

1974 SPECIAL RECOGNITION
MICROWAVE APPLICATION AWARD

TO

PHILLIP H. SMITH

"For the Application of Microwave Theory and Techniques to the practical realization of a Circular Transmission Line Chart for analyzing Microwave Circuits, the SMITH CHART."

Phillip H. Smith received his B.S. in Electrical Engineering from Tufts College in 1928 and upon graduation, joined the technical staff of Bell Telephone Laboratories where he became involved in the early development of transmission lines and directional antennas for the Bell System's shortwave overseas radio telephone circuits. During this time he developed early forms of the chart which was later to become generally known as the "Smith Chart."

From 1935 to the outbreak of World War II, Mr. Smith was engaged in the design of directional antenna equipment for commercial AM radio broadcasting. During the war his experience with directional antennas was utilized in the design and development of RADAR antennas where his numerous contributions placed him on the Reserved List of War Manpower Commission's Committee of Scientific and Research Personnel.

Following the war, Mr. Smith turned his attention to commercial FM radio broadcasting antenna design and subsequently invented the "Cloverleaf" antenna. More recently he has been involved in Military weapon systems studies and design, and has supervised groups responsible for the electrical design of the DEW line, SAGE systems, NIKE-ZEUS, and NIKE-X radar antennas.

Mr. Smith retired from Bell Laboratories in 1970. He is now a consultant in Berkeley Heights, NJ.

