1992 N. Walter Cox Award

Barry E. Spielman

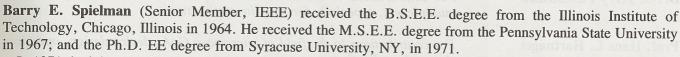
The N. Walter Cox Award has been established in recognition of the qualities of N. Walter Cox and his service to the MTT Society prior to his untimely death in 1988.

It is given aperiodically to a Society volunteer whose efforts on behalf of MTT-S best exemplify his spirit and dedication. It consists of a plaque.

This year's recipient is Dr. Barry Spielman. He served in many different MTT-S functions, including as 1988 President. In all his asignments he

distinguised himself through his talent to very discretely use his moderating influence to defuse critical situations while still keeping the goals in focus.

The citation reads: "For Exemplary Service Given in a Spirit of Selfless Dedication and Cooperation".



In 1971, he joined the Naval Research Laboratory (NRL), Washington, D.C., as a research electronics engineer at which time he performed research involving application of numerical computational and classical methods of applied mathematics for analyzing isolated and coupled, novel, planar transmission structures leading to microwave integrated circuit (IC) components such as directional couplers, filters, and phase shifters. He corroborated analyzed performance using experimental models. He became Head to the Solid State Circuits Section at NRL in 1978 at which time he performed and led a variety of research projects in the areas of microwave and millimeter-wave component technology, encompassing both monolithic and hybrid IC technologies. These projects spanned research activity on electromagnetic wave propagation in arbitrary, mixed metal and dielectric planar media, dielectic planar resonators, fin line Schottky mixers for the mm-wave regime, nonlinear MESFET device and circuit modeling leading to microwave amplifiers, oscillators, multipliers, and active filters, InP mm-wave monolithic circuits, and microwave and mm-wave control components. He became Head of the Microwave Technology Branch at NRL in 1984. In this position he performed and supervised research on and exploratory development of devices, circuits and components for RF and signal processing functions, spanning frequencies from about 1 to 1000 GHz. More specifically, some of this work included R&D of electrically-large and heterostructure semi-conductor devices, monolithic circuits in III-Vs and silicon, low-loss dielectric-based guiding and resonant structures, and superconducting mixers/detectors. This research group became the focal point for the Navy's GaAs MMIC R&D activity. In 1987, he joined the Washington University in St. Louis, MO, where he currently serves as Professor in and Chairman of the Department of Electrical Engineering. He is currently engaged in research on thin-film, superconducting, microwave electronics. He has published and delivered more than sixty publications and presentations in the microwave field.

Dr. Spielman has served as President of the Microwave Theory and Techniques Society Administrative Committee.