

Today in science: 1ST AMERICAN IN SPACE

Alan Shepard became the 1st American in space on May 5, 1961. His suborbital flight took place just 3 weeks after the Soviet Union's **Yuri Gagarin** orbited Earth once.

May 5, 1961, just 23 days after Yuri Gagarin of the Soviet Union became the first person in space, NASA launched astronaut Alan Shepard aboard the Freedom 7 capsule powered by a Redstone booster to become the first American in space. His historic flight began from Cape Canaveral in Florida, lasted 15 minutes, 28 seconds, before a splashdown in the Atlantic Ocean.

During the rocket's acceleration, Shepard experienced 6.3 g, or 6.3 times his normal weight, just before shut down of the Redstone engine, two minutes and 22 seconds after liftoff. Soon after, America's first space traveller got his first view of the Earth and became one of the first astronauts to say:

What a beautiful view.

His spacecraft splashed down in the Atlantic, 486 km from Cape Canaveral, where he and Freedom 7 were recovered by helicopter and transported to the awaiting aircraft carrier USS Lake Champlain. After his flight, the astronaut said humorously the memorable quote:

It's a very sobering feeling to be up in space and realize that one's safety factor was determined by the lowest bidder on a government contract.

Alan Shepard was one of 110 test flight pilots who had volunteered for NASA's manned space flight program – Project Mercury – in 1959. NASA selected him and six other pilots to be part of the project. All of the pilots went through a rigorous training regimen before NASA made a final selection.

The first American then to orbit Earth was **John Glenn**, aboard Friendship 7 on February 20, 1962.

NASA launched Alan Shepard into space against a backdrop of the Cold War. **Kurt Debus**, who was NASA's Launch Operations director at the time and who would go on to serve as the first director of the Kennedy Space Center, said later:

We knew we were in a competitive situation. But, we never permitted the pressure to make us take risks that might endanger Shepard's life or the success of the mission.

Just weeks after Shepard's flight, the Space Race began to heat up. On May 25, 1961, President John F. Kennedy gave a stirring speech before a joint session of Congress, in which he declared his intention to focus U.S. efforts on landing humans on the moon within a decade. **The first human footsteps on the moon took place on July 20, 1969. Shepard's Mercury flight was first step on humanity's long journey to Mars.**

NASA's newest crew capsule is named for Alan Shepard. It is a reusable launch system with a vertical-takeoff, vertical-landing suborbital manned rocket, being developed by Blue Origin as a commercial system for suborbital space tourism.

Flights with test passengers are planned for late 2017, with commercial passenger flights to begin in 2018.

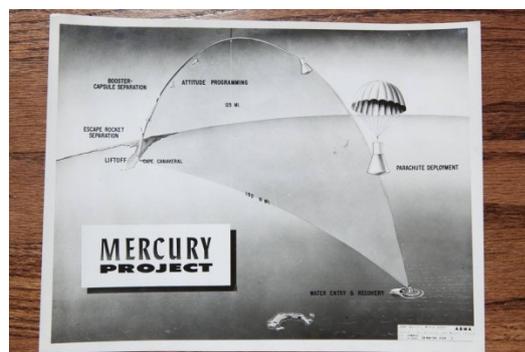
AK, with EarthSky Notes



Astronaut Alan B. Shepard Jr., in his silver pressure suit with the helmet visor closed, prepares for his historic flight into space.



Alan Shepard in his flight suit



Trajectory of Alan Shepard's flight aboard Freedom 7 on May 5, 1961.