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Mercury-Redstone

After the Russians launched Sputnik and the Americans launched Explorer I, the space race was on. But Sputnik and Explorer were only machines in space. Next the great superpowers rushed to beat each other in a race to put a human in space.

As a result, NASA asked von Braun's group in Huntsville to modify and test an Army Redstone missile that the space Agency could use to launch a manned Mercury capsule.

Between April 1959 and July 1960, von Braun's engineers in Huntsville ground-tested the Redstone's propulsion systems more than 200 times. Unfortunately, their first attempt to launch an unmanned Redstone was a complete failure.

Already under pressure from newspapers and politicians reminding them of the progress the Russians were making, von Braun and his engineers went to work on the technical problems that had beset the launch. They successfully launched their first unmanned Mercury-Redstone on December 19, 1960, and then launched another on January 31, 1961.

Next, the scientists placed a 37-pound chimpanzee named "Ham" in a Mercury capsule and launched him on a Redstone. Ham returned in good health but the Redstone engine had unexpectedly run with the throttle wide-open, a situation that caused von Braun to call for an additional unmanned Redstone launch on March 24, 1961. Finally, von Braun's Redstone was ready to launch America's first astronaut, Alan Shepard, into space.

Unfortunately, another event stole some of Redstone's thunder. On April 12,1961, the Russians announced that Maj. Yuri Gagarin had successfully orbited the Earth for 108 minutes in a 5-ton spacecraft. Gagarin became the first human to make a successful orbital flight through space.

The chance to launch Shepard on a suborbital flight came within weeks of Gagarin's flight. On May 5, a Redstone rocket supplied by the Marshall Center lifted off at Cape Canaveral, Florida, carrying Shepard in his Mercury spacecraft, nicknamed "Freedom 7." Shepard rose to an altitude of almost 116 miles and covered a range of more than 300 miles on a suborbital flight that lasted less than 15 minutes.

Marshall Space Flight Center Director Dr. Wernher von Braun addresses a jubilant crowd in front of the Madison County Courthouse celebrating the successful flight of astronaut Alan Shepard, the first American in space, on May 5, 1961.

Von Braun had been conciliatory toward the Russians following the Gagarin flight. But his tone changed after Shepard's flight. He predicted that the Americans would go even farther in the space race "eventually landing a man on the moon." The people of Huntsville "will share in these achievements," he told *The Huntsville Times.*