

# As the third-ranking cadet in his class, Aldrin could choose the direction of his military career. Upon graduation in 1951, he followed his dream and opted to enter the Air Force...

which later became the Air Force Institute of Technology at Wright-Patterson AFB, Ohio.

As a student, he had studied under rocketry pioneer Robert H. Goddard at Clark University before earning a doctorate from MIT. He was a passenger on the first transatlantic round trip of the dirigible Hindenburg, which later burned and crashed at Lakehurst Naval Air Station, New Jersey. He knew Orville Wright and Billy Mitchell. Jimmy Doolittle occasionally stopped

preaching the gospel of commercial air travel. In 1932, he took then-two-year-old Buzz on his first airplane ride, in a Standard Oil Lockheed Vega.

"I remember that it was painted red and white and looked like an eagle," Aldrin says today.

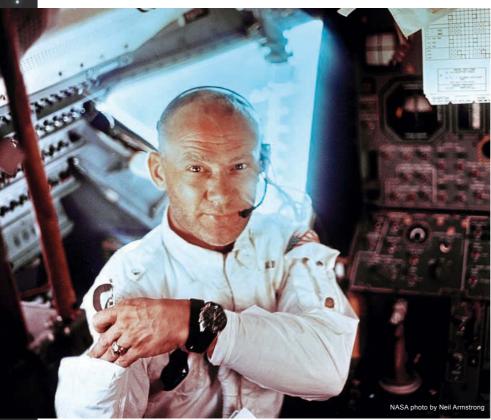
## STANDING HIS GROUND

Aldrin's given name was Edwin Eugene Aldrin Jr. He got his nickname from his sister Fay Ann; she could not say "brother" and called him "buzzer" himself. As a little boy he had loved building model airplanes and reading space-theme Buck Rogers comics. As he got older he became more and more interested in the mechanics of airplanes.

When his father landed a P-38 at an airport near their home after the war, Buzz noticed little things, he writes in his latest book, *No Dream Is Too High: Life Lessons From a Man Who Walked on the Moon.* For instance, the P-38's rivets were not flush with the aircraft's skin.

"'We need to improve that,' I thought. Eventually we did," Aldrin writes.

Below left: NASA turned down Aldrin on his first attempt to become an astronaut. Seven years later, he was in the Lunar Module, preparing to set foot on the moon, as Apollo 11 commander Neil Armstrong took this photo. Below: During the Korean War, fighter pilot Aldrin's gun camera footage captured for the first time a MiG-15 pilot punching out. Life Magazine printed the photos.



by the Aldrin house. (The future Tokyo Raider eventually befriended youngster Buzz and would later serve as a valued mentor.)

In 1928 Aldrin Sr. left the service and took a job as an oil company executive. He was one of the world's first flying executives, traveling around the globe

instead. As an adult Aldrin made it official, legally changing his first name to "Buzz."

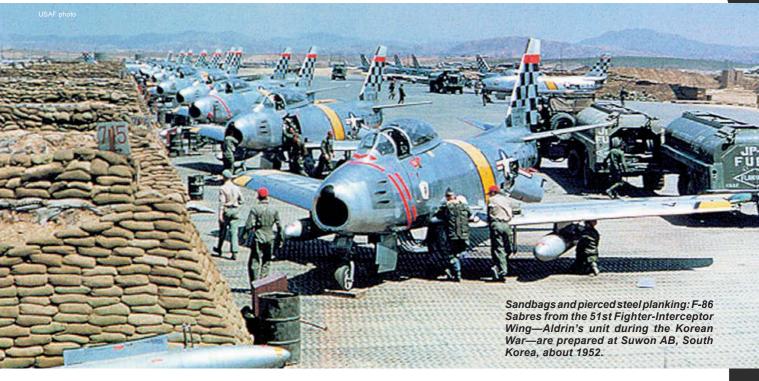
Given this background, and the fact that Aldrin was an impressionable teen during the earth-shaking events of World War II, it was almost inevitable that he would enter the military

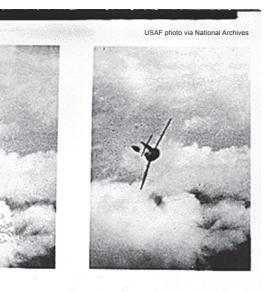














Surprisingly, Edwin Aldrin Sr. pushed hard for Buzz to try for entry into the Naval Academy. He thought that would ensure a brighter long-term future.

"He said he knew more successful businessmen who had gone to the Naval Academy than West Point," says Aldrin.

But he didn't want to go to Annapolis. He wanted West Point, in part because he'd been so impressed by his sister Madeline's boyfriend, a cadet who had been featured with the color guard in a photo for the cover of *Life Magazine*. Eventually Buzz prevailed, though this involved standing his ground against his formidable father.

He entered the academy in 1947. He thrived under the orderly and intense educational regimen, though not everything went smoothly.

During his third year, Aldrin reported a classmate he saw cheating on a test. According to West Point's honor code, Aldrin was bound to tell instructors what he saw. But the culprit was not punished, as the commandant felt evidence was lacking. It shook young Buzz's faith in the system.

Aldrin later wrote that he learned a lesson from this: There are always people who bend the rules, in any organization. Still, he and the academy were a good fit.

## Airman and tireless space exploration advocate Buzz Aldrin was also the second man to walk on the moon.

"I was unformed, and West Point, for better or for worse, fit me into a form," he wrote in *Return to Earth*, his 1973 autobiography.

As he neared the end of his formal education it was already clear where the US military might need him. In the summer of 1950, prior to his last year, he and a small group of other top West Point cadets toured Japan and the Philippines to study Gen. Douglas MacArthur's occupation governments and its creation of new laws and constitutions.

Their first night in the Far East, *Stars and Stripes* was slipped under their door. The paper's headline read that North Korea had invaded South Korea.

"At that point you kind of knew that after another year of West Point, there were a lot of cadets who were going to be involved in the Korean War," says Aldrin.

As the third-ranking cadet in his class, Aldrin could choose the direction of his military career. Upon graduation

in 1951, he followed his dream and opted to enter the Air Force, which had become an independent service at about the time he entered West Point.

Basic flight training was in Bartow, Fla. For six months, Aldrin flew T-6 trainers during the week and watched the water skiing maidens at nearby Cypress Gardens on weekends. Among the lifelong friends he made at this first stop in his Air Force career was Sam Johnson, a fellow pilot and future member of Congress from Texas who was shot down over North Vietnam and imprisoned for seven years.

Johnson was a POW when Aldrin landed on the moon in 1969. When he heard the news, Johnson went up to a guard and pointed at the moon hanging in the sky over Hanoi.

"That's ours now," he said.

Aldrin's early flight career was not without incident. He was fond of aerobatics and that nearly proved fatal. Piloting a T-28 one day during training in Texas, he attempted a double Immelmann and suffered a grayout from excessive G forces.

## F-86: PERSONAL FAVORITE

He awoke as though from a nap, rested and surprised to discover there was a spinning propeller in front of him. It took him some moments to realize he was in an airplane and in trouble. He pulled out about 2,000 feet above the ground.

When it came time to choose a type of aircraft following basic school Aldrin had further conflict with his strong-willed father. "He wanted me in bombers. He thought there was more leadership there," says Aldrin today.

The father was projecting his own career onto his son: He thought multiengine aircraft were the better path to higher rank and eventual business success, due to the experience of commanding a crew.

Buzz wanted fighters. They meant excitement, drama, and individual accomplishment. Again, he scored near the top of his class and got his wish. His next stop was three months at Nellis AFB, Nev., learning to fly F-80s and F-86s.

The latter was his favorite. "Rarely would I find anyone in that epoch who didn't greatly favor the Sabre," he says.

He arrived in Korea the day after Christmas 1951, in the midst of a typically severe Korean cold wave. The war was settling into a stalemate, though he didn't know that at the time. During one of his early acclimation flights Aldrin had what he remembers as one of his most harrowing airborne experiences. His main fuel-control

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system froze in the 100 percent power setting. The F-86 had an emergency manual fuel switch that enabled him to override the system, but it was a button that needed to be handheld to operate, making it virtually impossible for him to also operate the radio. In enforced radio silence, he broke off and headed for base. He barely made it.

Aldrin would eventually fly 66 combat missions in the Korean War. He scored two kills.

The first was not dramatic. Flying about five miles south of the Yalu River on May 14, 1952, he saw two MiG fighters, well below. He dove down, targeting the wingman. The MiGs never saw him coming. Aldrin simply lined up and fired. The MiG engine started smoking, the canopy flew off, and the pilot—likely North Korean or Chinese—ejected. The Russians were more capable and probably would have detected the attack and put up a fight.

For Aldrin, the most notable aspect of this encounter came from his gun camera. It turned out that his pictures caught the enemy ejection sequence, the first such photos to do so. A week later they appeared in *Life Magazine*. They went on to be among the most reproduced images of the Korean air war.

Aldrin's second MiG fight was far more exciting—and not necessarily in a good way. On patrol June 7, he was forced to join a flight of newer F-86s from another squadron when his wingman developed engine trouble. The new fighters were much faster and Aldrin had trouble keeping up as they moved in to attack a North Korean air base. Lagging behind, he looked up and saw an airplane sliding in from the right. The high tail gave it away as a MiG.

They saw each other at about the same time. Aldrin and his foe quickly went through several scissors maneuvers as both tried to get behind the other. Aldrin finally turned tightly enough to gain an advantage. He tried to fire but the aiming dot on his gun jammed.

Flying with his left wing pointed straight down toward the earth, Aldrin manually sighted in on his target and pulled the trigger. He saw something spark on the MiG's wing. Then Al-



A holographic Aldrin appears in "Destination: Mars," a NASA and Microsoft-produced "mixed-reality" experience, where visitors use headsets to see realistic, 3-D views of the Red Planet.

drin rolled back upright, punched the throttle to full open, and fired again as his foe went into a hard right turn. At this point they were getting close to the ground—too close for the dogfight to last much longer. As the MiG rolled out of the turn and dived, Aldrin fired two more bursts.

"It was like a slow-motion movie as I watched the enemy plane's nose come up and seem to hang in the air, the engine stalling. The canopy of the jet opened, and I saw the flash of the pilot's ejection flare. Whether he had time to open a parachute I don't know, but the MiG definitely beat him to the ground," wrote Aldrin in the 2016 book *No Dream Is Too High*.

### STEERED TOWARD THE STARS

The danger wasn't over. Aldrin was 20 miles north of the Yalu, in enemy territory, and low on fuel. Other MiGs would surely arrive soon. He made a beeline south, pushed by the helpful hand of the Manchurian Express, a jet stream that helped him make it back to base.

The hardest part of the encounter was checking his fear, Aldrin told an audience at Nellis in a 2007 appearance. The solitude of trying to escape enemy airspace without knowing when danger might arrive was "haunting," he said. But that's part of being a fighter

pilot. Fear must be put aside if you're to survive.

"You have to appreciate the threats, the danger of things, but you can't be obsessive over them, otherwise you are in the wrong business," Aldrin told the Nellis group.

After the fighting ended, Aldrin returned to the US and served as an aide to the dean of faculty at the new Air Force Academy. He went through Squadron Officer School. Then in 1956 he returned to flying, this time as a flight commander with the 36th Fighter Day Wing, based in Bitburg, West Germany.

In Germany Aldrin flew the F-100, a supersonic jet with greater performance than the F-86. At first, air-to-air combat was his unit's mission. Aldrin and other pilots sat alert in g-suits so they could be airborne within five minutes of a call. During the Hungarian crisis of 1956 they were deployed to a forward base in Munich and patrolled the tense border between communist and free worlds.

Eventually the F-100 was pressed into fighter-bomber service. Aldrin ceased to serve as a fighter jockey and instead took on the deadly serious responsibility of preparation for a possible World War III.

"We'd sit on alert with nuclear weapons on the wings of F-100s,

bombs we were supposed to deliver at a low level," he says today.

Despite the gravity of this mission Aldrin remembers his posting in Germany as an enjoyable time in his life. It was also a place where friendship steered him toward the stars.

Edward H. White had been one year behind Aldrin at West Point. The two men met and bonded as members of the academy's track team. When Aldrin arrived in Bitburg, White was already there, and they reconnected. It was a time of rapid development in the nascent discipline of spaceflight. Russia's Sputnik satellite shocked the world in October of 1957 and White became increasingly interested in the subject.

White left Bitburg to attend the University of Michigan and earn a higher degree in aeronautical engineering. He wrote back to Aldrin, expressing enthusiasm for what he saw as a brave new world.

But as the decade of the 1950s drew to a close, those events were still to come. Aldrin, too, began to consider the wonder and promise of the space field. Ed White was selling the virtues of higher education, hard. Aldrin's own father had earned a doctorate from MIT. Why shouldn't Buzz apply to MIT himself? He did and was accepted for study in 1959.

Aldrin found he enjoyed academic life. He knew that if he stayed long enough to earn a doctorate, he would likely lose out on test pilot school—and to that point all US astronauts had test pilot experience. But he also thought that learning might prove more valuable to the space program in the future than test flying skill, and in that he was prescient. He went for his PhD.

He chose for his thesis an examination of a man-controlled rendezvous between space vehicles. He knew NASA intended computers to control any such maneuver, but what if the computers failed and a human had to take control? They had to know what to calculate and how to do it. Eventually the work was titled "Line of Sight Guidance Techniques for Manned Orbital Rendezvous." Its first page was clear evidence of its author's desires. Aldrin dedicated the thesis to "The men in the astronaut program."

"Oh, that I were one of them," the dedication continued.

In fact, Aldrin was already working on that sort of rendez-vous. He'd applied to the astronaut program in parallel with his academic studies. In 1962, just as he finished the doctorate, NASA turned him down: It still wanted its astronauts to have test pilot experience.

He moved into a job in Los Angeles for USAF's Space Systems Division. Eventually, he began planning Department of Defense experiments to be carried on Gemini flights. Meanwhile, he reapplied to NASA.

Finally, in late 1963, Aldrin was at his office reviewing some technical documents when a secretary entered and said he had a phone call. It was Deke Slayton, chief of NASA's astronaut office.

In a matter-of-fact manner Slayton asked Aldrin if he would like to join the space program.

"Shoot, Deke, I'd be delighted to accept," Aldrin said.



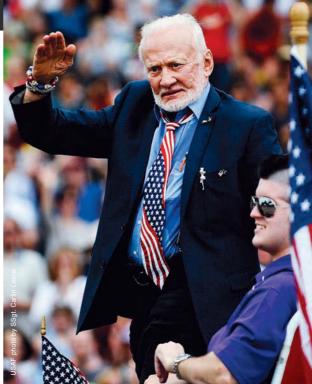
Aldrin had long known many of the men in the astronaut corps. Besides Ed White, he'd flown with John H. Glenn Jr. in Korea in the last days of the war. Now he and some of the other astronauts would be flying again, toward much higher ground.

NASA had selected White as one of the initial group of Project Gemini astronauts. He went into space on Gemini 4 and was the first astronaut to perform a successful space walk. White was scheduled to fly on the first Apollo mission, but he died in the tragic launchpad fire of Jan. 27, 1967, which also killed Virgil I. "Gus" Grissom and Roger B. Chaffee.

When Buzz Aldrin walked on the moon he carried a religious medallion in memory of his friend Ed White.

Aldrin spent eight years as an astronaut. Among the test pilots, he was known as something of an egghead.

"I'm sure that the fact I was called 'Dr. Rendezvous' was not always ... meant as praise," he says. Today he



Aldrin waves to the crowd during the Memorial Day Parade in Washington, D.C., in May.

values the camaraderie of the remaining early astronauts. As a member of the first mission to the moon, his place in history is secure.

He returned to the Air Force following his 1971 resignation from NASA and was eventually named chief of the Air Force Test Pilot School.

Beset by depression and alcohol dependence, Aldrin retired in 1972 with 21 years of Active Duty service. He sought help for his personal problems and has spent the past decades as a tireless advocate for space exploration. He has long insisted that what the US needs is a big, soul-stirring project: manned missions to Mars.

The best way to do that is via an approach he labels the "Aldrin cycler." It involves a series of cycling spacecraft that form a virtual staircase to the planet.

"The cycling starts in low-Earth orbit, then goes to lunar orbit with reusable orbiters," he says, calling this "Air Force inventiveness, typical out-of-the-box thinking."

In all, at 86, Aldrin seems to be taking the advice he lays out in his newest book, one chapter of which is titled: "Keep a Young Mind-Set at Every Age."

Peter Grier, a Washington, D.C., editor for the Christian Science Monitor, is a long-time contributor to Air Force Magazine. His most recent article, "The First Offset," appeared in June.