



*Donald Glen Fink*

# DONALD GLEN FINK

1911–1996

WRITTEN BY DONALD CHRISTIANSEN

SUBMITTED BY THE NAE HOME SECRETARY

AS THE CAPSTON to a long and distinguished career, Donald Glen Fink became the first general manager and executive director of the Institute of Electrical and Electronics Engineers (IEEE) in 1963. He was instrumental in helping pilot the IEEE through its first years, during which many of its members expressed a growing interest in nontechnical issues like the economic and social implications of engineering work. In 1972 he drafted a proposed amendment to the IEEE constitution that added to the organization's traditional scientific and educational purposes a “professional” purpose. Don authored a document called *Blueprint for Change* that was distributed to all IEEE members, in which he explained the history leading to the need for an expanding role for IEEE and the implications of such a change.

When overwhelmingly approved by the membership, the new constitution would signal an era in which the institute would concern itself with standards of qualification and ethical conduct, and in which “The IEEE shall strive to enhance the quality of life for all people throughout the world through the constructive application of technology in its fields of competence.”

Don came to the challenge well qualified through prior experience and with a well-developed ability to distill from a variety of positions strongly held by colleagues one that would embody the most worthy characteristics of each.

He was born in Englewood, New Jersey, November 8, 1911, and attended Englewood schools. His boyhood interest in things technical led him to apply for admission to the Massachusetts Institute of Technology, where he graduated with a B.S. degree electrical engineering in 1933. He became a research assistant at MIT in the electrical engineering and Geology departments.

In 1934 Don joined the editorial staff of *Electronics* magazine, published by McGraw-Hill. He earned his M.S. degree in electrical engineering from Columbia University in 1942. During World War II, on leave from McGraw-Hill, he joined the MIT Radiation Laboratory, where he became head of its Loran Division. From 1943 until 1946, still on leave from McGraw-Hill, he was named Expert Consultant to the Office of the Secretary of War. He was an observer of the atom bomb tests at Bikini Atoll. Returning to McGraw-Hill after the war, in 1946 he was named editor-in-chief of *Electronics* magazine, a position he held until 1952. It was during this period, in 1948, that he married Alice Marjorie Berry in Cranston, Rhode Island. They established their home in Tenafly, New Jersey.

Don became widely recognized for his expertise in the still-young field of television. He had written *Principles of Television Engineering* (McGraw-Hill) in 1940, and in 1950 he was appointed vice-chairman of the National Television Systems Committee. When agreement could not be reached on the resolution standard, he proposed 525 lines and it was accepted by the committee. The Federal Communications Commission endorsed the standard and monochrome television was off to a flying start. In 1952 Don joined Philco Corporation as director of research, a position he held until 1960, when he was named vice-president for research. In 1962 he became director of the Philco-Ford Scientific Laboratories.

Other books on television written by Don were *Television Engineering* and, with a coauthor, *Physics of Television*. He was the editor of *Television Standards and Practice*, *Color Television Standards*, and the *Television Engineering Handbook*.

He was also the author of *Computers and the Human Mind*, *Engineering Electronics*, *Microwave Radar*, and *Radar Engineering*, as well as some 150 papers and articles published in technical journals and periodicals.

Don was named a fellow of the American Institute of Electrical Engineers (AIEE) in 1951 and a fellow of the Institute of Radio Engineers (IRE) in 1947. He was a member of the IRE board of directors from 1949 to 1951, and again from 1956 to 1960. In 1956 and 1957 he served as editor of the IRE *Proceedings*, and in 1958 was elected president of the IRE. His IRE fellow citation read “In recognition of his espousal of high standards of technical publishing and for his wartime contributions in the field of electronic aids to navigation.” When the IRE and the AIEE began merger discussions, it was no surprise that Don became involved. He served as secretary of the merger committee, and when the new organization, IEEE, was formalized, he was named its general manager, in 1963, a position he held until his retirement in 1974, when he was appointed director emeritus for life. Over the next two years he served as executive consultant to the IEEE and as operations director for the Association for Cooperation in Engineering.

Not content with retirement, Don remained self-employed as a registered professional engineer. He continued his activities in television as chairman of the Society of Motion Picture and Television Engineers Study Group on High Definition Television, and also remained active as an editor. In 1975 he had created the *Electronics Engineers' Handbook*, the most widely used reference book in the field, and was instrumental in updating its subsequent editions. The *Standard Handbook for Electrical Engineering*, also edited by Don, by 1993 was in its 13<sup>th</sup> edition.

Don was elected to the National Academy of Engineering in 1969. He was chairman of the National Research Council's Commission on International Relations Board on International Organizations and Programs and chairman of its Committee on International Scientific and Technical Information Programs. From 1976 to 1981 he chaired the United Nations Economic and Social Council science programs.

Don received many awards. For his contributions during World War II, in 1946 the U.S. Department of War bestowed its Medal of Freedom; he received the Presidential Certificate of Merit in 1948. He received the Outstanding Civilian Service Medal of the U.S. Department of the Army in 1972.

His work in television was recognized through the IEEE Consumer Electronics Award (1978), the Journal Award of the Society of Motion Picture and Television Engineers (1955), the Outstanding Service to Television Citation of the International Symposium on Television (1971), and the Progress Medal of SMPTE (1979).

IEEE recognized his many contributions with its Founders Medal (1978) and its Centennial Medal (1984). A long-time member of the Radio Club of America, he was elected a fellow of that organization, which awarded him its Sarnoff Citation (1979), Ralph Batcher Memorial Award (1988), and Allen B. DuMont Citation (1990).

Don's academic prowess was recognized through his election to Sigma Xi, Tau Beta Pi, and Eta Kappa Nu. Eta Kappa Nu named him an "Outstanding Young Electrical Engineer" in 1940 and an eminent member in 1965.

In 1971 Don was named to the presidential select advisory Committee on Redeploying Scientists and Engineers in the Health Care Field.

In 1980 the IEEE established the Donald G. Fink Prize Paper Award in his honor. It is awarded annually for the best tutorial, review, or survey paper published in any IEEE journal.

Don was frugal, particularly with his time. At IEEE he would often spend his lunch hours closeted in his office, hard at work on some particular project. Beneath his serious demeanor was a sense of humor. A twinkle in his eye would foretell that it was about to break through. He kept several unusual historical electrical artifacts on his office bookshelves and would challenge visitors to identify them. His vocational interests included photography and astronomy, and when he combined the two and came up with a particularly impressive celestial photograph, his delight was unrestrained.

He enjoyed spending time with his family—his wife, Alice "Sally"; daughters, Kathleen and Susan; son, Stephen; and his four grandchildren. A particular pleasure of his was camping in New Hampshire.

Upon his death on May 3, 1996, he left a legacy that is reflected in the respect and high regard of his friends and col

leagues. In his honor, his friends initiated the Donald Glen Fink Project for the study of ethics in engineering and engineering management.

Don was held in high esteem by those who worked for him. I was fortunate to be a member of his staff at the IEEE. An engineer's engineer, he was technically astute, quick-witted, and an outstanding mentor and manager.