

‘Man, what a ride!’

50 years ago, a McDonnell Aircraft capsule carried the first U.S. astronaut into space *By Henry T. Brownlee Jr.*



PHOTOS: (Right) The Redstone 3 rocket carrying astronaut Alan Shepard and the Mercury capsule lifts off at Cape Canaveral, Fla., May 5, 1961. BOEING ARCHIVES

(Insets, from left) McDonnell workers help Alan Shepard into Freedom 7. NASA Shepard suited and in the Mercury spacecraft, preparing for his historic flight. NASA Shepard is recovered by a U.S. Marine Corps helicopter after his suborbital flight. BOEING ARCHIVES



A half-century has passed since Alan B. Shepard Jr. climbed into his Mercury capsule in the pre-dawn darkness at Cape Canaveral, Fla., and waited ... and waited ... and waited ... to take his own small step in the exploration of space.

On the morning of May 5, 1961, Shepard sat atop a Mercury-Redstone 3 rocket for more than four hours, through several delays, until the countdown finally reached zero.

At 9:34 a.m. EST, the rocket rose slowly from the launch pad and then gathered speed as it climbed out over the blue waters of the Atlantic, leaving a white plume in its wake.

The Mercury capsule, named Freedom 7, reached a velocity of 5,134 mph (8,260 kilometers per hour) and an altitude of 116.5 statute miles (187 kilometers) above the earth.

“Man, what a ride!” Shepard would say when he emerged from the capsule after becoming the first American to go into space.

His suborbital flight lasted only 15 minutes 28 seconds.

“In my humble judgment, it far exceeds the short duration of 15 minutes,” James S. McDonnell, the founder and president of McDonnell Aircraft Corp., said immediately after the successful launch and recovery. McDonnell had watched the launch from Cape Canaveral.

“Its significance,” he continued, “is that it has been only two years and seven months since Oct. 1, 1958, when the National Aeronautics and Space Administration was set up ... and two

and a quarter years since the Mercury capsule contract was signed by our company.”

NASA had notified McDonnell Aircraft on Jan. 12, 1959, that it had been selected as the prime contractor for Project Mercury, the goal of which was to place a human in orbit around the earth and return that person safely. McDonnell signed the contracts in February 1959.

Shepard, a U.S. Navy commander, was well-acquainted with McDonnell Aircraft and its products, having flown the F2H-3 Banshee during test and development of in-flight refueling systems and carrier suitability trials. Shepard also had tested McDonnell’s F3H Demon, as well as Douglas Aircraft Co.’s F4D Skyray and F5D Skylancer.

Even though Shepard was a top military test pilot, he was not just testing a new aircraft when he climbed into the Mercury capsule that morning at Cape Canaveral. The hopes of the United States to effectively enter the space race rested on Shepard—and the McDonnell-built capsule named for the seven Project Mercury astronauts.

The Mercury spacecraft was designed so it could be operated automatically, manually or by ground control. Just over two and a half minutes into the flight, Shepard took manual control of Freedom 7. With the voice of a veteran test pilot, Shepard radioed ground controllers: “Roger. Reading you loud and clear ... cabin pressure is holding at 5.5 ... fuel is ‘go’ 2.5G ... switching to manual control.”

Shepard, in succession, switched to manual control of the spacecraft’s pitch, then roll and then yaw while in zero gravity. He then looked out his periscope at the Atlantic Ocean. “What a beautiful view!” he exclaimed.

“All Americans rejoice in the successful space flight of Astronaut Shepard. This is an historic milestone in our own exploration into space,” President John F. Kennedy said following the flight.

Astronaut John Glenn would soon orbit the earth in his Mercury capsule.

The McDonnell team, working closely with NASA, helped define space exploration for the next 50 years—much of which would be accomplished by Boeing and its heritage companies.

This year not only commemorates the 50th anniversary of Shepard’s flight but also will mark the retirement of the space shuttle. The shuttles followed the Mercury, Gemini and Apollo programs that sent astronauts not only into orbit but to the moon. Boeing, McDonnell, Douglas, North American Aviation and Rockwell played major roles in the development of those programs, as well as the International Space Station.

Boeing continues to explore new frontiers in space. The company’s engineers are designing a new spacecraft to transport people to low Earth orbit destinations such as the International Space Station. Boeing also has plans to work on a new heavy-lift rocket that will be used to explore deep space. ■

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