

Pioneers in Space

From First Flight—to First Step!

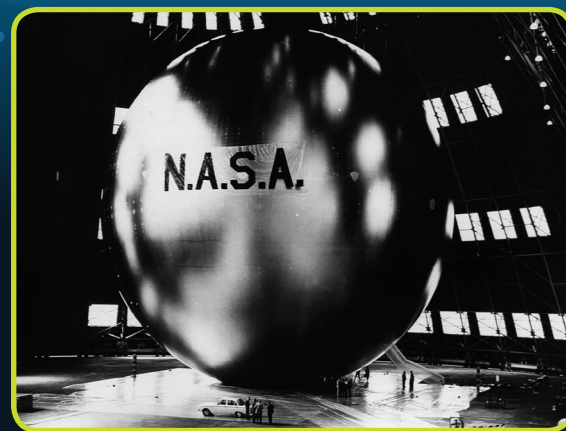
On October 4, 1957, the Soviet Union did something no one had ever done before: They shot *Sputnik 1* into space! (*Sputnik* is the Russian word for “satellite.”) It orbited (flew around) the Earth for three weeks.

The United States rushed to create a new government agency: NASA (the National Aeronautics and Space Administration). The Space Race had begun!

On May 25, 1961, President John F. Kennedy said: “I believe that this nation should commit itself to achieving the goal, before the decade is out, of landing a man on the Moon and returning him safely to the Earth.”

And we did! Fifty years ago, on July 20, 1969, astronaut Neil Armstrong was the first person to step foot on the Moon. It was only 66 years after Wilbur and Orville Wright made history by making the world’s first powered, manned flight in an airplane at Kill Devil Hills on December 17, 1903.

Many North Carolina people—and places—have been a part of that history. Here are just a few:



This was the world’s first communication satellite—a satellite-balloon hybrid called *Echo*, launched in 1960. (To understand how big it is, check out the car and people at the bottom of it!) *Echo* underwent prelaunch testing here in North Carolina in Weeksville.



Clayton native Samuel Beddingfield (*above, left*)—a graduate of NC State—joined NASA as an engineer in 1959. He was one of only 33 agency employees assigned to Cape Canaveral, Florida, at that time. During the Project Mercury program, Beddingfield oversaw mechanical and pyrotechnic operations, including the systems for the landing parachutes and capsule hatch. Beddingfield is seen here with astronaut John Glenn and the *Friendship 7* capsule before launch. Glenn was the first to orbit the Earth, in 1962.

From 1960 to 1975, 62 astronauts trained for space travel at North Carolina’s Morehead Planetarium in Chapel Hill—including 11 of the 12 men who walked on the Moon’s surface. Here, astronauts Edward White (*left*) and James McDivitt train for their Gemini flight at Morehead in May 1965.



Did you know that the first astronauts were animals? On January 31, 1961, a young chimpanzee named Ham made a 16-minute, 39-second suborbital flight that flew 157 miles above the Earth. Here, Commander Ralph A. Brackett, a native of Gastonia, welcomes Ham aboard the *USS Donner* after his successful recovery. In 1963 “Ham, the Astrochimp” was transferred to the National Zoo in Washington, DC. In 1980 he retired to the North Carolina Zoo, where he lived out the rest of his life surrounded by fellow chimpanzees.



Charlotte-born Charles M. Duke Jr. was a member of the astronaut support crew for Apollo 10. He also served as CAPCOM—the main point of contact between the spacecraft crew and NASA mission control—for Apollo 11. *Above*: In April 1972, Duke piloted the lunar module for the Apollo 16 flight. He remains the youngest man to have walked on the Moon.



In the early days of spaceflight, *people*—not devices—performed the calculations necessary for space travel. Many of these human “calculators” or “computers” were women, including some from North Carolina. Their tools of the trade: slide rules, spring-loaded calculating machines, pencils, and paper. During the Apollo years, Dr. Christine Darden, born in Monroe—shown here in 1974—wrote computer programs that could run calculations related to spacecraft reentry.



Image courtesy of Christine Darden.



Early space capsules splashed down into the ocean on return from flight. Aviators at Marine Corps Air Station–New River in North Carolina helped develop the early recovery procedures. Here, George Cox pulls astronaut Alan Shepard into the recovery helicopter after the successful flight of Mercury-Redstone 3 on May 5, 1961. A Florida native, Cox served three tours in Vietnam, then retired from the service and earned a degree in education from East Carolina University. He taught math at Beaufort Middle School until 2001 and is a long-time resident of Newport.

Beaufort native Michael Smith watched in awe as Neil Armstrong took man’s first steps on the Moon on July 20, 1969. Right then and there, he decided to become an astronaut. Sixteen years later—on January 28, 1986—he piloted the space shuttle *Challenger* into American memory. (Tragically, the *Challenger* exploded, killing all on board.) From simple farm boy to courageous explorer of a new frontier—his short but remarkable life served, and continues to serve, as an inspiration to anyone with a dream.

