

50th IAA HISTORY OF ASTRONAUTICS SYMPOSIUM (E4)  
Memoirs & organisational histories (1)

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KARL HENIZE AND HIS SPACE CAREER

**Abstract**

Karl Gordon Henize had a long, diverse and eventful space career. He was born near Cincinnati, Ohio on October 17, 1926. Towards the end of World War 2, Karl enlisted in the Navy V-12 training program, which took him to the University of Virginia in Charlottesville. He continued his studies there after the war and received a BS in mathematics in 1947 and an MS in astronomy in 1948. Following graduation, he was employed by the University of Michigan to make spectral observations from an observatory at Bloomfountain, South Africa. After three years in there, Karl returned to the U.S. to complete a PhD in astronomy from the University of Michigan in 1954. As the International Year, IGY, and the space age approached, Dr. Fred Whipple, Director of the Smithsonian Astrophysical Observatory, recruited Karl in September 1956 to be the astronomer in charge of deploying and operating a global network of Baker-Nunn satellite tracking cameras. When Sputnik 1 was launched in October 1957, only one Baker-Nunn camera was completed, still at its manufacturer in South Pasadena, California. An observing team led by Karl operated the camera there in October and got photographs of Sputnik 1. By the end of the IGY in December 1958, Karl was heading the smoothly functioning global network of 12 Baker-Nunn stations. In 1959, Karl accepted a professorship in the astronomy department at Northwestern University. While there in 1966, during the Gemini manned missions, he was the Principal Investigator for an astronomy experiment. In August 1969, Karl was selected as a NASA scientist-astronaut at age 40. While an astronaut, he was the principal Investigator for Skylab Experiment S019. Finally in July and August 1985, Karl Henize flew on the Spacelab-2 Mission of the Challenger Space Shuttle. This mission included astronomical objectives using telescopes mounted on the Instrument Pointing System provided by the European Space Agency. After retiring from the astronaut corps in 1986 but while still working for NAA, an opportunity arose to join an expedition to climb Mount Everest. Karl's role in the expedition was to evaluate the performance of a NASA radiation measurement instrument, the Tissue Equivalent Proportional Counter, TEPC, as a function of altitude. On the way up the mountain, Karl suffered from high altitude pulmonary edema and died by 1:00 am on October 5, 1993. He was buried there. The TEPC now flies on the International Space Station.