



NATIONAL SPACE TROPHY RECIPIENT



**Eugene
F.
“Gene”
Kranz**

NASA photo

Eugene F. “Gene” Kranz, former Director of Mission Operations for NASA and famed Flight Director of Apollo 13 where failure was never an option, was selected by the RNASA Board of Advisors as the winner of the 2007 National Space trophy. He is cited for “outstanding achievements in his pivotal role in the development of flight control operations for all manned space flights.”

Mr. Kranz was born on August 17, 1933, in Toledo Ohio. After his father died in 1940, his mother took in boarders. “We lived near the USO in West Toledo and throughout WWII we always had 3-5 GI’s in the house,” Kranz said in an interview with the author. “The GI’s were instrumental in instilling in me a love of country and a deep sense of desire to serve. My relatives served in Europe and the Pacific. I listened to their stories and followed their battles in my mind.”

The Korean war began while Kranz was in high school. He planned to join the Navy, but did not pass the physical required for entrance to Annapolis. He then pursued a degree in aeronautical engineering to increase his chances of becoming an Air Force pilot. He received his BS in Aeronautical Engineering from Parks College of Saint Louis University in 1954.

He was commissioned in the U.S. Air Force in 1954, and fulfilled his wish to become a pilot of high performance aircraft including the F-80, F-86, and the F-100. Future wife Marta Cadena from Eagle Pass, Texas pinned the wings on him when he graduated from flight training in 1956. “It was love at first sight,” Kranz admits. “We had only seven dates a couple where we had to travel a thousand miles to get together.”

They were married 50 years ago this month. “I was on an Air Defense Exercise and could only get a three-day pass. Our best man and I drove from North Carolina to Texas on a Friday, got married Saturday, and drove back Sunday. Three months later I was shipped to Korea.” The couple had six children between 1958 and 1966; Carmen, Lucy, Joan Frances, Mark, Brigid, and Jean Marie; and now have twelve grandchildren.

Kranz served as a flight test engineer at Holloman AFB, New Mexico, for McDonnell Aircraft developing the Quail Decoy Missile for the B-47 and B-52 aircraft from 1958 to 1960. “The program was wrapping up in the summer of 1960,” Kranz said. “I was offered a position at Edwards and in St. Louis on the Phantom II, but in the spring of 1960, I started following the *Aviation Week* reports on Project Mercury.” He spotted an ad for engineers for the Space Task Group in the July issue. “I applied and was hired sight unseen, reporting to Langley in October. Two weeks after being hired, Kraft sent me down to the Cape to write the MR-1 [Mercury Redstone] countdown and some ‘Mission Rules.’”

In a recent interview, Dr. Kraft recalled, “My first real encounter with him was when we all went to Cape Canaveral as a team of flight controllers to prepare for the first launch of the Redstone and Atlas rockets... He rapidly became a key member of the group and a strong contributor to the development of flight control techniques... He was unquestionably a leader.”

Kranz served as assistant flight director for Project Mercury. In 1962, he moved to Houston as branch chief for Flight Control Operations and assumed flight director duties for all Project Gemini missions. His job “was to train, plan, and provide the remote site teams and systems engineers and procedures personnel for, Mission Control. Included in the duty was the development of all controller console documentation, countdowns and mission rules. I also had a small group to provide the integrated crew and controller integrated training.”

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**Apollo
Flight
Director
Kranz**

NASA photo



NATIONAL SPACE TROPHY RECIPIENT CONT.



The Apollo 13 Flight Operations team celebrate a “successful failure.”

NASA photo

L to R: Cliff Charlesworth, Glynn Lunney, Gene Kranz, Chris Kraft, Jr., George Mueller, Robert Gilruth, George Low, and Charles Mathews.

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Kranz was promoted to division chief for Flight Control in 1968, and continued his duties as flight director for the Apollo program. Kranz said, “I do not think that any of us really imagined the impact we would someday have on history. The first time I really felt the impact were the moments sitting with Cliff [Charlesworth] and Glynn [Lunney] as the Apollo 8 crew started reading from the Book of Genesis. It was only fleeting, and then it was time to go back to work.”

This happened again on Apollo 11. “The classical Gene Kranz event took place as the *Eagle* landed on the lunar surface during Apollo 11,” Kraft said. “As everyone both in and around the MCC and in the world celebrated the touchdown at Tranquility Base, Kranz allowed about 15 seconds of revelry, and immediately **commanded** everyone within both hearing distance and over the intercom, to get back to their assigned task and assure that all was well and ready to perform a launch of the Lunar Module from the moon should an emergency occur. He was always ready for the next event to take place—either normal or abnormal. He was indeed the perfect man for the job.”

Kranz was flight director during Apollo 13 when a routine maintenance task caused an oxygen tank to explode, crippling the vehicle. “He knew the spacecraft and rocket

systems totally,” Kraft said. “It was this attention to detail and the actions he caused to take place that saved the lives and mission of Apollo 13.”

Kranz performed as both a flight director and flight operations director for the Skylab program, and, at its conclusion, was assigned as deputy director of Flight Operations with responsibility for space flight planning, training and mission operations, aircraft and astronaut operations. He retired from the Air Force Reserve as a Captain in 1972.

THE SHUTTLE ERA

In 1983, Mr. Kranz was assigned as director of Mission Operations with responsibilities for all aspects of mission design, testing, planning, training and spaceflight operations. Additionally he was responsible for the design, development, maintenance, and operations of all related mission facilities, as well as the preparation of the shuttle flight software. In this capacity, he was responsible for over 6,000 employees with an annual budget of approximately \$750 million. Mr. Kranz retired from NASA in March 1994 after 37 years of federal service.

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MOD Kranz celebrates 41-C (STS-13) in 1984



NASA photo

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“The element of my career that satisfies me the most is to see that the ‘Culture of Excellence’ we established in the early years continues to thrive in Mission Control today. It is my belief that in some way I helped develop and set the foundation for today’s teams,” Kranz said. “I speak to the elite warriors of today’s military. I rank the “elite” mission control teams in the same category. When they leave Mission Control, the flight directors and controllers assume leadership roles in many areas of Johnson Space Center and the space program. Years ago we set the performance reference when we wrote “The Foundations of Mission Control” (see page 26). The performance of today’s generation in Mission Operations makes me proud.”

Current activities include consulting and motivational speaking to professional, civic and youth groups. “I speak to 40-60 corporate, military and air show events each year. I am speaking to each of the seven classes/year that graduate from Squadron Officer’s School at Maxwell AFB, Alabama. I often tag up with [Apollo 13 commander] Jim Lovell for talks.”

He still loves to fly. He was a flight engineer on a B-17 “Flying Fortress” from 1992 to 1998, performing at air shows throughout the United States. He built an aerobatic biplane that is on display at the Lone Star Museum in Galveston, Texas. Today he does his flying as a “back seater.” His price for air show speaking is a ride with the performers. He has recently flown with the Blue Angels and Heritage pilots in a P-51 formation with an F-22 Raptor.

Kranz was the author of the “Spaceflight” section of the 1984 and 1988 *World Book Encyclopedia*. In 2000, Mr. Kranz

became a *New York Times* bestselling author. His book *Failure is Not an Option* was published by Simon and Schuster that year and in paperback by Berkeley Books in 2002. The book chronicles his work in mission control from Project Mercury through Apollo 13 and beyond. The book was selected by the History Channel as the basis for two documentary programs broadcast as two-hour specials in August 2003 and 2005. He is currently working on a book about leadership.

Kranz was a co-recipient of the Presidential Medal of Freedom awarded by President Nixon for the Apollo 13 mission and was designated a distinguished member of the Senior Executive Service by President Reagan. He received the AIAA Lawrence Sperry Award in 1967, the AAS Spaceflight Award in 1987, the Gilruth Award in 1988, an honorary doctorate from the Milwaukee School of Engineering in 1996, and numerous other honors and awards throughout his career.

When asked what advice he would offer to this year’s Stellar nominees, he said, “The foundations of Mission Operations represents the “Value” set for achieving excellence as a professional. If these standards are visible in every aspect of your work, you will be recognized as a person of integrity. With integrity comes trust, and with trust comes teamwork that will allow you to achieve virtually every goal.”

The RNASA Foundation takes great pleasure in awarding Mr. Kranz the Rotary National Award for Space Achievement’s National Space Trophy for his outstanding accomplishments. Congratulations, and thank you for your leadership and inspiration. 📧



Kranz inspires crowds all over the nation

Photo courtesy 2003 Cleveland Air Show