Colonel Gordon Cooper, U.S. Air Force

Leroy Gordon "Gordo" Cooper Jr. was an American aerospace engineer, U.S. Air Force pilot, test pilot, and one of the seven original astronauts in Project Mercury, the first manned space program of the U.S. Cooper piloted the longest and final Mercury spaceflight in 1963. He was the first American to sleep in space during that 34-hour mission and was the last American to be launched alone to conduct an entirely solo orbital mission. In 1965, Cooper flew as Command Pilot of Gemini 5.

Early life and education: Cooper was born on 6 March 1927 in Shawnee, OK to Leroy Gordon Cooper Sr. (Colonel, USAF, Ret.) and Hattie Lee Cooper. He was active in the Boy Scouts where he achieved its second highest rank, Life Scout. Cooper attended Jefferson Elementary School and Shawnee High School and was involved in football and track. He moved to Murray, KY about two months before graduating with his class in 1945 when his father, Leroy Cooper Sr., a World War I veteran, was called back into service. He graduated from Murray High School in 1945. Cooper married his first wife Trudy B. Olson (1927–1994) in 1947. She was a Seattle native and flight instructor where he was training. Together, they had two daughters: Camala and Janita Lee. The couple divorced in 1971. Cooper married Suzan Taylor in 1972. Together, they had two daughters: Elizabeth and Colleen. The couple remained married until his death in 2004.

After he learned that the Army and Navy flying schools were not taking any candidates the year he graduated from high school, he decided to enlist in the Marine Corps. Cooper left for M.C.R.D. Parris Island as soon as he graduated. However, World War II had ended before he could get into combat. He was assigned then to the Naval Academy Preparatory School and was an alternate for an appointment to Annapolis, MD. The man who was the primary appointee made the grade so Cooper was reassigned in the Marines on guard duty in Washington, D.C. He was serving with the Presidential Honor Guard in Washington when he was released from duty along with other Marine reservists.

Following his discharge from the U.S.M.C., he went to Hawaii to live with his parents. His father was assigned to Hickam Field at the time. He started attending the University of Hawaii, and there he met his first wife, the former Trudy B. Olson of Seattle, WA. She was quite active in flying, the only Mercury wife to have a pilot's license. They were married on August 29, 1947 in Honolulu when Gordon was 20. They lived there for two more years while he continued his university studies. Together, they had two daughters: Camala and Janita Lee. The couple divorced in 1971. Cooper married Suzan Taylor in 1972. They had two daughters: Elizabeth and Colleen, and remained married until his death in 2004.

Military Service: Cooper transferred his commission to the U.S.A.F. in 1949, was placed on active duty, and received flight training at Perrin AFB, TX and Williams AFB, AZ. Cooper's first flight assignment came in 1950 at Landstuhl AB, Germany, where he flew F-84s and F-86s for four years. He later became flight commander of the 525th Fighter Bomber Squadron. While in Germany, he also attended classed by the University of Maryland. Returning to the U.S. in 1954, he studied for two years at the Air Force Institute of Technology, and in 1956 completed his B.S. Degree in Aerospace Engineering. Cooper was then assigned to the U.S.A.F. Experimental Flight Test School (Class 56D) at Edwards AFB, CA, and after graduation was posted to the Flight Test Engineering Division at Edwards,

where he served as a test pilot and project manager testing the F-102A and F-106B. Cooper logged more than 7,000 hours of flight time, with 4,000 hours in jet aircraft.

Project Mercury: While at Edwards, Cooper read about a contract being awarded to McDonnell Aircraft to build a space capsule. Shortly after, he was called to Washington, D.C., for a NASA briefing on Project Mercury and the part astronauts would play in it. Cooper was selected from among 109 other pilots and was accepted as the youngest of the first seven American astronauts.

Each of the Mercury astronauts was assigned to a different portion of the project along with other special assignments. Cooper specialized in the Redstone rocket. He also chaired the Emergency Egress Committee, responsible for working out emergency launch pad procedures for escape. Cooper served as capsule communicator for Alan Shepard's first sub-orbital spaceflight and Scott Carpenter's flight. He was backup pilot for Wally Schirra in Mercury-Atlas 8.

Cooper was launched into space on 15 May 1963, aboard the Mercury-Atlas 9 spacecraft, the last Mercury mission. He orbited the Earth 22 times and logged more time in space than all five previous Mercury astronauts combined—34 hours and 20 minutes. Like all Mercury flights, his was designed for fully automatic control, a controversial engineering decision which reduced the role of an astronaut to that of a passenger. Toward the end of his flight, there were mission-threatening technical problems and the capsule had a power failure. Carbon dioxide levels rose, and the cabin temperature jumped to over 100°F. Cooper turned to his understanding of star patterns, took manual control of the capsule and successfully estimated the correct pitch for re-entry into the atmosphere. Cooper's cool-headed performance and piloting skills led to a basic rethinking of design philosophy for later space missions.

Project Gemini: On 21 August 1965, Cooper flew as Command Pilot of Gemini 5 on an 8-day, 120-orbit mission with Pete Conrad. They established a new space endurance record—3,312,993 miles in 190 hours and 56 minutes—showing that astronauts could survive in space long enough to go from the Earth to the Moon and back. Cooper was the first astronaut to make a second orbital flight.

Apollo program: Cooper was backup Commander for the May 1969 Apollo 10 mission. He hoped this placed him in position as Commander of Apollo 13, according to the usual crew rotation procedure established by the Flight Crew Operations Director Deke Slayton. However, by May 1969, when Slayton's assistant, Alan Shepard, was returned to flight status, Slayton replaced Cooper with Shepard as Commander of this crew. Loss of this command meant he would not fly until one of the later flights, if ever.

Retirement: Disappointed by the reduced chances of commanding a Moon landing flight, Cooper retired from NASA and the Air Force on July 31, 1970, as a Colonel, having flown 222 hours in space. Cooper received an Honorary D.Sc. from Oklahoma State University in 1967. His autobiography, *Leap of Faith*, recounted his experiences with the Air Force and NASA, along with his efforts to expose an alleged UFO conspiracy theory. Cooper was also a major contributor to the book *In the Shadow of the Moon*, which offered Cooper's final published thoughts on his life and career.

After leaving NASA, Cooper served on several corporate boards and as technical consultant

for more than a dozen companies in fields ranging from high performance boat design to energy, construction, and aircraft design. During the 1970s, he worked for The Walt Disney Company as a Vice President of research and development for Epcot.

Death: Cooper developed Parkinson's disease and died at age 77 from heart failure at his home in Ventura, CA, on 4 October 2004. His death occurred on the 47th anniversary of the Sputnik 1 launch and the day that SpaceShipOne made its second official qualifying flight. In 2007, Cooper's ashes were launched from NM on a sub-orbital memorial flight by a privately owned UP Aerospace SpaceLoft XL sounding rocket. Although the capsule carrying the ashes fell back toward Earth as planned, it was lost in mountainous landscape; however, the capsule was found and the ashes were returned to the families. The ashes were then launched on the *Explorers* orbital mission in 2008, but were again lost when the Falcon 1 rocket failed two minutes into the flight. Finally, in 2012, Cooper's ashes were on the SpaceX flight bound for the International Space Station.

Military Awards and Honors: Air Force Master Astronaut Badge, Legion of Merit, Distinguished Flying Cross with cluster, NASA Distinguished Service Medal, NASA Exceptional Service Medal, American Campaign Medal, World War II Victory Medal, Army Occupation Medal with Germany clasp, National Defense Service Medal with one star, Air Force Longevity Service Award with four clusters, Collier Trophy, the Harmon Trophy, the DeMolay Legion of Honor, the John F. Kennedy Trophy, the Iven C. Kincheloe Award, the Air Force Association Trophy, the John J. Montgomery Award, the General Thomas D. White Trophy, the University of Hawaii Regents Medal, the Columbus Medal, and the Silver Antelope Award. The Gordon Cooper Technology Center in Shawnee, Oklahoma is named after Cooper. Cooper was inducted into the International Space Hall of Fame in 1981, and into the U.S. Astronaut Hall of Fame on May 11, 1990.

Masonic History: He was a DeMolay, Master Mason (member of Carbondale Lodge # 82 in Carbondale, Colorado), York Rite Mason, honorary 33° Degree by the Scottish Rite, Shriner, and a National Sojourner.