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# Dr. Wernher von Braun Exploration Forum Program 

Dr. Wernher von Braun

Music-String Quartet from the Huntsville Symphony Orchestra Introduction-Dr. Charles R. Chappell<br>Dr. von Braun Remembered-Dr. Ernst Stuhlinger<br>Exploration of the Moon and Mars-Dr. Harrison J. Schmitt<br>The Global Environment and World Cooperation-Mr. John Denver<br>Questions and Summary Thoughts-Dr. Schmitt and Mr. Denver

Dr. Wernher von Braun was born in Wirsitz, Germany, March 23, 1912, the son of Baron Magnus and Emmy von Braun. He attended various schools in Germany since his father, a government official (Secretary of Agriculture under President von Hindenburg), was transferred frequently. He received his Ph.D. in physics at the University of Berlin in 1934. His university research led to full-time employment as a rocket development engineer with the German Ordinance Department.

In the closing months of World War II, Dr. von Braun led the majority of Peenemuende rocket specialists out of East Germany and established contact with the Western Allies. These transports included many families and great amounts of documentation and equipment. He and his colleagues came to the United States in September, 1945, under contract to the U.S. Army.

In 1950, the group was transferred to Huntsville, Alabama. From April 1950, until February, 1956, Dr. von Braun was Technical Director, Guided Missile Development Division, Redstone Arsenal. During these years the group developed the Redstone, the first large guided ballistic missile system to be introduced in the inventory of the U. S. Department of Defense. They also achieved the first successful recovery of an animal from a rocket flight.

In July, 1960, he and his Army Ballistic Missile Agency development team were transferred to the National Aeronautics and Space Administration (NASA) as the nucleus of the George C. Marshall Space Flight Center. During the period July, 1960 to February, 1970, Dr. von Braun served as Director of the Marshall Center in Huntsvile. Under his leadership, a continuing series of historic firsts in space was achieved.

In March, 1970, Dr. von Braun transferred to NASA Headquarters to become Deputy Associate Administrator. In that position, he was responsible for providing leadership in program planning, chairing the NASA Planning Board. On July 1, 1972, Dr. von Braun left government service and became Vice-President, Engineering and Development for Fairchild, Inc., Germantown, Maryland. Due to ill health, he retired from Fairchild in January, 1977.

Dr. von Braun died, after a prolonged illness, on June 16, 1977. He is survived by his wife, Maria and his children Iris, Margrit and Peter. Dr. von Braun's interesting life and astounding accomplishments have left a historic mark of epic proportions on the history of space exploration.

## The National Space Club's First Annual

## Dr. Wernher von Braun Scholarship and Award Dinner Program



> The National Space Club

The National Space Club, founded as the National Rocket Club in 1957, is a non-technical organization composed of representatives of industry, government, educational institutions, the press and others, that seek to promote United States leadership in the field of astronautics. The objectives of the club are to foster policies and programs necessary to establish and maintain U. S. leadership in astronautics and to stimulate the advancement and application of rocketry, space flight, and related technologies for the benefit of all mankind and, when necessary, the defense of the United States against aggression.

## The Dr. Wernher von Braun Scholarship

## The Dr. Wernher

 von Braun Space Flight AwardThis scholarship, in memory of Dr. von Braun, is to be awarded to an undergraduate upperclassman in a space related field. The ideal recipient will be a student dedicated to the pursuit of space exploration, flight development, and space engineering. This endowed scholarship provided by a $\$ 10,000$ contribution by the National Space Club, will be placed with The University of Alabama in Huntsville Foundation. The recipient of the scholarship will be invited to participate in selected National Space Club activities. Both The University of Alabama in Huntsville and the National Space Club are committed to the motivation of young people to pursue careers in science and engineering which will advance scientific knowledge through space research and exploration. The partnership formed by this scholarship will symbolize a mutually beneficial relationship which ensures an even brighter future for mankind.

This award is presented annually for great achievement in advancing space flight programs contributing to United States leadership in astronautics. This National Space Club Huntsville Committee Award specifically recognizes achievements in space flight and technology embraced by the ideals and visions of Dr. von Braun.

John Denver is a co-founder of the Windstar Foundation, and a world-renowned actor, singer, and songwriter. He is a communicator with a unique talent which enables him to share feelings, observations and opinions in a way in which all people, regardless of language, geographic, economic and political backgrounds can relate to his messages.

It is this talent for communicating that has led Denver's career in the direction of multiple exchanges with the Soviet Union in working toward global cooperation. He was invited by the Soviet Union of Composers to perform in their country in 1984. The success of that visit led to a 12 -day concert tour of the U.S.S.R. in June 1985. Those were the first performances by an American artist since the suspension of cultural exchanges between the superpowers that followed the Soviet invasion of Afghanistan. Denver returned to the Soviet Union in 1987 to do a benefit concert for the victims of the Chernobyl nuclear power plant disaster.
"I'm a global citizen," he says, "I've created that myself and I don't want to step away from it. I want to work in whatever I do -- my music, my writing, my performing, my home or personal life -- in a way that is directed toward a world in balance, a world that creates a better quality of life for all people." Thus, the natural progression to the establishment of the Windstar Foundation, a non-profit educational and research center founded by Denver in 1976. The foundation is a catalyst for personal responsibility toward action which creates a sustainable future on a global scale.

The child of an Air Force family, Denver has a lifelong interest in aviation. He holds an instrument rating that allows him to fly as a captain at all altitudes. He was honored by the Experimental Aircraft Association for his support of general and experimental aircraft, and was recently selected to be on their Board of Advisors. A vocal advocate of the manned space program, he has been invited by NASA to attend many launchings, and in 1985, was awarded a NASA medal normally reserved for spaceflight designers and engineers.

Denver has said, "I would give my guitar to go into space. I've expressed this to NASA. Unfortunately, it looks like a civilian in the American space program is now a long way off. To fly with the Soviets greatly enhances what I already considered an incredible opportunity. As an example of U. S. - Soviet cooperation, as a symbol of our mutual desire for peace on Earth and in space, and as a demonstration of the possibilities that space exploration offers every man and woman, what a great and useful way to spend a year of my life."


Dr. Harrison Schmitt

Dr. Harrison "Jack" Schmitt has the varied experience of a geologist, astronaut, pilot, administrator, educator, writer, and United States Senator. He trained as a geologist and scientist at the California Institute of Technology, as a Fulbright Scholar at the University of Oslo, and at Harvard University, receiving his Ph.D. in geology from Harvard in 1964 based on earlier field studies conducted in Norway.

He was selected for the Apollo Scientist-Astronaut program in 1965 and served as the Lunar Module Pilot for Apollo 17 -- the last Apollo mission to the Moon. As the only scientist to go to the Moon, he was also the last of twelve men to step on the Moon. Schmitt's studies of the Valley of Taurus-Littrow on the Moon in 1972, as well as his earlier scientific work, made Schmitt one of the leading experts on the history of the terrestrial planets.

After organizing and directing the activities of the Scientist-Astronaut Office and of the Energy Program Office for NASA from 1973 to 1975, Schmitt fulfilled a long-standing commitment by entering politics. He was elected to the U.S. Senate from his home state of New Mexico in 1976.

In his last two years in the Senate, Senator Schmitt was Chairman of the Senate Commerce Committee's Subcommittee on Science, Technology, and Space and of the Senate Appropriations Committee's Subcommittee on Labor, Health and Human Services, and Education. He currently serves as a member of the Army Science Board and as consultant to the National Strategic Materials and Minerals Program Advisory Committee.

Harrison Schmitt is consulting, speaking, and writing on a wide range of business, foundation, and government initiatives. His principle activities are in the fields of technology, space, defense, biomedicine, geology, and policy issues of the future. He brings to the consideration of complex public and corporate concerns a unique breath of experience ranging from the scientific to the practical and from the administrative to the political.

Dr. Ernst Stuhlinger, a native-born West German, has contributed immeasurably to the U.S. Space Program since his arrival to the United States in 1946 to become a member of the Wernher von Braun rocket development group. Upon arrival, Stuhlinger was assigned to the preparation, launching, and development of scientific instrumentation of V - 2 rockets. In the next few years, he began major assignments in telemetry, guidance and control systems, and rocket instrumentation.

In 1950, von Braun and his group moved to Huntsville. This brought new opportunities for research to Stuhlinger in the areas of guidance, control and measuring systems. Noteable among his accomplishments at the time is his contribution to the development of the first Explorer Satellite.

Advancement was inevitable for this promising space scientist when in 1960, Dr. Stuhlinger assumed responsibilities as Director of the Space Sciences Lab at the George C. Marshall Space Flight Center. Significant contributions to Skylab and the early planning of the High Energy Astronomical Observatory and the large Space Telescope were placed among his repertoire of research projects. After eight years in this position, Stuhlinger assumed responsibilities as Associate Director for Science at the Marshall Space Flight Center in 1968.

After 30 years of government service, Stuhlinger retired from NASA on January 2, 1976 and joined the University of Alabama in Huntsville as Senior Research Scientist and Adjunct Professor in Physics. However, he remained involved in the organization and chairing of symposia on space matters as well as consulting work in electric propulsion and materials processing under weightlessness.

In 1984, Stuhlinger joined Teledyne Brown Engineering Company as a Senior Research Associate. He has been an active participant in the commercialization of material processing in space and the planning and design of a material processing facility on the Space Station. In addition, Stuhlinger became actively involved in studies of a Free Flyer and the design and building of a drop tube for metallurgical research.

