



## John W. Marchetti

John Marchetti was born to Italian immigrants in Boston, Massachusetts on June 6, 1908. He received his college education at Columbia University in New York City with an AB in 1929, BS in Electrical Engineering in 1930 and EE in 1931. In 1936 he married Santina (Sara) Giuffre. They had two children, Nina and John, Jr. His first job was with the New York Edison Co. Then in 1937 he was hired as a civilian engineer at Watson Laboratories (later Signal Corps Laboratories) of the Army Signal Corps, Fort Monmouth, New Jersey.

After initial work on communications equipment, he joined the RPF (Radio Position Finding) team developing early radar sets under Paul Watson. Although assigned to work on 600 MHz sets, he also contributed to others including the SCR-268 and also the SCR-270 that was successful in detecting the Japanese assault planes on Oahu, Hawaii and the Philippines in December, 1941. After Dr. Harold Zahl invented the VT-158 transmitter tube that resonated at 600 MHz, Marchetti led the design team that used this tube to develop a mobile radar, the A/N TPS-3. Weighing only 1,200 lbs. the radar could be carried by a group of men and had a range of 120 miles. It was successfully deployed in the Pacific Theater as a mobile early-warning set.

Marchetti then modified the SCR-268 to employ the VT-158 tube for use on picket ships stationed off the Panama Canal Zone for early- warning protection. The SCR-268 was used as a fire-control radar in combination with the Bell Labs M-9 Director and 90mm anti-aircraft batteries. These units were sent to England and deployed on the Dover cliffs to defend against incoming Luftwaffe aircraft. When the V-1 buzz bombs started to fall on Britain these batteries were brought to bear, but with poor success (kill rate less than 10%). Then Captain Marchetti was sent in to determine the problem. His

solution resulted in a dramatic increase in the kill rate to over 90%. For his efforts he was awarded the Order of the British Empire (OBE), Military Division.

He entered France through Normandy where he was Chief Radar Officer for 1st Army, siting Allied radars on fighter airfields. He was ordered back to Signal Corps Laboratories to work on a mortar locator radar, primarily for the Pacific. Again, Marchetti led the design team under the direct orders of Gen. Roger B. Colton, Chief Engineer of the Signal Corps. The radar was a modification of the earlier A/N TPS-3 and was remarkably successful; so much so that Gen. Colton ordered him to build the first 12 sets on site at Camp Evans. Five days later the 12 sets were sent to the Pacific to be followed by many production units.

After the war, Marchetti reached the rank of Lt. Colonel in the US Army Air Forces prior to his honorable discharge in 1946. As a civilian, he was named Technical Director of the Air Force Cambridge Research Center in Boston. This involved the technical supervision of three divisions: Electronics, Geophysics and Atomic Warfare, comprising over 2000 personnel.

Later he headed radar research and development for Avco Corporation where he designed the first electronically steerable array radar. Following this he started his own company, Marchetti, Inc., in Natick Massachusetts where R&D activities on radar and other electronics continued.

His final endeavors were in the field of high-speed rail transportation. He performed electrical engineering support on the original Metroliners for the Budd Co.

John Marchetti passed away at his home in Cherry Hill, NJ on March 28, 2003 at the age of 94 next to a table full of electronic equipment he was testing.