# 2

# An astronaut named Gus

Gus Grissom never seemed to fit the archetypal American hero mold. A stocky and somewhat stubby man who stood at 5 feet 7 inches, he looked more like the neighborhood motor mechanic or television repairman than an astronaut. But he excelled as an Air Force test pilot and as a Mercury astronaut, becoming an integral part of NASA's drive to the Moon. While he may not have been the most sociable or loquacious member of the astronaut group, he was well respected by them. "Gus was a very bright young man who didn't have a lot to say most of the time," fellow astronaut Scott Carpenter told the author in 2013, "but when he said something it was of great value and always worth listening to."<sup>1</sup>

### A MAN OF FEW WORDS

The late John A. ('Shorty') Powers, former NASA Public Affairs Officer would have agreed with Carpenter's characterization. "Gus is the quiet one," he once observed. "He doesn't talk much, but when he does speak, the words come out in short bursts – like a fighter pilot's measured use of limited ammunition. When he fires off a burst, one had better be listening carefully, because he's only going to say it once and there won't be any surplus words."<sup>2</sup>

Fellow Mercury astronaut Wally Schirra had a good grasp on the personality of Gus Grissom, saying he brought a vast amount of knowledge and experience into the space program, and his opinions as an extremely capable and competent test pilot and engineer were highly valued and respected. "Gus did not consider himself as the hero type, nor was he impressed with personal prestige. He was a quiet, unassuming, and completely unpretentious person, and his reasons for wanting to participate in this venture were really quite basic. Should the officials at NASA share his belief that he was one of the better qualified people for this new mission, then he was proud and happy to help out. Although Gus was the shortest of any of us chosen in that first group of astronauts, his physical stature did not in any way hinder or inhibit his

enormous competitive spirit. He possessed a strong desire to succeed in everything he undertook, and this unbeatable desire to win was matched only by his determination and perseverance to see a job through to its satisfactory conclusion."<sup>3</sup>

The family name Grissom actually evolved from England and the surname Gresham. According to genealogists the Greshams came to America from Surrey, England, and later chose to distinguish themselves from the loyalists by changing their name to Grissom. The first Gresham to immigrate to America was John Gresham, who, with his wife and son, settled in Arundel County, Maryland in the mid-1600s. For Gus Grissom it was a similarly long and difficult trek from Mitchell, Indiana to flying into space, but his tenacity and a driving urge to go beyond any limitations imposed by others was always an integral part of his character.

Virgil Ivan Grissom was born at 8:00 a.m. on 3 April 1926 in the small mid-western city of Mitchell in southern Indiana, the second child of Dennis and Cecile King Grissom. In a significant and somewhat connective sense, that same day American rocket scientist Robert H. Goddard conducted a second successful launch of a liquid-fueled rocket at his Aunt Effie's farm in Auburn, Massachusetts.

Grissom's father was a signalman for the Baltimore and Ohio Railroad, while his mother was a homemaker. An older sister had died in infancy before his birth, and he was followed in turn by three younger siblings, Wilma, Norman and Lowell. The family lived in a simple, white-frame house at 715 Baker Street (later to be renamed Grissom Street). He took his early education at Mitchell's Riley Elementary School, a short walk from his house, and while he possessed an IQ said to be around 145 he was only an average student and had no real plans for the future. He did, however, become



The Grissom home, circa 1968 (Photo: Carl L. Chappell)

moderately interested in flying airplanes. "I guess it was a case of drifting and not knowing what I wanted to make of myself," he said. "I suppose I built my share of model aeroplanes, but I can't remember that I was a flying fanatic."<sup>4</sup> As a child he attended the local Church of Christ where he remained a lifelong member and later joined Beaver Patrol with the local Boy Scout Troop 46, developing his enduring love of the outdoors.

Every morning, in order to have a little pocket money for his own activities, young Gus would make his way to the downtown bus station and collect that day's edition of the *Indianapolis Star* newspaper for his delivery route. In the evenings he would also pick up and deliver the local newspaper, the *Bedford Times*.

In 1940 Grissom was enrolled at Mitchell High School, where he soon found to his chagrin that his short stature precluded him from playing varsity sports. Instead he became a fierce competitor in the school's swimming pool. While he could not play basketball for his school, he took immense pride in being a member of the Boy Scout Honor Guard, which presented the American flag before any games. While engaged in this activity during one game, he caught the eye of fellow student Betty Lavonne Moore, who played the drum in the school band. When he came and sat with her during the half-time break, Betty realized to her delight that the attraction was mutual. "I met Betty Moore when she entered Mitchell High School as a freshman," Grissom later admitted, "and that was it – period, exclamation point!"<sup>5</sup>

#### JOINING THE AIR FORCE

While at Mitchell High School, Grissom completed a year of pre-cadet training in the U.S. Army Air Corps, which he found most enjoyable. By this time his interest in aviation had taken a deeper hold, and he took on summer casual work in order to pay for brief flights in barnstorming airplanes at nearby Bedford airport, Indiana. A local attorney who owned a small aircraft would often take him on flights for a one dollar fee and taught him the basics of flying.

Grissom picked up the nickname 'Gus' during a card game when someone saw the abbreviated name on an upside-down score card and mistakenly translated it to "Gus." Before long, Grissom's friends also began calling him Gus, and it stuck. But he will always be known as Virgil to the people in his hometown in Mitchell.

World War II broke out while Grissom was still in high school, and he was eager to enlist upon graduation. On 8 August 1944 – Betty's seventeenth birthday – he was inducted into the Army Air Forces at Fort Benjamin Harrison, with the expressed desire of becoming a pilot. He was subsequently ordered to Sheppard Air Force Base (AFB) in Wichita Falls, Texas, for five weeks of basic training. Then he was assigned to Brooks Field in San Antonio, where, to his extreme disappointment, he spent his days behind a desk as a lowly clerk.

Grissom took some short leave and on 6 July 1945, while still in his teens, he and Betty were married in the First Baptist Church in Mitchell. He then returned to the Air Force while Betty remained in Mitchell, working at the Reliance Manufacturing Company making shirts for the Navy. Soon after, Japan capitulated and the Second



Newlyweds Gus and Betty Grissom. (Photo: World Book Science Service)

World War came to an end. Dispirited with the lack of flight training within the Air Force, Grissom left the service in November 1945 with the rank of corporal and took up a job fitting out school buses in Mitchell's Carpenter Body Works, but it was the kind of mundane and repetitive work he hated. Deciding to become a mechanical engineering student, he enrolled at Purdue University, Indiana under the G.I. Bill in September 1946. He and Betty took a small apartment near the campus, and while Betty worked as a long-distance telephone operator to help pay the bills, he found some after-class work as a short-order cook "frying hamburgers for 30 hours a week."<sup>6</sup> Fortunately he found his studies absorbing and to his liking, and he graduated with his bachelor of science degree in February 1950.

He had contemplated entering private industry at this stage of his life, but when the Korean war broke out Grissom decided to re-enlist in the Air Force and was assigned to Randolph AFB, Texas as an aviation cadet. On 16 May 1950, he and Betty welcomed their son Scott into the world. In September Grissom graduated from basic flight training and was sent to Williams AFB in Phoenix, Arizona for more advanced training. He received his wings and was commissioned a 2nd lieutenant in March 1951. In December of that year he was shipped off to the conflict in Korea to fly North American F-86 Sabre jets with the 334th Fighter Interceptor Squadron.



2nd Lieutenant Grissom after receiving his wings in March 1951. (Photo: Carl L. Chappell)

Six months after his arrival in South Korea Grissom had reached the 100-mission mark and was promoted to 1st lieutenant. He was eager to fly another 25 missions, but his request for an extension was refused and he returned home having earned a Distinguished Flying Cross and the Air Medal with cluster. After a period in Flight Instructor School he was designated as a flight instructor at Bryan AFB, Texas. On 30 December 1954 he and Betty completed their family with the birth of second son, Mark. The following year Grissom was assigned a place at the Air Force Institute of Technology at Wright-Patterson AFB, Ohio, to study aeronautical engineering. He then won an assignment to the prestigious and highly prized Test Pilot School at Edwards AFB, California, checking out advanced-design fighter airplanes.

## THE MAKING OF AN ASTRONAUT

Following his graduation from Test Pilot School, Grissom, now bearing the rank of captain, returned to Wright-Patterson AFB in May 1957 as a test pilot assigned to the fighter branch.

#### 60 An astronaut named Gus



An exultant Grissom after completing his 100th combat mission during the Korean war. (Photo: World Book Science Service)

One day in 1958, an adjutant handed Capt. Grissom an official teletype message marked "Top Secret," instructing him to report to an address in Washington, D.C., and to wear civilian clothing. There were no other details, but he knew there was a challenge in there somewhere. As it turned out, he was one of 110 carefully selected candidates who had met the general qualifications for astronaut training. They would undergo initial briefings and medical screening in the quest to find America's first astronauts for NASA.

After attending the briefing, in which the attendees were given information about Project Mercury, they were offered a crucial choice. If they decided to volunteer for the chance to become what NASA referred to as an "astronaut", they would move onto the next phase of the selection process. If not, then they could return without prejudice to their present service. Some turned down the chance to be involved



Gus Grissom at the U.S. Air Force Test Pilot School, California. (Photo: U.S. Air Force)

in this new venture. There were too many unknowns and they preferred to continue with the work they were already involved in. Grissom now had to think seriously about his own future.

"It was a big decision for me to make. I figured that I had one of the best jobs in the Air Force, and I was working with fine people. I was stationed at the flight test center at Wright-Patterson, and I was flying a wide range of airplanes and giving them a lot of different tests. It was a job that I thoroughly enjoyed. A lot of people, including me, thought the [Mercury] project sounded a little too much like a stunt than a serious research program. It looked, from a distance, as if the man they were searching for was only going to be a passenger. I didn't want to be just that. I liked flying too much. The more I learned about Project Mercury, however, the more I felt I might be able to help and I figured that I had enough flying experience to handle myself on any kind of shoot-the-chute they wanted to put me on. In fact, I knew darn well I could."<sup>7</sup>

#### 62 An astronaut named Gus

Afterwards, when he told Betty about Project Mercury and the chance that was being presented to him, she said that he would have her full support in whatever he decided to do. After a lot of thought, Grissom decided to volunteer, following which he was subjected to intense physical and psychological testing through early 1959. At one stage he came close to being disqualified when doctors discovered that he suffered from hay fever, and he had to convince them that it would not bother him in space. He argued that he would be sealed in a pressurized spacecraft, with no pollen present. It must have been a close call, as there was a tremendous emphasis on physical fitness. With his usual determination he won his case.

On Thursday evening, 2 April 1959, Gus Grissom received the phone call that would change his life forever. On the other end of the line was NASA's assistant manager for the project, Charles Donlan, who officially informed him that he had been selected as one of the space agency's seven Mercury astronauts.

"After I had made the grade, I would lie in bed once in a while at night and think of the capsule and the booster and ask myself, 'Now what in hell do you want to get up on that thing for?' I wondered about this especially when I thought about Betty and the two boys. But I knew the answer: We all like to be respected in our fields. I happened to be a career officer in the military – and, I think, a deeply patriotic one. If my country decided that I was one of the better qualified people for this new mission, then I was proud and happy to help out. I guess there was also a spirit of pioneering and adventure involved in the decision. As I told a friend of mine once who asked me why I joined Mercury, I think if I had been alive 150 years ago I might have wanted to go out and help open up the West."<sup>8</sup>

Following the announcement of the names of the seven Mercury astronauts in Washington on 9 April 1959, they became instant celebrities – something that caught them (and NASA) completely unawares. "It happened without us doing a damn thing," Deke Slayton later mused. "We show up for a news conference … and now we're the bravest men in the country. Talk about crazy!"<sup>9</sup>

#### SOME PERSONAL REFLECTIONS

An air of mystique quickly surrounded the Mercury astronauts. People eagerly sought out and consumed information about them and their families in newspapers, especially through *Life* magazine, which was awarded sole rights to their stories under a mutually beneficial deal thrashed out between the astronauts' tax attorney Leo D'Orsey and the magazine.

Perhaps the most enigmatic of the seven was Gus Grissom, who tried to avoid the press and public speaking whenever he could, although he abided this as part of his duties as a NASA astronaut. He was more at home in the cockpit of a fighter jet or poking around inside a space capsule than he was in revealing details of his private life. A man of few words, he was quickly given the rather unfair sobriquet of "Gruff Gus." He didn't care; he had a job to do, and he disliked distractions.

One of the lesser-liked duties for most of the Mercury astronauts – particularly Grissom – involved giving speeches. But on one occasion he unwittingly created a

humorous, oft-repeated story that would always follow him around. It came about when all seven astronauts were on a tour of the Convair plant in San Diego to see Atlas rockets under construction. At one stage of their visit the astronauts were seated on a podium outside the plant, in front of 18,000 cheering employees. A Convair executive made a short speech, then turned and asked if an astronaut would care to respond. Grissom somehow found himself propelled forward to the microphone by his fellow astronauts, but he had been caught off-guard and was unprepared. As the tumultuous applause died down he cleared his throat and suddenly developed a dose of stage fright. He hesitated, raised his hands for quiet and blurted out, "Well...do good work!" He then rejoined the other grinning astronauts. Momentarily, the crowd was silent, and then they burst into wild clapping and cheering. It was as if he'd just recited the Gettysburg address, and the workers loved him. "Do good work!" – it now became their mantra and mission statement. Gus's stammering slogan was stitched onto a huge banner, which was hung above the plant's work bay to serve as an inspiration to all.

Another side of Gus Grissom was recalled by Frank Moncrief from Virginia Beach, Virginia, who shared a particularly vivid memory of the astronaut during a training session.



A poster inspired by Gus Grissom's three words to the Convair employees. (Photo: NASA)

#### 64 An astronaut named Gus

"The original seven astronauts were sent to Little Creek Naval Amphibious Base so the Navy frogmen could give them scuba lessons. It was believed that weightlessness in water was similar to weightlessness in space. I was honored to be one of the frogmen picked to be an instructor.

"These guys were the sharpest of the sharp. John Glenn asked me how the Aqua-Lung valve worked, and I explained in detail the valve's functions. That did not satisfy him. I had to take the valve apart, explaining every screw, every spring and every diaphragm. They were that thorough. For graduation, the astronauts entered the pool with a full tank of air and were told to swim around without coming up for anything. We instructors began harassing them, pulling off a face mask or fins, pulling out mouthpieces, turning off their air. Then we brought them to the surface and congratulated them. I was proud to have been a part of that. But it wasn't over.

"A couple of weeks later, we got word that the astronauts were inviting the instructors to ride in a jet. When we arrived at Langley, the astronauts greeted us like old buddies. I was given Deke Slayton's helmet and Walter Schirra's flight suit to wear. My pilot was Gus Grissom, and we boarded a T-33 jet trainer. He told me to put my left hand on my left knee and my right hand on my right knee and not to touch anything. I did as I was told.

"Gus started to describe everything: 'I am going to start my rollout; when the aircraft gets to 180 knots I will lift this tub off the ground.' (These guys were used to flying highperformance aircraft, so flying a T-33 was demeaning.) He threw the plane into a steep left-hand bank – WOW! The g's! My helmet felt like it weighed a ton. Then Gus straightened out the plane and said there was a hole in the clouds. WOW, again! We went from 3,000 to 10,000 feet in seconds. The clouds looked like lava-lamp spirals. Gus began to fly around these spirals, up and down. He asked me how I was doing, then said, 'Frank, don't you dare throw up in my plane.' I answered, 'Gus, just before I die, I am going to throw up in this plane.' (I was close.) Then we leveled off, to my relief.

"Gus said, 'There's Richmond down there.' I said, 'How can you tell from up here?' He said, 'Let's go take a look.' We went straight down. WOW – more g's and g's. Then, thank God, he leveled off again.

"When we landed back at Langley, we got out of the plane, and Gus put an arm across my shoulders, pointed up and said, 'Frank, that's *my* pool.'

"I answered: 'Touché, Gus.""10

All of the Mercury astronauts were highly competitive individuals, even amongst themselves. The late Cece Bibby was an exceptionally gifted artist who found fame as the person who painted insignias on the sides of the orbital Mercury spacecraft, and she recalled that "each of them wanted to have the first flight. It didn't matter that the first couple of flights would be suborbital; first was first and that was part of the attraction.

"These guys had really fought to be named the first astronauts, although some people referred to them as astronaut candidates. Wally Schirra once said that they were actually only 'half-astronauts' until a space flight was made. So, after the first seven were picked they then fought to make the first flight. This led to a lot of good-natured competition and jockeying for position and it involved every aspect of their flights. "When Al made his flight there was a stencil cut for the name *Freedom* 7 and the name was sprayed onto the capsule. The same was true for Gus's *Liberty Bell* 7. I don't know who sprayed the names on the capsules. I do know that when John Glenn decided he wanted his *Friendship* 7 hand painted on his capsule there was a good bit of 'joshing' that went on about it. Al and Gus made comments that a stencil wasn't good enough for John; that he had to have his name hand painted by an artist.

"Gus told me later that he wished he'd have had an artist do his *Liberty Bell*. He said it really bugged him that someone else thought of it and he hadn't. Competitiveness."<sup>11</sup>

That same competitiveness also involved fast cars and the pulling of pranks – or "gotchas" – on each other. Grissom's brother Lowell recalled one hilarious incident.

"It was late evening, and [as] Gus exited the Cape's gates, he drove his Corvette at its usual speed of 100 miles per hour. He got on the first highway, and one cop picked him up and started chasing him. A little further away, a second police car joined the chase. And by the time Gus reached Cocoa Beach, three police cars were following him.

"Gus was far ahead of them, and when he reached the motel where he was staying he parked his Corvette in front of Alan Shepard's room, then walked into his own. The cops came and saw the Corvette sitting there and felt the hood and said, 'Yeah, this is it.' And they banged on Shepard's door. Shepard comes to the door, half-asleep, and they pull him out, throw him on the ground and cuff him. Meanwhile, Gus had changed into pajamas and was watching from his room.



Cece Bibby painting the Friendship 7 logo onto the side of John Glenn's spacecraft. (Photo: NASA)

"As the police officers handcuffed Shepard, Gus yelled at them out the window. 'Hey, guys, can you hold it down out there? Some of us have to go to work in the morning!"<sup>12</sup>

Whatever his faults, or the perception others might have of him, no one could deny the application, thoroughness, and expertise that Gus Grissom brought to his work and training. He gained everyone's respect, and two years after the selection of the Mercury astronauts his dedication to the task was rewarded by the assignment to his first flight into space.

# References

- 1. Scott Carpenter interview with Colin Burgess, Spacefest V, Tucson, AZ, 4 May 2013
- 2. Thomas, Shirley, *Men of Space, Vol.* 7, chapter "Virgil I. Grissom," Chilton Books, Philadelphia, PA, 1965, p. 97
- 3. Chappell, Carl L., Seven Minus One: The Story of Astronaut Gus Grissom, New Frontier Publication, Mitchell, IN, 1968, p. xi
- 4. Indiana Historical Society, Virgil "Gus" Grissom, (undated) by IHS staff, online at *www.indianahistory.org/our-collections/library-and-archives/notable-hoosiers/ virgil-gus-grissom*
- 5. Grissom, Virgil, *Gemini: A Personal Account of Man's venture into Space*, The Macmillan Company, Toronto, Ontario, 1968, p. 19
- 6. *Ibid*
- 7. Burgess, Colin and Kate Doolan. *Fallen Astronauts: Heroes Who Died Reaching for the Moon*, University of Nebraska Press, Lincoln, NE, 2003, p. 95
- Carpenter, Malcolm S., Cooper, L. Gordon, Jr., Glenn, John H. Jr., Grissom, Virgil I., Schirra, Walter M., Jr., Shepard, Alan B. Jr., and Slayton, Donald K., *We Seven*, Simon and Schuster Inc., New York, NY, 1962, pp. 73–74
- 9. Schefter, James, *The Race: The Uncensored Story of How America Beat Russia to the Moon*, Doubleday Books, New York, NY, 1999, p. 67
- 10. Moncrief, Frank, article "Lessons Learned" for the *Virginian-Pilot* newspaper, Norfolk, VA, interviewed by Diane Tennant, 22 September 2012
- 11. Bibby, Cece, Cece Bibby's Genealogy, online stories at http://freepages.genelogy. rootsweb.com/~cecebibby/nasa-stories/naked-lady.htm
- 12. Grissom, Lowell. Online story at http://baileyloosemore.wordpress.com/2012/06/22/ honoring-a-hero



http://www.springer.com/978-3-319-04390-6

Liberty Bell 7 The Suborbital Mercury Flight of Virgil I. Grissom Burgess, C. 2014, XXV, 275 p. 191 illus., Softcover ISBN: 978-3-319-04390-6