

Dr. Ernst Stuhlinger

“To keep our own planet in a livable state, even from that standpoint, it will be very important to do space research and to develop a space program further and further,” once remarked Dr. Ernst Stuhlinger.

Stuhlinger was a world-renowned space scientist who began work in Germany in the 1930s and retired as associate director for science at the Marshall Space Flight Center on Dec. 28, 1975. He passed away on Sunday, May 25 in Huntsville, Alabama.

After working as a scientist for Germany during World War II, the U.S. Army employed Stuhlinger in Texas and New Mexico and then in Huntsville, Alabama in 1950 where he continued work on missile-related scientific projects. When parts of those laboratories were transferred to NASA in 1960, Stuhlinger moved to the new NASA Marshall Space Flight Center where he became director of the Space Sciences Laboratory. He was appointed Associate Director for Science in 1968 and worked closely with Dr. Wernher von Braun, the first Director of the Marshall Center.

“I had the pleasure of meeting with Dr. Stuhlinger in the past and was impressed with his knowledge and never-ending enthusiasm for the space program. Dr. Stuhlinger will be missed by many, but his contributions to space will always be valued and remembered,” said Marshall Center Director David King

Stuhlinger was a direct participant in the early planning for human lunar exploration and the Skylab Apollo Telescope Mount (ATM) which produced a wealth of new scientific information about the Sun. He also did early planning on the High Energy Astronomy Observatories and contributed to the initial phases of the Hubble Space Telescope.

Stuhlinger called the first lunar landing a “dream come true.” But he added, what Von Braun wanted to do after the Apollo flights was to build the space station and plan a flight to Mars.

Stuhlinger’s own work included studies of electric propulsion for exploring Mars, comets, asteroids and other targets of the solar system. He also did early work involving scientific payloads for the Space Shuttle. He was a member of several noted scientific societies.

After his retirement from NASA in 1975, he joined the University of Alabama in Huntsville as adjunct professor where he taught astrophysics and space sciences. He also spent several months in Germany under the Alexander von Humboldt research award program. In 1984 he accepted a position as senior research associate at an aerospace firm in Huntsville.

Besides authoring more than 200 papers about space-related subjects, he co-authored, or edited several books on aeronautical engineering, electric propulsion, ion propulsion, Skylab, Project Viking, Wernher von Braun, and Mars.

Born December 19, 1913, Stuhlinger was the son of a school teacher in a farming village in southern Germany. In 1922, his family moved to Tuebingen, Germany, where Stuhlinger attended high school and studied physics, mathematics, and zoology eventually receiving his Doctorate in Physics with a thesis on "Ionization Rate of Cosmic Rays" in 1936. He was appointed as an Assistant Professor of the Physics Department of the Berlin Institute of Technology and was a member of the faculty there from 1936 to 1941. He was an associate of Hans Geiger, inventor of the Geiger counter.

From 1939 until 1941, Stuhlinger was a member of a research group conducting studies in nuclear physics. In 1938, Stuhlinger became a member of the German atomic energy team.

Two years later, he was drafted into the German Army. "I was a PFC in the German army, and I was marching toward the steppes of the Ukraine when an order reached me in early 1943 to come and join the Peenemuende group." At Peenemuende, Stuhlinger carried on research in guidance and control systems and assisted in the development of the V-2, a five and one-half-ton rocket that could travel 120 miles. "I saw for the first time what in future years I would see many times, and millions of people around the globe would see at rocket launchings."

In 1946 Stuhlinger came to the United States along with several other members of the Wernher von Braun team to work for the United States Army in Texas and New Mexico. There he helped Von Braun's group develop, test and prepare scientific instrumentation for a series of V-2 rockets that the U.S. Army had recovered in Germany.

While at Fort Bliss, Texas, Stuhlinger also began studying electric space propulsion systems. In 1950, Dr. von Braun and his group moved to Huntsville, Alabama, where the Army

established the Ordnance Missile Laboratories. Under the auspices of Von Braun, the team grew quickly, developing the Redstone, the Jupiter, and the Pershing missiles.

Stuhlinger became an American citizen on April 14, 1955. During those years, he worked on electric equipment, including magnetic and transistor amplifiers, and on special rocket instrumentation.. He continued his studies of space flight missions with electrically charged spacecraft during several extended stays in West Germany. From 1956 until July 1, 1960, Stuhlinger was Director of the Research Projects Laboratory, Army Ballistic Missile Agency for the U. S. Army Ordnance Missile Command at Redstone Arsenal.

On January 31, 1958, the Von Braun group launched Explorer I, America's first satellite. In Huntsville, Stuhlinger became chief of a laboratory for the development of control and measuring systems. He continued receiving recognition for his feasibility and design studies of electrical propulsion for space ships and was awarded the American Rocket Society's Propulsion Award soon after joining the Marshall Center in 1960.

Stuhlinger called Von Braun "a very great influence, a very decided influence." In a 1999 interview he added, "I figured out the other day that I was present in about 1,500 meetings which he (Von Braun) chaired, technical meetings some of them also going into questions of how to approach a project, how to get it through, to get it accepted, and how to approach other people to make them understanding and cooperative."