



The Time and Frequency Control Community Loses One of its Pioneers and Leaders:

HELMUT HELLWIG (1938-2000)

The time and frequency control community lost one of its leaders on July 22, 2000 when Helmut Hellwig passed away. Helmut made many scientific and management contributions to our field and he will be missed by his many friends and colleagues.

Helmut Hellwig was born on May 7, 1938 in Berlin, Germany. His professional education in Germany included a 1963 Master of Science degree in physics and a 1966 Doctorate in electrical engineering, both from the Technical University of Berlin. During that period Helmut was a Researcher at the Heinrich Hertz Institute in Berlin. He immigrated to the United States in 1966 and became a U.S. citizen in 1972.

Dr. Hellwig was a research physicist in the field of atomic frequency standards for the U.S. Army Electronics Command in Ft. Monmouth, NJ between 1966 and 1969, and a Time and Frequency Division Research Physicist, Section Chief and Associate Division Chief at the National Bureau of Standards (NBS) in Boulder, CO between 1969-1979. While there, Helmut established an organizational culture of advanced research in the field of atomic clocks which persists to this day.

In 1979, Helmut became the President of Frequency and Time Systems, Inc. (FTS, now part of Datum, Inc.), a research and manufacturing company in Beverly, MA. He led the successful qualification and production of satellite cesium clocks for the Global Positioning System (GPS).

In 1986, Helmut returned to NBS as Associate Director. Then, in 1990 he was appointed Director of the Air Force Office of Scientific Research, Bolling Air Force Base, DC, where he was responsible for managing the entire basic research program of the U.S. Air Force. He built a strong research infrastructure carried out by approximately 6,000 researchers in Air Force Laboratories, universities and industries.

In 1996, Helmut was appointed Deputy Assistant Secretary for Science, Technology and Engineering, Office of the Secretary of the Air Force (Acquisition) in Arlington, VA. In that position, he was responsible for all Air Force investments in science and technology. Helmut retired from this position in 1999.

He was a Fellow of the IEEE, a Member of the American Physical Society and Sigma Xi. He was also a member of the International Scientific Radio Union (URSI), the International Radio Consultative Committee (CCIR) and the International Astronomical Union (IAU)

Helmut was very active in IEEE and frequency control committees, including the I&M and UFFC Societies. He was an Associate Editor of the Transactions on UFFC, Chairman of the I&M Technical Committee on Time and Frequency, and a member of the PTTI Executive Committee. He has also organized or co-organized numerous national and international conferences.

He was granted several patents in the field of atomic frequency standards, and published about 100 technical and scientific articles and papers.

Helmut received a number of professional awards, including an honorary doctorate from the University of Besancon, France in 1989 for his work on atomic frequency standards, and a 1996 Air Force Senior Executive Service, Presidential Rank Award for exceptional performance over an extended period of time. He was also the recipient of the E.U. Condon Award, the IR-100 award and the United States Army Science Award.

Helmut is survived by his wife Thekla, his two sons Frank and Peter, and two granddaughters.

Donations may be made in Helmut Hellwig's name to RICA, a facility for children and adolescents with severe emotional disabilities at 15000 Broschart Road, Rockville MD 20850.