



2022 Frank G. Brewer Memorial Aerospace Award – Individual Category

Retired Air Force Colone Joseph Kittinger
- Died 9 December 2022 at age 94

Col. Joseph Kittinger was a retired U.S. Air Force officer and a lifelong champion of aerospace science. During his Air Force career, he was a NATO test pilot, flew experimental jet fighters, and participated in aerospace medical research. His love of flying and passion for science led him to even more aerospace research.

In 1954, Kittinger flew an observation plane to monitor a rocket sled experiment where Col. John Stapp traveled over 600 mph to test the effects of gravitational stress on the human body. In 1955, Kittinger participated in another research project with Stapp as a test pilot for Project Manhigh. Using high-altitude balloons and a pressurized gondola, they were studying whether humans were physically and psychologically capable of extended travel at near-space altitudes. Kittinger was aloft for seven hours as the balloon climbed to 96,000 feet. Data from this research project was used in NASA's Project Mercury.

In 1960, he surpassed a previous high-altitude record by reaching 102,800 feet in Excelsior III. His flight garnered him three world records: the highest open-gondola balloon ascent, the longest free-fall and the longest parachute descent. He was honored by President Dwight D. Eisenhower with the Harmon Aeronaut Trophy and later published his experiences in a book, "The Long, Lonely Leap."

Kittinger continued balloon-borne experiments for the Air Force until 1963, when he was reassigned to combat duty to serve in Vietnam where he was a POW for 11 months. After his military retirement, he won multiple balloon race competitions, set a world record for flying a helium balloon from Las Vegas to New York, and became the first person to fly solo by balloon across the Atlantic Ocean.

As a famed high-altitude balloon scientist, Kittinger has advanced the science and safety of flight, inspiring Civil Air Patrol youth through CAP's first National Aerospace Education High-Altitude Balloon Challenge for Cadets in 2021. Kittinger served as ambassador for the challenge, personally financing the \$5,000 award and presenting the winning cadets with the Kittinger Cup.

After two years of this role, he died on 9 December 2022, but will remain the namesake of this national STEM challenge for cadets.