SPECIAL ISSUE

FRED HAISE: A HERO FOR THE SPACE AGES

The Apollo 13 astronaut inspired the world, but he hasn't forgotten his days as a Sooner. **BY GEORGE LANG**

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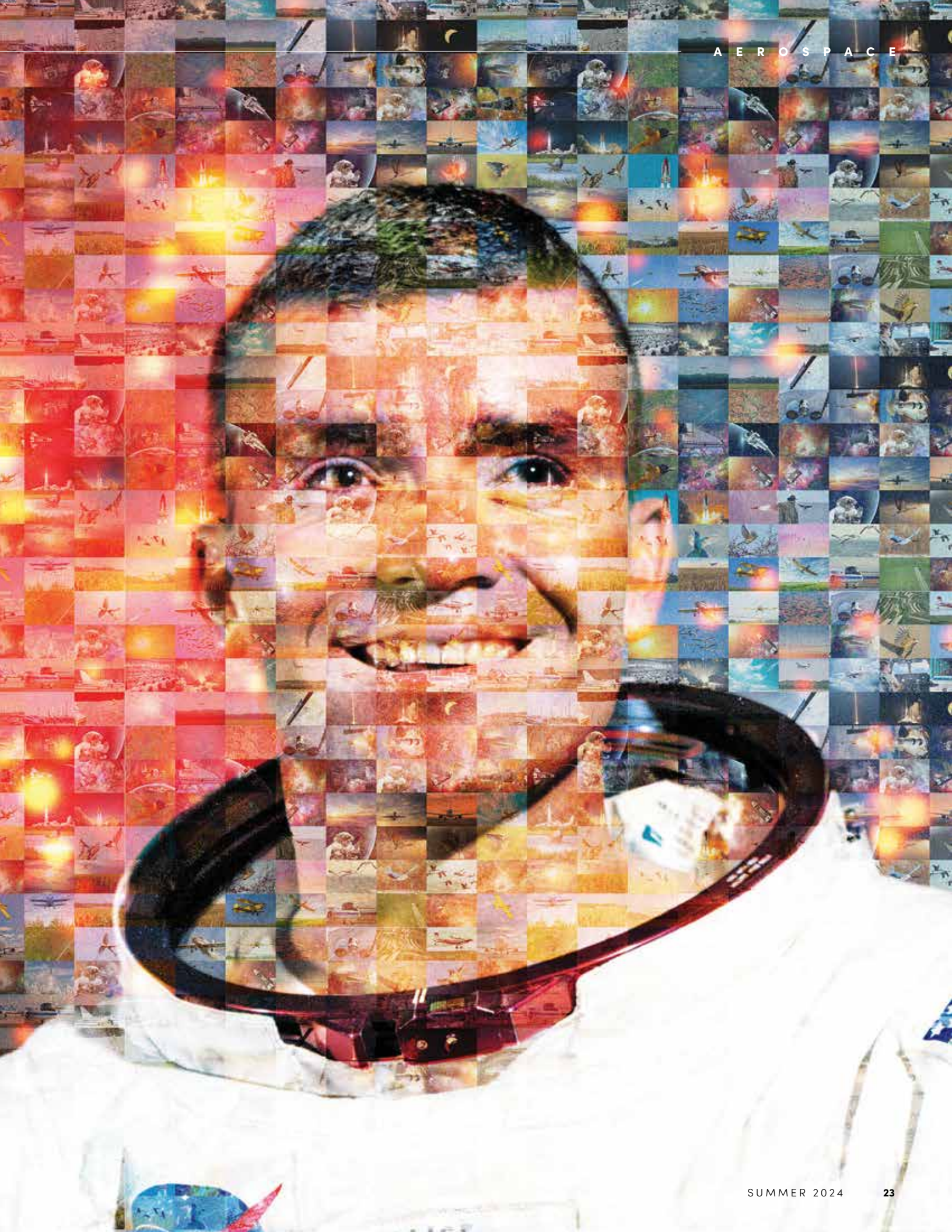

IN THE EARLY 1950S, WHEN astronaut Fred Haise was a former paperboy with a journalism scholarship to Perkinston Junior College in Biloxi, Miss., the moon was only the province of Jules Verne novels and early science fiction films, a still-mysterious nightlight for the Earth.

Haise bought a Cushman motor scooter and zipped around Biloxi to cover his reporting duties for the *Biloxi Gulfport Daily Herald*. He was set to fill his adult life writing about other people and events, but then Kim Il Sung's army crossed the 38th parallel into South Korea, and Haise's life trajectory made a pivotal shift.

Haise had been 9 when his father, Fred Haise Sr., enlisted after Japanese forces attacked Pearl Harbor, and that example of personal sacrifice and commitment still resonated.

"It made me think I should probably serve like my dad and two uncles had served," says Haise, now 90 and widely known as the lunar module pilot for the famed Apollo 13 mission, from his home near Houston.

Once he graduated from Perkinston, Haise joined the Navy Aviation Cadet Program and learned to fly in World War II-era T-6 Texans and F6F Hellcats. He served as a U.S. Marine Corps fighter pilot for two years before arriving at the University of Oklahoma in 1956 to study aeronautical engineering. Haise joined the Oklahoma Air National Guard at Will Rogers World Airport to continue amassing flight hours.

"We lived up on the north campus at Max Westheimer Field in leftover, wooden Navy barracks that had been converted into apartments for married students—which we were at the time, with one child," Haise says, describing early days at OU with his first wife, Mary. He recalls gathering outside the barracks for cookouts and homemade ice cream with other married students. "I was kind of like a 'senior citizen' in terms of thinking about fraternities or student activities, and I didn't do any of that."

But he did learn to love Sooner athletics. Haise had never seen collegiate wrestling before coming to OU, and he became a regular fan at matches. It was also a time of massive accomplishment on the gridiron during Bud Wilkinson's reign.

"I only saw one losing game in three years," Haise says, adding that he attended the legendary 1957 OU vs. Notre Dame faceoff that broke Wilkinson's 47-game win record. "It is still the longest winning streak in college football."

This was also the time when Haise's own winning streak—an enduring legacy captured in history books and film—truly began. On July 29, 1958, nine months after the Soviet Union's launch of Sputnik 1 kicked off the race for space, the U.S. government founded the National Aeronautics and Space Administration (NASA) to explore space and establish strategic competition with the Soviet Union.

COURTESY FRED HAISE

Enterprise test flight crew commander Haise and crew pilot Gordon Fullerton pose in front of the space shuttle in 1976.

COURTESY FRED HAISE

From left: Fred Haise, Jim Lovell and Jack Swigert step onto the USS Iwo Jima after Apollo 13's successful splashdown.

One year later, Haise started working as a research pilot at what is now known as the NASA John H. Glenn Research Center in Ohio and at California's Edwards Air Force Base, then NASA's key aeronautical research facility. He listened when President John F. Kennedy proposed to the U.S. Congress that the nation "should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to the earth."

"It wasn't until JFK's pronouncement of the lunar program that the space program—in my view—became a more permanent reality," Haise says.

At Edwards, NASA was testing the rocket-powered North American X-15 hypersonic aircraft. While he

COURTESY FRED HAISE

Fred Haise is photographed during NASA lunar module mockup training.

loved flying fighters and wanted to pilot the X-15, Haise did the math he'd perfected at OU and determined that he was too junior to reach the X-15 cockpit before the program closed.

He also spoke to Neil Armstrong, another test pilot who had flown the X-15 before entering the astronaut program. Armstrong warned the young man who loved flying that he would spend most of his time in meetings and flight simulators. This did not sit well with Haise; with time ticking on the X-15, he made plans to be unbound by gravity.

"I thought, 'The only way I'm going to go higher and faster is to become an astronaut,' " he says.

In 1966, Haise was selected as part of Astronaut Group Five, 19 men culled from 5,000 applicants who would become astronauts in the Apollo lunar missions, Skylab and the space shuttle program.

Fred Haise exits Apollo 13's Odyssey command module onto a U.S. Navy life raft after splashdown.

COURTESY FRED HAISE

HONORING

OU's Astronaut Scholars

Since 2005, 22 OU students have been named recipients of the prestigious Astronaut Scholarship, which recognizes the brightest and most talented college students in science, technology, engineering and mathematics. The scholarship was established by former Mercury 7 astronauts—including Oklahoma's own Gordon Cooper—to encourage students to pursue scientific excellence.

A full list of OU Astronaut Scholars will be published in the online edition of Sooner Magazine.

Grumman Aerospace Corp. consulting pilot George Dowling, left, and Haise test the lunar module upper-hatch air supply at Kennedy Space Center.

COURTESY FRED HAISE

He became the backup lunar module pilot for Apollo 8, as well as for Apollo 11, which landed the first humans on the moon.

Haise, along with Commander Jim Lovell and his fellow Group Five selectee Ken Mattingly, planned to go to the moon themselves as crew on Apollo 14, but a shakeup in crew assignments moved Haise and his crew up to fly Apollo 13.

Then, only three days before the April 11, 1970, launch, Mattingly learned he'd been exposed to measles. The potential contagion grounded Mattingly, and he was replaced by Group Five astronaut Jack Swigert.

Apollo 13's mission—a geological visit to the Fra Mauro Highlands—was considered vital and dubbed with the Latin motto, *ex luna scientia* ("from the Moon, knowledge"). But much was fraught with Apollo 13. Beyond shake-ups and Mattingly's last-minute crew replacement, some people in and around NASA were superstitious about a 13th mission. Federal funding and public interest in lunar missions also had fallen off in the year following Armstrong's first steps on the surface in 1969.

However, Apollo 13 launched without a major hitch. Some 56 hours later, Haise, Lovell and Swigert made a live appearance on television from the lunar module. Haise was putting equipment away when NASA's capsule communicator asked Swigert to engage stirring fans inside the service module oxygen tank.

The fans set off an explosion, triggered by frayed wiring inside the tank. Moments later, the team called Johnson Space Center and Swigert spoke the now-immortal words, "Houston, we've had a problem here."

"Within a minute or two, I noticed that several readings on instruments indicated we had lost the second oxygen tank, too, and I was sick to my stomach with disappointment," Haise says. "Because I knew that meant we were not going to go into lunar orbit, and we were not going to land. All that work I had done through two previous missions, and now my big time to go land and walk on the moon was gone."

The craft's fuel cells needed oxygen to function, and low oxygen and rising carbon dioxide levels were affecting the crew as temperatures plummeted within the module. Crew members kept carbon dioxide at bay through filters improvised with ripped-up manuals and duct tape. Haise developed a kidney and urinary tract infection, causing intense pain and flight sickness during a mounting crisis.

To maximize the range for the lunar module to serve as a "lifeboat" for the crew, the module's descent propulsion system would have to power it back to Earth, so mission control devised a plan for the module to slingshot around the moon two hours after the module reached its closest approach to the lunar surface.

COURTESY FRED HAISE

Apollo 13's Odyssey command module splashes down in the southern Pacific.

Fred Haise practices underwater escape in case the command module capsized during splashdown.

COURTESY FRED HAISE

"... And because we fly, we envy no man on Earth. We all have wings fused to our souls through adversity, fear and adrenaline."

—GENE KRANZ

From the moment he landed at Max Westheimer Airport in April 2022, the OU 1959 alumnus and Apollo 13 astronaut received a rousing welcome.

TRAVIS CAPERTON

Fred Haise at the Stennis Space Center test stand named in his honor

COURTESY FRED HAISE

Haise watched with regret as Fra Mauro passed under the windows of the module. The three astronauts had to settle for a flyby when they had dreamed, trained and traveled for a landing, spacewalks and research.

Despite their harrowing mission, Apollo 13 successfully splashed down in the Pacific Ocean four days after the explosion on April 17. They enjoyed a comparatively soft and sweet landing on a sunny day.

"I expected it to be much harder than it was," Haise says. "It wasn't much more pronounced than landing on the couch."

He and the rest of the crew received the Presidential Medal of Freedom from Richard Nixon. Haise went on to pilot the space shuttle during testing in the late 1970s and then left NASA to join the executive team at Northrop Grumman, the same defense contractor that built Apollo 13's lunar module.

Accolades for Apollo 13's crew extended over the decades. In 1995, Ron Howard directed *Apollo 13*, which starred the late Bill Paxton as Haise, Tom Hanks as Lovell and Kevin Bacon as Swigert. The film earned nine Academy Award nominations and won two Oscars.

"The movie had some scenes with added drama that didn't happen, such as the crew argument," Haise divulges. "After Ron Howard listened to our flight voice transmissions, he said everything seemed too routine given the emergency we were experiencing. The drama was added to make us seem 'more human.' "

Nearly two decades after Apollo 13, Haise was inducted into the National Aviation Hall of Fame. His remarkable life was captured in the 2022 autobiography, *Never Panic Early*, written with fellow OU alum and aviation and space author Bill Moore. That April, OU's Molly Shi Boren Ballroom overflowed with admirers hanging on Haise's every word, and people lined up for hours to purchase his book and meet a genuine hero.

In the book's foreword, Apollo 13 flight director Gene Kranz wrote that his friends of over a half-century "are forever brothers in a fraternity of those who have taken flight. And because we fly, we envy no man on Earth. We all have wings fused to our souls through adversity, fear and adrenaline."

Ever the engineer, Haise doesn't know if he'd describe his experiences so grandly.

"But," he concedes, "I do think Apollo 13 has become one of many folk tales about real-life experiences of people in serious trouble who overcame obstacles to survive."

George Lang is the former editor of Oklahoma Gazette *and assistant entertainment editor at* The Oklahoman. *He lives in Oklahoma City.*