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DR. ERNST STUHLINGER

Dr. Ernst Stuhlinger is associate director for science at NASA's George C. Marshall Space Flight Center in Huntsville, Alabama. In this capacity he shares responsibility for developing and reviewing the Center's science-oriented activities and for establishing and maintaining interaction with scientific personnel in NASA, other government agencies, universities and laboratories throughout the nation and abroad.

A native of Germany, Dr. Stuhlinger was born in Niederrimbach, Wuerttemberg, on December 19, 1913. He was educated in German schools and attended the University of Tuebingen, where he received his doctorate in physics in 1936.

As a member of a research group studying nuclear physics, Dr. Stuhlinger worked for seven years with Dr. Hans Geiger, developer of the Geiger counter. From 1936 to 1941 he served as assistant professor in the Physics Department of the Berlin Institute of Technology.

After two years of service in the German Army, Dr. Stuhlinger transferred in 1943 to the Rocket Development and Test Center near

Peenemuende, Germany, where his work in rocketry began. He came to the U. S. after the end of World War II together with Dr. Werner von Braun and the 118-member German rocketry team then placed under contract to the U.S. Army.

From 1946 to 1950, Dr. Stuhlinger worked at Fort Bliss, Tex. He moved to Huntsville in 1950, when the Army's rocket research and development activities were transferred from Fort Bliss to Redstone Arsenal, Ala. At the new location, he became chief of the Research Projects Office and later director of the Research Projects Laboratory, then an element of the Development Operations Division of the Army Ballistic Missile Agency.

In 1960, when the Development Operations Division became the nucleus for the establishment of the George C. Marshall Space Flight Center, Dr. Stuhlinger transferred to NASA. At the Marshall Center, he continued serving as director of the Research Projects Laboratory, later named Space Sciences Laboratory. He was appointed to his current position in February 1969.

Under Dr. Stuhlinger's direction, early planning work for lunar exploration and for the Apollo Telescope Mount was initiated. The

Apollo Telescope Mount later became part of the Skylab experimental space station, launched in 1973, and produced an impressive wealth of new scientific data of the Sun. Dr. Stuhlinger was also responsible for the early planning of a satellite project to study high energy radiations, which is now known as the High Energy Astronomical Observatory (HEAO) Project. Work in his laboratory also included preliminary studies of a ~~Large Space Telescope~~ ^{*} for stellar observations, ~~comets~~ comets, asteroids and other targets in the solar system with electrically propelled probes. More recently, Dr. Stuhlinger participated in the planning of scientific payloads for the Space Shuttle.

The author of a book on electric propulsion and co-author of a number of other books related to manned and unmanned space activities and space sciences, Dr. Stuhlinger has written more than 100 technical articles and scientific papers on nuclear and space physics, electric and nuclear rocket propulsion, space vehicles, satellites, astronomy and the future of space flight. He has gained scientific recognition in the U.S. and abroad for his studies of electric propulsion systems for space vehicles and his active role in furthering the exploration of space.

Among the many honors and awards presented to him are the

following:

* Since 1947, he has studied possibilities of electric propulsion for space vehicles; this work resulted in numerous proposals for the exploration of planets, comets...

- 1959: The U. S. Army's highest civilian award, the Exceptional Civilian Service Medal;
- 1960: The American Rocket Society's Propulsion Award;
- 1962: The Galabert Prize for Achievement in the Field of Astronautics, Paris;
- The Hermann Oberth Award of the Huntsville Chapter, American Institute of Aeronautics and Astronautics;
- 1964: The Hermann Oberth Prize from the Hermann Oberth Society, Germany;
- The NASA Medal for Exceptional Scientific Achievement;
- 1969: The NASA Exceptional Service Award;
- 1970: Conrad Roentgen Award;
- 1973: Honorary Degree of "Doctor Engineer" by the Technical University of Berlin.

Dr. Stuhlinger is a Fellow of the American Institute of Aeronautics and Astronautics, a Fellow of the American Astronautical Society, an honorary member of the German Society for Space Flight, of the Hermann Oberth Society, and of the Austrian Society for Space Flight, and a Fellow of the British Interplanetary Society. He is a member of the American Astronomical Society, the International Academy of

Astronautics, the American Optical Society, the German Roentgen Society, the Alabama Academy of Science, and the Von Braun Astronomical Society, which he helped to found.

Dr. Stuhlinger became a U. S. citizen in April 1955. He is married to the former Miss Irmgard Lotze, also a native of Germany. The couple resides in Huntsville and has three children.

The Marshall Center is one of the field centers of the National Aeronautics and Space Administration and has played a leading role in the nation's manned space flight program. It developed the Saturn launch vehicles and Lunar Roving Vehicles for the Apollo lunar landing program and Skylab, the first U. S. space station. For the Apollo Soyuz Test Project, a joint Earth orbital rendezvous and docking mission with the U.S.S.R. conducted in July 1975, the Center provided a Saturn IB launch vehicle and managed a series of materials processing experiments.

At present, a major portion of the Marshall Center's efforts is directed toward the development of an economical, reusable and versatile new space transportation system, the Space Shuttle. The Marshall Center has charge of the solid rocket boosters, the main engines for the orbiter, and the expendable propellant tank. In addition, the Marshall Center is responsible for a range of planned scientific and applications payloads including the High Energy Astronomy Observatory and the Large Space Telescope. The Marshall Center has the leading role in the U.S. portion of the Spacelab project. Spacelab is being developed and manufactured by the European Space Administration (ESA). Research is also conducted in areas such as remote sensing of Earth resources, environmental and space sciences and manufacturing in space.

Under a cooperative agreement with the Energy Research and Development Administration (ERDA), the Center is also directing a development program in support of ERDA's Solar Heating and Cooling Demonstration activities to help solve the nation's energy problems.