MICROWAVE THEORY AND TECHNIQUES SOCIETY

1975 MICROWAVE CAREER AWARD

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Henry J. Riblet

For a career of meritorious achievement and outstanding technical contribution in the field of microwave theory and techniques.

Henry J. Riblet received the B.S. degree in 1935, a Master's degree in 1937 and the Ph.D. degree in 1939, all from Yale University and all in mathematics.

He taught mathematics for three years, first at Adelphi College and then at Hofstra College, both on Long Island. It was then that he received his introduction to microwave circuits from W. W. Hanson for whom he made some of the first calculations of the resonant frequencies of Klystron cavities. At Bill Hanson's suggestion, he joined the Radiation Laboratory where he worked under L. C. Van Alta as head of that section of the antenna group special-izing in linear arrays. When the war ended, he joined the Submarine Signal Co. as head of their antenna group. When the Submarine Signal Co. was merged into the Raytheon, he, with three of his associates -- T. S. Saad, N. Tucker, and R. Williston, formed the Microwave Development Laboratories where he has been employed since as President and Treasurer. He has also served since (at various times) as an officer and director of the Ferrotec Corp., Parametric Industries, and Americon Microwave in the formation of each, of which he played some part. From 1960 to 1963 he taught at Harvard University with the title of Professor of Engineering Practice.

His interest in electromagnetic theory, mechanical devices and applied mathematics has resulted in papers concerned with the theory and design of microwave circuits, as well as a number of patents for antennas and R. F. components. This includes the design and/or work on the theory of omni-directional antennas, the slotted dipole, multi-hole topwall directional couplers, side and topwall 3 db hybrids, crossguide couplers, rotary



joints, waveguide switches, stepped impedance transformers, direct coupled and inter-digital filters and stepped waveguide twists.

More recently he has written a series of notes concerned with the characteristic impedance of coaxial structures in which one or both of the conductors is rectangular and has just completed the development of a class of reactively compensated optimum impedance transformers.

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