MICROWAVE THEORY AND TECHNIQUES SOCIETY

1974 MICROWAVE CAREER AWARD

TO

Harold Alden Wheeler

H. A. Wheeler was unanimously endorsed by the MTT Society's ADCOM to receive the second Microwave Career Award. This action, taken on the recommendation of MTT Awards Committee, chaired by John Horton, recognizes "a career of meritorious achievement and outstanding technical contribution in the field of microwave theory and techniques."

Mr. Wheeler graduated from George Washington University in 1925 with the degree of B.S. in Physics. In 1972 he received the honorary degree of Doctor of Science.

While in college, he became acquainted with Professor Hazeltine of Stevens Tech, who was then designing the "Neutrodyne" receiver. This design captured the market, and its success led to the formation of Hazeltine Corporation as a patent licensing and engineering organization. Shortly afterward, Wheeler invented and demonstrated the diode AVC which was generally adopted for broadcast receivers and is still used in all AM and TV receivers.

Until World War II, he was active in designing and testing broadcast receivers. From 1930, he was in charge of the company's Bayside Laboratory, and from 1939 was VP and Chief Consulting Engineer at the newly commissioned Little Neck Laboratory. There he was active in FM and in the TV developments for which he was awarded the Morris Liebmann Prize by IRE in 1940.

During World War II, he continued in this capacity in the Navy program of IFF (Interrogation Friend or Foe) which was an accessory to radar.

After the war, Wheeler formed an independent engineering group, Wheeler Laboratories, Inc., which achieved recognition in the engineering of microwave circuits, tracking-radar antennas, and phased arrays for military and aerospace applications. This company, with laboratories in Great Neck and Smithtown, was acquired by Hazeltine Corporation in 1959 as a subsidiary. In 1971, the WL staff was merged into the Research Laboratories of Hazeltine in Greenlawn, where they are now active in antenna developments for various purposes, especially for the Doppler MLS and other applications in air traffic control.

Wheeler is the author of many technical papers presented in IRE-IEEE forums and published in their periodicals. His specialties before the war were related to radio receivers for AM, FM, and TV. During and after the war, he specialized in the fields of microwaves and of antennas for a great variety of applications. He has been awarded about 180 U.S. patents and many foreign patents. He is probably best known for his 1939 IRE paper entitled, "The Interpretation of Amplitude and Phase Distortion in Terms of Paired Echos," which was related to TV. He has served as chairman of many committees and was elected a Director of IRE for two terms, 1940-46. He was a Fellow of both IRE and AIEE, and received the Medal of Honor from the successor IEEE in 1964.