

Virgil Ivan "Gus" Grissom

"Gus" Grissom was born in Mitchell, IN, on 3 April 1926, the second child of Dennis and Cecile Grissom. His father was a Baltimore and Ohio Railroad signalman, and his mother a homemaker. His older sister died shortly before his birth, and he had three younger siblings, Wilma, Norman, and Lowell. He was a Boy Scout and earned his Star Scout rank.

Grissom attended Mitchell High School, where he met Betty Lavonne Moore through their extracurricular activities. His Boy Scout Troop carried the American flag at school basketball games, while she played the drum in the high school band. His first jobs were delivering the *Indianapolis Star* in the morning, and the *Bedford Times* in the evening. He also worked at a local meat market, a service station, and a clothing store. He spent time at a local airport in Bedford, IN, where he became interested in flying. A local attorney who owned a small plane would take him on flights for \$1 and taught him the basics.

World War II: World War II broke out while Grissom was still in high school, and he was eager to enlist upon graduation. He became an aviation cadet in the U.S. Army Air Forces, and completed an entrance exam in November 1943. Grissom graduated from high school in 1944, and was inducted into the U.S. Army on 8 August 1944. He was sent to Sheppard Field in Wichita Falls, TX, for basic flight training, after which he went to Brooks Field in San Antonio, TX, and then, in January 1945, was assigned to Boca Raton Army Airfield, FL.

After the war ended, Grissom married Betty Moore on 6 July 1945 while on leave and was discharged in November 1945. He took a job at Carpenter Body Works, a local bus manufacturing business; however, he was determined to attend college. Using the G.I. Bill, Grissom enrolled at Purdue University in 1946 and graduated with a Bachelor of Science degree in Mechanical Engineering in 1950.

Korean War: After graduation, Grissom enlisted in the U.S.A.F. at Randolph AFB, TX. In March 1951, he received his pilot wings and a commission as a second lieutenant and an assignment to the 75th Fighter Interceptor Squadron at Presque Isle AFB, ME. With the Korean War, Grissom was dispatched to Korea in February 1952. There he flew 100 F-86 combat missions from Kimpo AB. On multiple occasions, he broke up Korean air raids as they would often flee at the first sign of superior American aircraft. On 11 March 1952, Grissom was promoted to first lieutenant and cited for his superlative airmanship.

After Korea, Grissom was stationed at Bryan AFB, TX as a flight instructor. During a training exercise, the trainee caused a flap to break off, sending the plane spinning out of control. Grissom climbed from the rear seat of the small craft, took over the controls, and safely landed. In August 1955, Grissom was reassigned to the U.S.A.F. Institute of Technology. After completing the year-long course, he earned a bachelor's degree in Aeromechanics. In October 1956, he entered USAF Test Pilot School at Edwards AFB, CA, and returned to Wright-Patterson AFB in May 1957 as a test pilot.

In 1958, Grissom received a message instructing him to report to Washington, D.C. wearing civilian clothes. The "Top Secret" message ordered him not to discuss its contents with anyone. He was one of 110 military test pilots who had earned an invitation to learn about the space program and Project Mercury. Grissom was intrigued, but knew that competition for the final spots would be fierce. On 13 April 1959, Grissom received notification of his selection as one of the seven Project Mercury astronauts.

Project Mercury: On 21 July 1961, Grissom was pilot of the second Project Mercury flight, which he named *Liberty Bell 7*. This sub-orbital flight lasted 15 minutes and 37 seconds. After splashdown, emergency explosive bolts unexpectedly fired and blew the hatch off, causing water to flood into the spacecraft. Quickly exiting through the open hatch, Grissom nearly drowned as water began filling his spacesuit. A recovery helicopter tried to retrieve the spacecraft, but flooded spacecraft was too heavy, and it ultimately sank.

Grissom stated he had done nothing to cause the hatch to blow. Robert F. Thompson, Director of Mercury Operations, spoke with Grissom upon his arrival on the aircraft carrier. Grissom explained that he had gotten ahead in the mission timeline and had removed the detonator cap, and also pulled the safety pin. Once the pin was removed, the trigger was no longer held in place and could have inadvertently fired as a result of ocean wave action, bobbing as a result of helicopter rotor wash, or other activity. NASA officials concluded Grissom had not necessarily initiated the firing of the explosive hatch, which would have required pressing a plunger that required five pounds of force to depress. Initiating the explosive egress system called for pushing, or hitting, a metal trigger with the hand, which would have left an unavoidably large obvious bruise, but Grissom was found not to have any of the telltale hand bruising. Still, controversy remained, and fellow Mercury astronaut Wally Schirra, at the end of his 3 October 1962, flight, remained inside his spacecraft until it was safely aboard the recovery ship, and made a point of deliberately blowing the hatch to get out, bruising his hand.

Project Gemini: In early 1964, Alan Shepard was grounded after being diagnosed with Ménière's disease and Grissom was designated command pilot for Gemini 3, the first manned Project Gemini flight, which flew on 23 March 1965. This mission made him the first NASA astronaut to fly into space twice. This flight made three revolutions of the Earth and lasted for 4 hours, 52 minutes and 31 seconds.

In a joking nod to the sinking of his Mercury craft, Grissom named the first Gemini spacecraft *Molly Brown* (after the popular Broadway show *The Unsinkable Molly Brown*); NASA publicity officials were unhappy with this name. When Grissom and his Pilot John Young were ordered to come up with a new one, they offered *Titanic*. NASA executives gave in and allowed the name *Molly Brown*, but did not use it in any official references. Subsequently, and much to the agency's chagrin, on launch CAPCOM Gordon Cooper gave Gemini 3 its sendoff by telling Grissom and Young, "You're on your way, *Molly Brown*!" and ground controllers used this name throughout the flight.

After the safe return of Gemini 3, NASA announced new spacecraft would not be named. Hence, Gemini 4 was not named *American Eagle* as its crew had planned. The naming of spacecraft resumed in 1967 after managers found the Apollo flights needed a name for each of two flight elements, the Command Module (CSM) and Lunar Module. Lobbying by the astronauts and senior NASA administrators also had an effect. Apollo 9 had the call signs *Gumdrop* for the Command Module and *Spider* for the Lunar Module. However, Wally Schirra had been prevented from naming his Apollo 7 spacecraft *Phoenix* in honor of Grissom's Apollo 1 crew since it was believed the average taxpayer would not understand the "fire" metaphor as intended.

Apollo Program: Grissom was backup command pilot for Gemini 6A when he shifted to

the Apollo program and was assigned as commander of the first manned mission, with Senior Pilot Ed White, who had flown in space on the Gemini 4 mission when he became the first American to make a spacewalk, and Pilot Roger B. Chaffee. The three men were granted permission to refer to their flight as "Apollo 1" on their mission insignia patch.

Death: Before its planned 21 February 1967, launch, the Command Module interior caught fire and burned on 27 January during a pre-launch test on Launch Pad 34 at Cape Kennedy. All three men were asphyxiated. The fire's ignition source was never determined, but their deaths were attributed to a wide range of lethal hazards in the early design and conditions of the test, including: a pressurized 100% oxygen prelaunch atmosphere, many wiring and plumbing flaws, flammable materials used in the cockpit and in the astronauts' flight suits, and an inward-opening hatch which could not be opened quickly in an emergency, and could not be opened at all with full internal pressure.

Grissom had attained the rank of lieutenant colonel at the time of his death, and had logged a total of 4,600 hours flying time, including 3,500 hours in jet airplanes. He is buried in the Arlington National Cemetery, directly beside Roger Chaffee.

Awards and Honors: Distinguished Flying Cross and Air Medal with one oak leaf cluster.

Masonic History: Brother Grissom was a member of Mitchell Lodge #228 in Mitchell, IN and a National Sojourner.