

DR. HAROLD A. ZAHL

NARRATIVE

Dr. Harold A. Zahl was Director of Research, US Army Electronics Command, Fort Monmouth. Although he retired in January 1966, he remained active as a consultant with ECOM until his death on March 11, 1973.

Known as the "grand old man" of Fort Monmouth research and development, he was born in Chatsworth, Ill. on August 24, 1904. He received his B.A. in physics and mathematics from North Central College, Napierville, Ill. and his M.S. and Ph. D. from the State University of Iowa, Ames. He came direct to Fort Monmouth in 1931 after receiving his doctorate.

His most important inventions include two vacuum tubes which first made it possible for early radars to transmit and receive from the same antennas and the VT-158, generally known as the "Zahl tube" which pushed radar into the megacycle operating range. Both proved invaluable in World War II.

His outstanding career spanned almost the entire electronic spectrum, from rooms full of electronics tubes to tiny integrated circuits, from the gigantic "bedspring" antennas of early radar to man-portable satellite communications equipment that can be heard around the world.

Dr. Zahl participated in the early Bikini atom bomb tests, worked on missile electronics at White Sands, New Mexico, assisted in the design of the first U.S. satellites, and took active leadership in Fort Monmouth's tracking of early satellites.

As chairman of its Joint Services Technical Advisory Committee, he assisted in establishing the Research Laboratory of Electronics at the Massachusetts Institute of Technology, Cambridge. This was the forerunner of the Lincoln Laboratory.

Author of numerous technical and scientific papers, short stories and magazine articles, including a Reader's Digest first person award story in August 1958, he also wrote two books, "Electronics Away or Tales of a Government Scientist," and "Radar Spelled Backwards." In addition, he published science fiction works under the pen name, Christopher James, the combined names of his two oldest sons.

Dr. Zahl received many honors for his contributions to the field of electronics. Among them were the Harry Diamond Award from the Institute of Electrical and Electronic Engineers (IEEE); the Army Decoration for Exceptional Service, one of the government's top civilian awards; and the Legion of Merit, awarded for his service as a lieutenant colonel during World War II.

He also received the Distinguished Achievement Award from the Service Club of Long Branch, N. J. and the Outstanding Civilian Award of the Federal Business Association of New York.

A fellow of the IEEE and the American Physical Society, he was a founding member of the Armed Forces Communications and Electronics Association and served on the national board of directors of both IEEE and AFCEA.

Dr. Zahl was married to the former Vera Virginia Hiller in 1948. The couple has three sons, James, Christopher, and Harold.

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BIOGRAPHICAL DATA

Dr. Harold A. Zahl, government scientist, physicist, inventor, and author, Director of Research, US Army Electronics Command, Fort Monmouth, 1931 - 1966.

Born August 24, 1904, son of Rev. and Mrs. Arthur Herman Zahl, in Chatsworth, Ill.

Died: March 11, 1973.

Education: B.A. in physics and mathematics, North Central College, Naperville, Ill. M.S., Ph.D. in physics and mathematics, State University of Iowa, Ames, 1931.

Married: 1948, Vera Virginia Hiller

Children: James, b. 1949; Christopher, b. 1951; Harold, b. 1955.

Inventions: VT-158 tube (Zahl tube). Pushed radar into megacycle operating range.

Two vacuum tubes which enabled early radars to transmit and receive from same antennas.

Achievements: Participated in early Bikini atom bomb tests.
Assisted in design of first U.S. satellites.
Took active leadership in Fort Monmouth's tracking early satellites.
Assisted in establishing the Research Laboratory of Electronics, Mass. Institute of Technology
Chairman, Joint Services Technical Advisory Committee, R.L.E.

Awards: Harry Diamond Award, IEEE
Exceptional Civilian Service Medal
Legion of Merit
Outstanding Civilian Award, Federal Business Assoc., N.Y.
Distinguished Achievement Award, Service Club of Long Branch, N.J.

Books: Electronics Away or Tales of a Government Scientist
Radar Spelled Backwards.

Numerous magazine and newspaper articles and science
fiction stories (pen name "Christopher James").

Organizations: Fellow, IEEE, American Physical Society
Founding member, AFCEA
Member, National Board of Directors, IEEE and AFCEA