John Glenn
Former United States Senator
John Herschel Glenn, Jr., is a former American pilot, engineer, astronaut and United States senator. Wikipedia
Born: July 18, 1921 (age 93), Cambridge, OH
Space missions: STS-95, Mercury-Atlas 6
Spouse: Annie Glenn (m. 1943)
Education: Muskingum University
Movies: Kitty Hawk: The Wright Brothers' Journey of Invention
Children: Carolyn Ann Glenn, John David Glenn

In 1959 Glenn was chosen to be one of the first seven astronauts in the U.S. space program. On February 20, 1962, he was launched into space inside a capsule called *Friendship* 7. Over five hours, Glenn orbited Earth three times. The voyage made Glenn a hero to many Americans.

Glenn retired from the space program in 1964. Soon afterward, he also left the Marine Corps and gained an important job at a soft-drink company. Meanwhile, Glenn became involved in politics. He was elected to the U.S. Senate in 1974. He served as a senator until 1999.

In 1998 Glenn returned to space aboard the space shuttle Discovery. He was the oldest person ever to travel in space. In 2012 Barack Obama awarded Glenn the Presidential Medal of Freedom.



Neil Armstrong

Astronaut

Neil Alden Armstrong was an American astronaut and the first person to walk on the Moon. He was also an aerospace engineer, naval aviator, test pilot, and university professor. Wikipedia

Born: August 5, 1930, Auglaize County, OH

Died: August 25, 2012, Cincinnati, OH

Space missions: Gemini 8, Apollo 11

Spouse: Carol Held Knight (m. 1994–2012), Janet Shearon (m. 1956– 1994)

Education: University of Southern California (1970), Purdue University (1947–1955), Blume High School (1947)

Children: Mark Armstrong, Karen Armstrong, Eric Armstrong

In 1969 U.S. astronaut Neil Armstrong became the first person to walk on the moon. Millions of people watched on television as Armstrong stepped out of his spacecraft and said, "That's one small step for [a] man, one giant leap for mankind."

Neil Alden Armstrong was born on August 5, 1930, in Wapakoneta, Ohio. He became interested in airplanes at a young age. After high school Armstrong became an air cadet, or trainee, in the U.S. Navy. He also studied flight engineering at two universities. In the early 1950s Armstrong was a pilot in the Korean War.

In 1955 Armstrong joined the National Aeronautics and Space Administration (NASA) as a test pilot. Seven years later NASA chose Armstrong to be an astronaut. He led the flight of the spacecraft Gemini 8, launched on March 16, 1966. During that flight Armstrong became the first person to connect his spacecraft to a rocket in space.

On July 16, 1969, Armstrong, Edwin E. (Buzz) Aldrin, Jr., and Michael Collins left for the moon in the Apollo 11 spacecraft. Four days later, Armstrong became the first person to step out onto the moon's surface. For more than two hours Armstrong and Aldrin collected samples of moon soil, made measurements, and took photographs before they began their return trip to Earth.

Armstrong retired from NASA in 1971. He continued to teach and to work on committees about the space program. He died on August 25, 2012, in Cincinnati, Ohio.



Buzz Aldrin was an American astronaut. He was the second man to walk on the Moon.

Edwin Eugene Aldrin, Jr., was born on January 20, 1930, in Montclair, New Jersey. His family gave him the nickname "Buzz." Buzz's father was an aviator and a student of **rocketry**. Buzz was not a great student until he decided to become an aviator like his father. Then he worked hard to improve his grades. Buzz's studying paid off when he was accepted at the U.S. Military Academy at West Point, New York. In 1951 he graduated third in his class.

Aldrin became a pilot in the U.S. Air Force. He flew many combat missions in the Korean War. He went on to attend the Massachusetts Institute of Technology, where he earned a doctorate in astronautics (the science of spacecraft) in 1963. Later that year the National Aeronautics and Space Administration (NASA) chose him to be an astronaut.

During November 11-15, 1966, Aldrin made his first trip into space. He traveled with James A. Lovell, Jr., on a spacecraft called Gemini 12. Aldrin spent 5 1/2 hours on a spacewalk outside the craft.

Aldrin's next space mission was aboard Apollo 11, which lifted off on July 16, 1969. Apollo 11 carried Aldrin, Neil Armstrong, and Michael Collins to the Moon. On July 20, Armstrong and Aldrin stepped out onto the surface of the Moon. There they collected samples of Moon soil and took photographs. The mission ended on July 24 with splashdown in the Pacific Ocean. Aldrin retired from NASA in 1971. In 1998 he founded the ShareSpace Foundation, an organization to promote space travel.



Sally Ride

Physicist

Sally Kristen Ride was an American physicist and astronaut. Born in Los Angeles, Ride joined NASA in 1978 and, at the age of 32, became the first American woman in space. After flying twice on the space shuttle Challenger, she left NASA in 1987. Wikipedia

Born: May 26, 1951, Los Angeles, CA Died: July 23, 2012, La Jolla, San Diego, CA Space missions: STS-7, STS-41-G Spouse: Steven Hawley (m. 1982–1987) Education: Stanford University (1978), More Books: To Space & Back, More

Sally Ride was a U.S. astronaut. In 1983 she became the first U.S. woman to travel into outer space.

Sally Kristen Ride was born in Encino, California, on May 26, 1951. She graduated from Stanford University in northern California with four degrees, including a doctorate in physics.

In 1978 the National Aeronautics and Space Administration (NASA) selected Ride to train as an astronaut. After completing her training in 1979, she worked as a **space shuttle** mission specialist. On June 18, 1983, Ride made her first voyage into outer space aboard the space shuttle *Challenger*. The shuttle was in space for six days.

Ride took a second trip aboard the *Challenger* in 1984. During this mission Ride's friend Kathryn Sullivan became the first U.S. woman to walk in space. In 1986 the *Challenger* exploded as it was taking off for another mission. Ride was one of the astronauts who helped to investigate the explosion. Ride left NASA in 1987.



Mae Jemison

Physician

Mae Carol Jemison is an American physician and NASA astronaut. She became the first African American woman to travel in space when she went into orbit aboard the Space Shuttle Endeavour on September 12, 1992. Wikipedia

Born: October 17, 1956 (age 58), Decatur, AL

Space missions: STS-47

Nationality: American

Space agency: NASA

Parents: Dorothy Green, Charlie Jemison

Education: Cornell University (1981), Stanford University (1977), Morgan Park High School (1973)

Mae Jemison was the first African American woman to become an astronaut. She was a part of the crew of the space shuttle *Endeavor*, which orbited Earth for more than a week in 1992.

Jemison was born on October 17, 1956, in Decatur, Alabama. She was the youngest of three children. When she was 3, the family moved to Chicago, Illinois. Even as a young girl Jemison was deeply interested in science.

Jemison graduated from high school at age 16. She then received a scholarship to attend Stanford University in California. She graduated from there in 1977 with a degree in chemical engineering.

After Stanford, Jemison attended medical school at Cornell University in New York. She received her medical degree in 1981. She worked as a doctor first in Los Angeles, California, and then with the Peace Corps in West Africa.

Then Jemison applied to the National Aeronautics and Space Administration (NASA) to become an astronaut. She was one of only 15 out of 2,000 applicants accepted by NASA. Jemison entered NASA's astronaut program in 1987. In 1992 Jemison flew aboard the shuttle *Endeavor* as the science mission specialist. At the time she was the only female African American astronaut.

After retiring from NASA in 1993, Jemison founded her own company, the Jemison Group. The company created new technologies, especially to help developing countries. Jemison also created an international science camp for teenagers.



Ellen Ochoa was the first Hispanic woman astronaut. She was also a scientist and an inventor. She helped create several systems that use lasers to gather and process information from images.

Ellen Ochoa was born on May 10, 1958, in Los Angeles, California. She grew up in La Mesa, a town near San Diego, and graduated from San Diego State University in 1980. She studied physics in college, but she was also interested in music and played the flute. She continued both her music and her science studies after college. Ochoa earned a master's degree and a doctorate from Stanford University in electrical engineering. She also played with the Stanford Symphony Orchestra.

In graduate school Ochoa concentrated on optics. Optics is the study of how light behaves. She continued that work at Sandia National Laboratories in New Mexico. She helped create optical systems for recognizing objects. Later she worked at the Ames Research Center designing computer systems. Ames is associated with the National Aeronautics and Space Administration (NASA). All of her skills helped her gain admission to NASA's astronaut program in 1990.

Ochoa became an astronaut in 1991. She flew on her first mission, on the space shuttle *Discovery*, two years later. By 2002 she had flown on four shuttle flights. On the shuttle she oversaw experiments and operated a robotic arm to move other astronauts and equipment around.

She later served as the Deputy Director of the Johnson Space Center in Houston, Texas. She often spoke to groups of students of all ages about her experiences as an astronaut.



Ham

Chimp

Ham, also known as Ham the Chimp and Ham the Astrochimp, was a chimpanzee and the first Hominidae launched into space, on 31 January 1961, as part of America's space program. Wikipedia

Born: July 1957, Cameroon

Died: January 19, 1983, North Carolina Zoo, Asheboro, NC

Space missions: Mercury-Redstone 2

Space time: 0d 0h 16m

First space flight: Mercury-Redstone 2

Space agency: NASA

Beginning in July 1959, the two-year-old chimpanzee was trained under the direction of neuroscientist Joseph V. Brady at an Air Force Laboratory to do simple tasks in response to electric lights and sounds. During his training, Ham was taught to push a lever within five seconds of seeing a flashing blue light if he could pull the lever in time he earned him a banana.

What makes Ham's mission different from all the other primate flights to this point is that he was not merely a passenger, he had a task to complete!

On January 31, 1961, Ham was secured in a Project Mercury mission designated MR-2 and launched from Cape Canaveral, Florida, on a his space flight. Ham's vital signs and tasks were monitored by sensors and computers on Earth. The capsule suffered a slight loss of pressure during the flight, but Ham's space suit kept him safe. Ham's lever-pushing performance in space was only a fraction of a second slower than on Earth, demonstrating that tasks could be performed in space. Ham's capsule splashed down in the Atlantic Ocean and was recovered by a rescue ship later that day. His only physical injury was a bruised nose. His flight was 16 minutes and 39 seconds long.



Laika

Dog

Laika was a Soviet space dog who became one of the first animals in space, and the first animal to orbit the Earth. Wikipedia

Born: 1954, Moscow, Russia Died: November 3, 1957, Low Earth orbit Space time: 0d 5h 0m Weight: 13.23 lbs (6 kg) Space agency: Ministry of General Machine Building

The Soviet Union stunned the world on Nov. 3, 1957, with the launch of Sputnik 2. On board the small satellite was a little dog, Laika, the first animal to orbit Earth. However, Laika was not the first animal in space. The United States and the U.S.S.R. had been putting animals atop rockets since 1947.



Laika, a mixed-breed dog, was the first living being in orbit. She was launched on the Soviet Union's Sputnik 2 mission in November 1957. Credit: NASA

Laika was a young, mostly-Siberian husky. She was rescued from the streets of Moscow. Soviet scientists assumed that a stray dog would have already learned to endure harsh conditions of hunger and cold temperatures. Laika and two other dogs were trained for space travel by being kept in small cages and learning to eat a nutritious gel that would be their food in space.

The dog's name was originally Kudryavka, or Little Curly, but she became known internationally as Laika, a Russian word for several breeds of dog similar to a husky. American reporters dubbed her Muttnik as a pun on Sputnik.



Jim Lovell

Astronaut

James Arthur "Jim" Lovell, Jr., is a former NASA astronaut and a retired captain in the United States Navy, most famous as the commander of the Apollo 13 mission, which suffered a critical failure en ... Wikipedia

Born: March 25, 1928 (age 86), Cleveland, OH Space missions: Gemini 12, Apollo 8, Gemini 7, Apollo 13 Spouse: Marilyn Lovell (m. 1952) Children: Susan Gerlach, James Gerlach, Barbara Gerlach, Jeffrey Gerlach Movies: Apollo 13

Books: Lost Moon: The Perilous Voyage of Apollo 13

James Arthur Lovell Jr. (born March 25, 1928) is a former NASA astronaut, Naval Aviator, mechanical engineer, and retired Navy captain. In 1968, he was a pilot of Apollo 8, he became one of the first three humans to fly to and orbit the Moon. He then led the 1970 Apollo 13 lunar mission which had a critical failure while in flight only circled around the Moon and returned safely to Earth instead of landing on the moon. He was able to land safely with the help of his crew and mission control.

Lovell had previously flown on two Gemini missions, Gemini 7 in 1965 and Gemini 12 in 1966. He was the first person to fly into space four times.

One of 24 people to have flown to the Moon, Lovell was the first person to fly to it twice. He is a recipient of the Congressional Space Medal of Honor and the Presidential Medal of Freedom (in 1970. He is a co-author of the 1994 book *Lost Moon*, on which the 1995 film *Apollo 13* was based.



Yuri Gagarin

Cosmonaut

Yuri Alekseyevich Gagarin was a Russian-Soviet pilot and cosmonaut. He was the first human to journey into outer space, when his Vostok spacecraft completed an orbit of the Earth on 12 April 1961. Wikipedia

Born: March 9, 1934, Klushino, Russia Died: March 27, 1968, Kirzhach, Russia Space missions: Vostok 1 Height: 5' 2" (1.57 m) Full name: Yuri Alekseyevich Gagarin Awards: Hero of the Soviet Union, Pilot-Cosmonaut of the USSR, More

Yuri Alekseyevich Gagarin (9 March 1934 – 27 March 1968) was a Soviet Air Forces pilot and cosmonaut who became the first human to journey into outer space, achieving a major milestone in the Space Race; his capsule Vostok 1 completed one orbit of Earth on 12 April 1961. Gagarin became an international celebrity and was awarded many medals and titles, including Hero of the Soviet Union, his nation's highest honor.