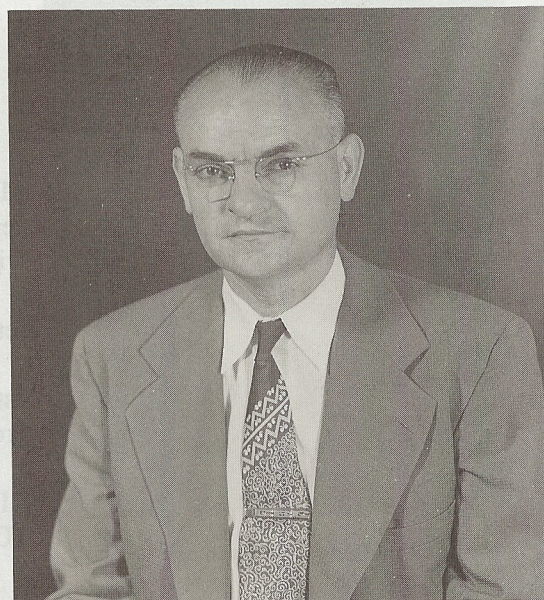


# 1993 Pioneer Award

The Pioneer Award recognizes contributions which have had major impact on our field and have stood the test of time. The basis for the nomination is an archival paper in the field of interest of MTT-S, published at least 20 years prior to the year of the award, i.e. it recognizes important technical contributions that have had a continuing impact on the practice of microwave engineering, for a period exceeding two decades.

In 1993 we have two winners: Dr. Claud Cleeton, retired Associate Director of the Naval Research Laboratory, and Dr. C. Lester Hogan, retired President and Chief Executive Officer of Fairchild Camera and Instrument.

Dr. Cleeton is cited "For Pioneering Contributions to Microwave Spectroscopy." Dr. Cleeton's notebook is now in the Smithsonian National Museum of American History, Washington DC, Accession 1984.0408. Some of the fundamental work was published in a paper entitled: "Electromagnetic Waves of 1.1 cm Wavelength and Absorption Spectrum of Ammonia," Phys. Rev., Vol. 45, pp 234-237, Feb. 15, 1934.



Claud E. Cleeton

**Claud E. Cleeton** was born December 11, 1907, in Schuyler County, Missouri, and grew up on a farm there. He married Mary Ellen Underwood, and they live in Bellevue, Washington. They have two daughters: Sarah Elizabeth Kakaley of Renton, Washington, and Sue Ellen Guldi of Kirkland, Washington. He received the BS degree in Education from the Northeast Missouri State Teachers College in 1928, the MS degree in Physics from the University of Missouri in 1930, and the PhD degree in Physics from the University of Michigan in 1935.

Dr. Cleeton was an Instructor in Physics for a total of five years at the Junior College in Moberly, MO, the Teachers College in Kirksville, MO and the University of Michigan. He joined the U.S. Naval Research Laboratory in Washington D.C. in 1936 where he held various positions in the field of Electronics until retiring in 1969 as Associate Director of Research in Electronics.

He is a fellow of the IEEE, member of the American Physical Society and Sigma Xi. He received numerous awards among which was the Present's Certificate of Merit from President Truman in 1946 and the Navy's Distinguished Civilian Service Award in 1969.

He was granted a dozen patents in electronics and after retirement published two books, "The Art of Independent Investing," Prentice-Hall and "Strategies for the Options Trader", John Wiley. In recent years he has written and marketed computer programs.

His PhD thesis at the University of Michigan was "1.1 cm Waves and the Absorption Spectrum of Ammonia". A microwave spectrometer was constructed for this work. It used two large Navy brass searchlight mirrors and a diffraction grating made of 18 aluminum sheets 7.4 cm wide. These elements were mounted in a frame and hinged so as to rotate together. The source was a split anode magnetron and the receiver a crystal detector. An absorption cell was made of rubberized cloth and was arranged to be lowered into the beam for the measurements.