

**Dr. Ruben F. Mettler**  
**Inducted 2000**



Born February 23, 1924, Dr. "Rube" Mettler grew up on a farm near Shafter, California. An outstanding student, he received a scholarship to attend Stanford University, where he matriculated in 1941, planning to study law. With America's entry into World War II, however, Mettler volunteered for the U.S. Navy. The Navy sent him to an accelerated program at the California Institute of Technology, where he earned a Bachelor of Science degree in eighteen months. He next attended midshipman school and the radar training school at the Massachusetts Institute of Technology, then served in the Pacific. After the war ended, the Navy assigned him to the instrumentation team for the Bikini atomic bomb tests where he witnessed at close range the weapon explosions. Following these experiences, Mettler decided to pursue further education in electrical and aeronautical engineering at Caltech, where he earned a Master of Science degree in 1947 and a Ph.D. in 1949, graduating at the top of his class.

Recruited into Hughes Aircraft Corporation, Mettler rose quickly through the ranks. Within a year, his work with Jack Irving on the lead collision fire control system for the Falcon missile and guided rockets had resulted in a significant expansion of business, and Mettler became Project Manager for Radar, Guidance and Fire Control Systems for Fighter Aircraft. He remained with Hughes Aircraft until 1954, when he moved to Washington as a consultant to the Department of Defense. In that capacity he reported to, among others, Donald Quarles, Assistant Secretary of Defense for Research and Development, and Trevor Gardner, Special Assistant for Research and Development in the Office of the Secretary of the Air Force.

Mettler joined Ramo-Wooldridge Corporation in 1955 as assistant director of the Guided Missile Research Division and Director of System Engineering and Technical Direction (SE&TD) for the Thor intermediate-range ballistic missile (IRBM) program. Together with his Air Force

counterparts, Mettler oversaw one of the most ambitious, fast-paced development programs ever undertaken—Thor, the first Air Force missile to use inertial guidance. Just thirteen months after the start of the program, the first Thor was ready for flight testing, and Thor missiles were produced and deployed in England in three and a half years. He managed SE&TD for the Minuteman intercontinental ballistic missile (ICBM) program in 1957 and the following year, assumed the title of Director of SE&TD for Thor, Atlas, Titan, and Minuteman. In that capacity, he worked closely with Air Force engineers to overcome serious technical challenges, especially in the Minuteman program. In mid-1959, when the Air Force accelerated Minuteman's date of initial operational capability by a year, Mettler recalled going "into a frenzy" because "it required moving heaven and earth" to meet the new goal. Nonetheless, the Minuteman team successfully met the challenge.

With the 1958 transition from Ramo-Wooldridge to TRW, Inc., Mettler's responsibilities grew. He served as the executive vice-president for Space Technology Laboratories (STL) during 1959-1962, then as STL president, replacing Louis Dunn. During that period, TRW/STL was the first commercial company to design and build proprietary satellites, and the first contractor to invest in a large satellite test and production facility, without government funding. STL then became the first contractor selected by NASA to design and build a large scientific spacecraft. In 1963, he became president of TRW Systems Group, which grew out of STL and expanded its leadership in development of large, complex spacecraft for both the Air Force and NASA. Mettler was elected as TRW's president and chief operating officer during 1969-1977 and as its chairman and chief executive officer during 1977-1988. He maintained the corporation's focus during the 1980s by continued strong participation in Air Force and NASA space programs and ballistic missile programs, along with a growing automotive business and by launching initiatives in quality, productivity, technology, manpower development, and management systems. Although he retired in January 1989, Mettler continued on TRW's board of directors until 1994, having occupied a seat there for nearly thirty years. Dr. Mettler died in May 2006.