

# The Eagle That Flies Highest

The purpose-filled life of OU graduate and NASA physicist Jerry Chris Elliott-High Eagle

BY JAY C. UPCHURCH

**C**lass had ended and a flood of humanity poured into the hallways of the University of Oklahoma's new Engineering Center on Boyd Street. As Jerry Elliott made his way toward the main exit with fellow students, out of the corner of his eye, three words jumped off the bulletin board like a sign pointing to the next step in his journey.

## **"NASA HIRING TODAY."**

Elliott stopped in his tracks to make sure he was seeing correctly. As he gravitated toward the board for a closer look, he felt a tingle as he read that interviews were going on that very moment in the dean's office.

"It was a very fortuitous moment," says Elliott, looking back on that fateful spring day in 1966. "I could have gone a different direction when I left class or I could have been distracted. It would have been easy for me to just walk right past."

Instead, the three simple words caught his attention and rekindled his imagination. Elliott's mind raced back to the moment he first learned what he believed would

Aaron Sprecher









Recruited by NASA right out of college, Elliott began his career as a flight controller for the Gemini project. At the age of 27, he was the lead retrofire officer on Apollo 13 and was instrumental in bringing craft and crew home safely, earning him and the mission control team the Presidential Medal of Freedom.

be his destiny. As a five-year-old boy living in Oklahoma City, he experienced what his mother described as “a vision.” The young Elliott was outside playing when he heard a voice coming from the sky in the direction of the sun telling him that he would one day help men land on the moon.

Some things in life almost defy explanation. They take a leap of faith, or in Elliott’s case, a deeper look into the spiritual nature of his Osage and Cherokee heritage.

After telling his mother what he had heard, they went back outside. “I pointed to the sun and repeated what the voice had said to me. She didn’t try to explain it. She just told me to keep the vision, believe and hold onto it.”

From that moment, Elliott immersed himself in anything and everything that involved the moon, rockets and the possibility of manned space travel. The vision became a part of his quest, and when he saw the NASA job posting outside the dean’s office, he knew that it was potentially another step toward making it a reality.

## The Interview

In December 1965, Elliott finished his undergraduate degree in physics at OU, where he had spent the previous four-plus years honing his math and science skills under the

capable tutelage of professors like Stanley Babb, Richard Fowler and Norman Ricker.

“That was an exciting time in my life. There were some rough days, but OU turned out to be an enjoyable overall experience,” says Elliott. “Dr. Babb was a great mentor, and all of those professors helped empower me by providing the academic knowledge and the tools that I would need for future endeavors.”

By the time spring semester rolled around, the 22-year-old had decided to pursue a master’s degree in physics while making ends meet by serving as an officer for the Norman Police Department. But three months into the semester, Elliott received notice from the local draft board that he had 15 days to report to Army boot camp.

Little did he know that his life was about to take another dramatic turn.

“After I saw the bulletin post regarding NASA, I went straight to the dean’s office where they were doing the interviews, and hoped that I would have a chance to possibly make an impression,” says Elliott, who, unlike every other job candidate in line that day, did not have his résumé or the required Federal Form 171 completed.

Dressed in his police uniform as his shift started at noon that day, Elliott was the last person to reach the interview desk



Elliott and screen actor Iron Eyes Cody pose with the docking module from the Apollo-Soyuz Test Project, the first manned international space mission, which Elliott worked on at NASA. The module launched with the American spacecraft Apollo on July 15, 1975, and docked with Soviet Soyuz 19 two days later.

where NASA representative Bernie Goodwin was wrapping things up to catch a flight back to Houston.

“Mr. Goodwin looked up at me and jokingly asked if I was there to give him a ticket for being double-parked,” says Elliott. “When I told him I wanted to interview for a job, he asked me if I had all of the required paperwork completed for evaluation.”

Elliott explained his situation in hopes that Goodwin would make an exception in his case.

“He asked me what I wanted to do at NASA, and I told him that I wanted to land men on the moon,” says Elliott. “He eventually took my name and contact information, and went on his way. I really had no idea what would come of it. I was just glad to have had the chance to meet him.”

Less than 48 hours later, a Western Union telegram arrived from NASA informing Elliott that he had been selected to work as an aerospace technologist on the “The Man in Space Program.”

“Obviously, that telegram was life-altering. I was just blown away,” says Elliott. “I felt it was reassurance that my vision was truth—an incredibly spiritual moment for me.”

That same day, an Air Force general called to let the draft

NASA to gain the experience and knowledge required to put the first men on the moon.

As the first Native American hired by NASA, Elliott admits that he faced various forms of racism during his time there, especially in the early years. But he never let those hurdles stand in the way of the important work he felt was ultimately his life’s purpose.

“My mother always taught me to be proud of my heritage and I wasn’t going to let anything or anyone change that. I just kept my head down and made sure I did my job very well. Over time, I earned their respect by showing everyone there that I was equally capable,” says Elliott.

He was part of the last four Gemini missions, all of which moved the nation closer to a successful moon landing.

As the Apollo program was being christened in 1967, Elliott transferred into the job of Guidance, Navigation and Control Engineer, a position with NASA Mission Control that directly involved him in assisting with guiding and eventual landing of the lunar module. Later, he was transferred to the prime Mission Control Center position of Retrofire Officer, whose job was to compute return-to-Earth trajectories from the moon—and all points in between.

board know that Elliott would not be making his scheduled boot camp appearance, thanks to his new job.

Elliott packed some clothes and his guitar, borrowed his mother’s 1962 Ford Galaxy 500 and drove straight to Houston. Two days later, he was filling out NASA paperwork and excited about starting a new job to which he would devote the next 41 years of his life.

It also turned out to be a ticket that allowed him to not only travel the world, but also help bring significant changes to it outside of NASA.

## The Gemini and Apollo Years

Upon his arrival in April 1966, Elliott immediately began working as a guidance engineer on Gemini, a 12-mission human spaceflight project designed by





OU Western History Collections

Elliott (front row, center) is shown here with fellow residents of Cross Center's Vance House in a 1963 *Sooner Yearbook* photo.

“Here I was, this American Indian kid from Oklahoma, and I was lending my knowledge and talents to NASA—while at the same time, accomplishing my purpose and vision,” says Elliott. “For me, life is about exploring and discovering. What greater purpose can we have as human beings? So to say my time at NASA was quite memorable is an understatement.”

Elliott clearly remembers the moment on June 20, 1969, when Commander Neil Armstrong's left foot touched the lunar surface. “I thought it was cold in the control room, but it was because I was covered in goosebumps,” he recalls. “It was a tremendous victory for the United States, but also for me, personally.” Twenty-one years after Elliott's childhood vision, the eagle had landed.

In all, Elliott was involved in 11 different Apollo missions, including Apollo 13, where he played a crucial role as the prime Retrofire Officer. He assisted with the rescue plan that helped bring the crew back to Earth safely after the mission was aborted due to problems with its oxygen supply and electrical power.

For their successful efforts in returning Apollo 13, Elliott and members of the Mission Control operations team were awarded the Presidential Medal of Freedom in 1970.

From his arrival in 1966 to his retirement in 2007, Elliott played key roles in basically every project NASA launched, including Skylab, America's first space station; Apollo-Soyuz, the first manned space mission in partnership with

the Soviet Union; Space Station Freedom; the Space Shuttle Program; and the International Space Station.

“Jerry had quite a history at NASA. He played a major role in so many big missions for the entirety of his career there,” says Dr. John Herrington, retired U.S. Navy aviator and astronaut who piloted the 16th Space Shuttle mission (Endeavour) in 2002. As a member of the Chickasaw Nation, Herrington was also the first Native American to fly in space.

“Jerry and I have a shared heritage, which we are both very proud of, and he has always been someone I could talk to about the work at NASA or life, in general. He has a wealth of knowledge,

and that was certainly beneficial to me when it came to better understanding the demands that came with being an astronaut during my time in the space program.”

## Life Beyond Space

After the 1969 Apollo moon landing, which brought closure to the vision he had pursued for much of his early life, Elliott could have finished out his time at NASA and quietly settled into a less ambitious existence. But that was not his way.

In fact, nothing could be further from the truth.

Instead, Elliott has worked tirelessly on several social justice causes close to his heart.

In 1975, he and OU engineering alumnus George Thomas, a Cherokee, founded the National Society of American Indian Engineers to encourage Native students into the fields of science and engineering. Today, the organization, known as the American Indian Science and Engineering Society, has more than 5,000 members and has awarded more than \$12 million in academic scholarships to indigenous students nationwide.

Elliott wrote the draft for Senate Joint Resolution 209, which authorized President Gerald R. Ford to proclaim the nation's first “Native American Awareness Week” in 1976. He also designed an international site for peace and unity located on the equator in Ecuador and led a delegation from the United States to its dedication in 1986.



Elliott returned to OU for a Physics Department reunion in 2009. One of the first Native Americans to graduate with a physics degree from OU, he founded the National Society for Native American Engineers to inspire Native youth to consider careers in science, technology, engineering and mathematics.

In 2019, Elliott’s company, HighEagle Technologies, received a patent for a device to treat cancer and blood-related diseases. The device, which uses a combination of hyperthermia and hyperoxygenation, also shows promise in treating the coronavirus, he says, because it helps get oxygen directly into the bloodstream.

A prolific writer, Elliott has penned award-winning poetry and written numerous books, articles and papers on a variety of topics, ranging from space technology and computer theory to Native American tales for children.

In addition to writing, Elliott is an accomplished musician

“For me, life is about exploring and discovering. What greater purpose can we have as human beings? So to say my time at NASA was quite memorable is an understatement.”

renowned for playing the American Indian flute and drums from Native American events to concerts with the Milwaukee Symphony, the Oklahoma City Symphony and the National Symphony Orchestra in Washington, D.C.

He has also developed a following as a singer-songwriter, playing guitar with a jazz/blues ensemble from concert halls in LA and New York to large outdoor festivals, like Milwaukee’s annual Summerfest.

“Jerry is such a talented and spiritual man,” says Sharon Hoffmann, whose husband, Tom, a longtime professor at the University of Maine, spent several years traveling and performing with Elliott prior to Hoffmann’s death in 2012.

“He has focused a lot of his life outside of NASA on helping Native American causes. And he’s done a lot of that through his music,” Hoffmann says. “Tom and J.C. spent a great deal of time together and came to consider each other brothers. We both have such great respect for Jerry and all of the things he has accomplished in his life. His story is truly fascinating.”

At age 41, elders in the Cherokee Nation—in recognition of his work at NASA and beyond—gave Elliott the name “High Eagle,” in accordance with the saying, “The Eagle-that-flies-highest is closest to God.”

Over the years, that name has resonated deeply with Elliott.

“I have been God-guided with everything in my life,” he says. “I’ve always tried to follow the unknown path and live with a true purpose. I am honored to have that name and I always do my best to live up to it.”

---

*Jay C. Upchurch is editor in chief of Sooner Spectator and lives in Norman.*