, 1965	Gemini 7 was launched carrying Frank Borman and James A. Lovell, Jr., making 206 orbits around Earth and proving a trip to the Moon possible.	USA
Dec. 15, 1965	American astronauts Walter Schirra, Jr. and Thomas Stafford in Gemini 5 made the first space rendezvous with Gemini 7.	USA
Feb. 3, 1966	Soviet Luna 9 was the first spacecraft to soft-land on the moon.	USSR
Mar. 1, 1966	Soviet Venera 3 hit Venus, the first spacecraft to reach another planet. It failed to return data.	USSR
March 1966	Soviet Luna 10 was the first spacecraft to orbit the moon.	USSR
June 2, 1966	Surveyor 1 was the first U.S. spacecraft to soft-land on the Moon.	USA
Aug. 14, 1966	U.S. Lunar Orbiter 1 entered moon orbit and took the first picture of the Earth from the distance of the moon.	USA
Apr. 23, 1967	Soviet Soyuz 1 was launched, carrying Vladimir M. Komarov. On April 24 it crashed, killing Komarov, the first human space flight fatality.	USSR
Oct. 18, 1967	Venera 4 sent a descent capsule into the atmosphere of Venus, returning data about its composition.	USSR
Sept. 15, 1968	Soviet Zond 5 was launched, the first spacecraft to orbit the Moon and return.	USSR
Oct. 11, 1968	Apollo 7 was the first staffed Apollo mission with Walter M. Schirra, Jr., Donn F. Eisele, and Walter Cunningham. It orbited the Earth once.	USA
Dec. 21, 1968	Apollo 8 was launched with Frank Borman, James A. Lovell, Jr., and William A. Anders, the first Apollo to use the Saturn V rocket, and the first staffed spacecraft to orbit the moon, making 10 orbits on its 6-day mission.	USA
Jan. 1969	Soyuz 4&5 perform the first Soviet spaceship docking.	USSR
July 20, 1969	Neil Armstrong and Edwin Aldrin, Jr. made the first staffed soft landing on the moon and the first moonwalk, using Apollo 11.	USA

July 31, 1969	Mariner 6 returned high-resolution images of the surface of Mars, concentrating on the equatorial region.	USA
Aug. 5, 1969	Mariner 7 returned high-resolution images of the surface of Mars, concentrating on the southern hemisphere.	USA
April 11, 1970	Apollo 13 was launched, suffering an explosion in its SM oxygen tanks. Its moon landing was aborted and the crew, James A. Lovell, Jr., John L. Swigert, Jr., and Fred W. Haise, Jr., returned safely.	USA
Sept. 12, 1970	Soviet Luna 16 was launched, conducting the first successful return of lunar soil samples of an automatic spacecraft.	USSR
Nov. 17, 1970	Luna 17 landed on the moon, with the first robot, Lunokhod 1.	USSR
Dec. 15, 1970	Soviet Venera 7 was the first probe to soft-land on Venus.	USSR
Jan. 31, 1971	Apollo 14 moon mission was launched by the United States with Alan Shepard. They explore the moon and transport lunar material. Shepard becomes the first person to hit a golf ball on the moon.	USA
Apr. 19, 1971	Salyut 1 space station was launched by the USSR. It remained in orbit until May 28, 1973.	USSR
May 30, 1971	The United States launched Mariner 9, which became the first spacecraft to survey Mars from orbit.	USA
June 6, 1971	Soyuz 11 carried G.T. Dobrovolsky, V.N. Volkov, and V.I. Patsayev to Salyut 1, the first occupancy of an orbital station. However, on June 29 <sup>th</sup> the passengers died upon Soyuz 11's reentry.	USSR
July 30, 1971	Apollo 15 astronauts David Scott and James Irwin drove the first moon rover.	USA
Nov. 13, 1971	American Mariner 9 was the first spacecraft to orbit another planet, Mars.	USA
Mar. 2, 1972	Pioneer 10 was launched toward Jupiter, designed to familiarize alien life with humans. It returned the first close-up images of	USA

	Jupiter in 1973.	
July 15, 1972	Pioneer 10 became the first human made object to travel through the asteroid belt.	USA
April 5, 1973	Pioneer 11 was launched flying past Jupiter in 1974 and Saturn in 1979 where it discovered new rings.	USA
May 14, 1973	Skylab workshop was launched by the United States.	USA
May 25, 1973	First crew to Skylab was launched, repairing damage that occurred during launch.	USA
Nov. 3, 1973	American Mariner 10 was launched, on the first dual planet mission. Over the next year, it returned photographs of Venus and Mercury.	USA
May 17, 1974	NASA launched the first Synchronous Meteorological Satellite.	USA
June 24, 1974	Soviet Salyut 3, their first military space station, was launched. It remained in orbit until Feb. 2, 1977.	USSR
July, 1975	American Apollo 18 and Soviet Soyuz 19 docked.	USA and USSR
Oct. 1975	Soviet Venera 9 and 10 sent the first pictures of Venus to Earth.	USSR
June 22, 1976	Soviet military space station Salyut 5 is launched, remaining in orbit until August 8, 1977.	USSR
July 20, 1976	Pictures of the Martian surface were taken by Viking 1, the first U.S. attempt to soft land a spacecraft on another planet.	USA
Sept. 3, 1976	Viking 2 landed on Mars on the Plain of Utopia where it discovered water frost.	USA
Aug./Sept. 1977	Voyagers 1 and 2 left Earth to meet with Jupiter in 1979 and Saturn in 1980.	USA
Sept. 29, 1977	Soviet Salyut 6 space station was launched.	USSR
Nov. 1978	The Einstein Observatory began its 30 day mission.	USA
Dec. 1978	Two Pioneer spacecraft reached Venus. One dropped four probes into the atmosphere while the other mapped the surface.	USA
Sept. 1, 1979	Pioneer 11 reached Saturn, flying to within 13,000 miles and	USA

	taking the first close-up photographs.	
Apr. 12, 1981	The first mission of the Space Transportation System, Columbia, was launched.	USA
June 19, 1981	The European Space Agency (ESA) launched its third Ariane rocket.	ESA
Dec. 20, 1981	The ESA launched a fourth Ariane rocket.	ESA
Mar. 1, 1982	Venera 13 landed on Venus, and provided the first soil analysis.	USSR
Apr. 19, 1982	Soviet Salyut 7 space station was launched.	USSR
May 13, 1982	Soviet Soyuz T-5 was launched to rendezvous with Salyut 7, the first team to inhabit the space station.	USSR
Aug. 1982	Voyager 2 completed its flyby of Saturn.	USA
Nov. 11, 1982	The space shuttle Columbia's 5 <sup>th</sup> mission, its first operational one, began, deploying two satellites.	USA
Apr. 4, 1983	The space shuttle Challenger lifted off for its first mission and had the first American space walk in nine years.	USA
June 19, 1983	Sally Ride became the first U.S. woman to travel in space.	USA
Oct. 10, 1983	Soviet Venera 15 returned the first high-resolution images of the Venus polar area, and compiled a thermal map of the most of the northern hemisphere.	USSR
Nov. 28, 1983	The space shuttle Columbia carried the ESA Spacelab-1 into orbit.	USA, ESA
Jan.-Nov. 1983	The Infrared Astronomical Satellite found new comets, asteroids, galaxies and a dust ring around the star Vega that may be new planets.	USA, UK, Netherlands
Feb. 3, 1984	Bruce McCandless took the first untethered space walk from the space shuttle Challenger.	USA
July 17, 1984	Soyuz 12 was launched carrying Svetlana Saviskaya, who became the first woman to walk in space.	USSR
Aug. 30, 1984	The third space shuttle, Discovery, took off on its maiden voyage.	USA

Oct. 1984	Salyut 7's crew set a 237-day record in space.	USSR
Oct. 5, 1984	Launch of space shuttle Challenger mission STS-41G carrying the first crew with two women—Sally Ride and Katherine Sullivan. Sullivan became the first American woman to walk in space.	USA
Dec. 1984	Soviet/International Vega 1&2 were launched, dropping probes into Venus' atmosphere before continuing to Halley's Comet.	USSR
Jan. 8, 1985	The Sakigake probe was launched by Japan's Institute of Space and Aeronautical Science, becoming the first interplanetary probe as it rendezvous with Halley's Comet.	Japan
Apr. 29, 1985	The Challenger carried the ESA spacelab-3 into orbit.	USA and ESA
July 2, 1985	The ESA launched the Giotto spacecraft from an Ariane rocket.	ESA
Oct. 3, 1985	The fourth space shuttle Atlantis took off on its first mission.	USA
Oct. 1985	Spacelab D1, the first joint German/ESA mission, was flown.	Germany, ESA
Jan. 1986	Voyager 2 flew past Uranus	USA
Jan. 28, 1986	The space shuttle Challenger exploded shortly after liftoff of mission STS.	USA
Feb. 20, 1986	The core unit of Soviet space station Mir was launched.	USSR
March, 1986	Spacecraft from the USSR, Japan and Western Europe flew by Halley's Comet on its 30 <sup>th</sup> recorded appearance.	USSR, Japan, ESA
Dec. 1987	Yuri Romanenko returned from space station Mir, having arrived there from Soyuz TM 2 and set a record of 326 days in space.	USSR
May 4, 1989	Space Shuttle Atlantis was launched, deploying the spacecraft Magellan.	USA
July 12, 1989	Soviet/International Phobos 2 launched, which orbited Mars to study its surface, atmosphere and magnetic field.	USSR
Oct. 18, 1989	U.S. launched the Galileo spacecraft from Shuttle Atlantis flight	USA

	STS-34 which took infrared images of Venus and images of asteroid Ida before continuing to Jupiter.	
April 5, 1990	U.S. Pegasus rocket was deployed from a B-52 bomber, and launched the Pegasus satellite in the first demonstration of the Pegasus launch vehicle.	USA
April 24, 1990	Space Shuttle Discovery launches on STS-31, deploying the Hubble Space Telescope astronomical observatory.	USA
Aug. 1990	U.S. spacecraft Magellan arrives at Venus where for the next year it took radar images of the surface.	USA
Oct. 6, 1990	Space Shuttle Discovery launched the Ulysses spacecraft with two upper stages, on mission STS-41. Ulysses flew toward Jupiter, to be slingshot towards the sun, to obtain data from high solar latitudes.	USA
Feb. 7, 1991	Salyut 7 fell from orbit and burned up over Argentina.	USSR
Apr. 5, 1991	Space Shuttle Atlantis carried the Compton Gamma Ray Observatory into orbit. This new space telescope, built by NASA, was the first to provide an all-sky continuous survey in the gamma-ray and X-ray spectra.	USA
June 5, 1991	Shuttle Columbia carried the Spacelab SLS-1 into orbit, to conduct investigations into the effects of weightlessness on humans.	USA