



Neil Wilson

Wall Of Honor 2021 RADAR Systems Technology

Neil Wilson arrived at Camp Evans in 1953 to work in the Microwave/Millimeter Wave Vacuum Tubes Branch, which was part of the Micro/MMW Devices Division. The overarching organization at that time was known as the Signal Corps engineering Laboratory (SCEL). The labs at Camp Evans and Fort Monmouth were ultimately part of the Army's Electronics Command which was under the Army Material Command (AMC).

During these years, Wilson performed internal experimental investigations and industrial development of high power microwave tubes for the Army's next generation radars and jammers. This technology was critical because of the emerging threats under development in Soviet Union Military Systems. There was a compelling and urgent need for the United States Army and the other services to quickly advance the state-of-the-art of Battle Automated Systems transmitters and receivers to meet and overcome the threat. Neil Wilson was instrumental in the success of the Department of Defense in these highly esoteric technical areas. He was directly involved in the successful development of the Coupled Cavity Traveling Wave Tube (TWT) amplifiers for the AN/TPQ-36 and AN/TPQ-37 Firefinder counter-mortar and counter-battery radars.

Wilson also provided key technical backup for the Joint Stars air to ground radar system, which was a joint Army/Air Force development and the premier target detection system during the First and Second Gulf Wars. Early in his career Neil provided key technical support for the AN/MPQ-4A counter-battery radar as well as for the AN/PPS-5 Army ground radar developed at Camp Evans. Other organizations specifically requested his technical support for Ballistic Missile Defense applications, and the development by the U.S. Navy of the critical AEGIS shipboard air defense radar system.

Wilson supported other Camp Evans system developments such as the AN/ALQ-136 radar jammer and the PPN-19 miniature radar beacon for the Special Operations Command. It was used by Army ground units to provide tactical aircraft with terminal guidance for ordnance delivery or drop zone locations. He worked on the Crossed-Field Amplifiers and Helix TWTs for the Patriot Air Defense missile system and the Strategic Defense Initiative (SDI) the development of wideband millimeter wave TWTs and special subsystems for Electronic Countermeasures applications.

Neil published many well-regarded technical presentations, including: "Soviet Microwave /Millimeter Wave Power Tubes" at IEEE ELECTRO-89 in New York City. He also served on many DoD Advisory Groups and chaired many technical panels. In 1982, Neil was chairman of a committee of the Institute of Electrical and Electronics Engineers (IEEE) International Electron Devices Meeting in San Francisco. At the time Neil was chief of the Microwave/Millimeter Wave Tubes Branch in the Army's Electronic Research and Development Command (ERADCOM) Electronic Technology and Devices Laboratory.

In June 1989, Wilson retired from the Department of the Army after 35 years of outstanding service. He was a technical consultant for many years due to his expertise in Microwave and Millimeter tube technology. Initially, he was affiliated with the Los Alamos National Laboratory and Research Associates of Syracuse.

After 15 years as an employee for General Technical Services (GTS) founded by Mike Mirarchi, a previous Wall of Honor honoree, Wilson fully retired in September 2021. Neil currently resides with his wife, Helen in Ocean Township New Jersey. They have three children: Neil, Gretchen and Amanda.

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