

William Harry Erickson

April 4, 1916 — October 21, 1998

William Harry Erickson was born in McKeesport, Pennsylvania on April 4, 1916. After graduating with a B.S. degree in Electrical Engineering from the University of Pittsburgh in June 1938, Bill joined the Duquesne Light Company in Pittsburgh, Pennsylvania, where he became an electric-power transmission and distribution engineer specializing in the design of transmission facilities. During this period, he was also a graduate student at Carnegie Institute of Technology. In 1942, he came to Cornell as a civilian instructor in steam engineering in the U.S. Navy V-12 officer-training program as a specialist in motors and generators. He joined the School of Electrical Engineering as an Assistant Professor in 1945, received the M.S. degree in Electrical Engineering from Carnegie Tech in September 1946, became an Associate Professor in 1947, and attained full professorial rank in 1953. When Charles R. Burrows resigned as Director of the EE School in 1957, Professor Erickson served as Acting Director for two years and as Assistant Director from 1959-65. From 1965-71, he was an Associate Dean of the College of Engineering. Bill returned to teaching duties in 1972 and also served two separate three-year terms (1972-75 and 1979-82) as a member of the administrative board of the Division of Unclassified Students, a college department that supervised undergraduates who were in academic difficulty. He retired as Professor Emeritus in July 1982. The major portion of Bill's 40-year academic career at Cornell was devoted to undergraduate education in the EE School and in the college, with emphasis on the application of engineering methods. He was also an ardent advocate of good technical writing and humanities studies in an engineering curriculum.

In 1946 and for years afterward, the large number of students who were enrolled in the Schools of Chemical, Civil, and Mechanical Engineering were required to take special courses in electrical engineering. Professor Erickson was given the task of organizing and teaching these "service courses," and served as a mentor to a group of graduate students who were appointed as his teaching assistants. Several of these young instructors later became members of the EE School faculty. Since a suitable textbook was not available, Bill wrote and distributed a series of class notes on basic electrical engineering and dc and ac machinery that he dubbed "Electrical Engineering for Non-Electrical Engineers." In collaboration with the late, Professor Nelson H. Bryant, who wrote the electronics component, the notes were expanded into a textbook entitled *Electrical Engineering, Theory and Practice*. The first edition of this popular text was published in 1952, a second edition came out in 1959, followed by a paperback edition in 1975.

Professor Erickson's background and expertise in electric-power systems and machinery were invaluable in the Naval training program, in the development of his text, and throughout his academic career. His familiarity with engineering practice allowed him to construct challenging thought-provoking problems that were incorporated into his text. Unlike the usual rote exercises found in many textbooks, every problem in the text required a firm understanding of the principles involved in order for the student to achieve a correct solution. Bill often received requests for a solution manual from users of his text at other colleges but his typical response was, "I've given you the correct answers. You'll learn something if you figure out the solutions by yourself."

In the early 1950s, Bill helped initiate and taught many sessions of a required senior EE engineering-reports course that featured preparation of technical articles and oral presentations. When the Division of Basic Studies was established in the College of Engineering in 1961, Bill initiated Eng. 101 and Eng. 102, Engineering Problems and Methods, as introductory engineering courses at the freshman level. The courses featured consideration of major examples of modern engineering, emphasized the interrelationship of the several professional fields, and described the role of the engineer in society. Bill taught these courses for 10 years in addition to his duties as Assistant Director of the EE School and as Associate Dean of Engineering. During those years he also continued his service-course management and teaching responsibilities, and served as class advisor at all class levels. Upon his return to active teaching without administrative responsibilities, and until his retirement, Bill applied his machinery and power-system expertise to introductory electrical engineering courses at the sophomore level, and particularly to the junior laboratory courses that came to be known over the years as "Super Lab." He was a junior and senior advisor throughout those years and served as advisor for several Master of Engineering projects, including design of a Mars Rover, and a windmill power generator.

Many of Bill's major contributions to the College of Engineering occurred while he was Associate Dean of Engineering. In his initial task of restructuring the Engineering curriculum from a five-year to a four-year program, he achieved a smooth and relatively trouble-free transfer to the new curriculum due in large part to his direct approach and clearheaded solutions to the problems that arose during the transition process. His strong belief in the need for engineers to have a thorough grounding in the humanities led to the establishment of a college requirement in the new program of at least 30 hours in the College of Arts and Sciences. During his tenure as Associate Dean, Bill was responsible for over-all undergraduate affairs in the college, and was particularly effective in his work with the Academic Standards Committee where his stern but eminently fair judgments administered to students in academic difficulties ultimately caused many of those students to improve their records and graduate

successfully. In later years, these same students often expressed their gratitude to Bill for his positive impact on their successful careers.

In addition to his classroom responsibilities, Bill was an active participant throughout the years in the work of many committees, including among others, Long Range Planning, Financial Aids, Nominating, and Physical Education and Athletics, at the university level; the Core Curriculum, Professional Programs, Policy, and Academic Standards, in the College of Engineering; and as a multi-term member of the governing Faculty Committee in the EE School. In off-campus activities, he was registered as a professional engineer in New York State, served as Chairman of the Ithaca Section of the American Institute of Electrical Engineers (AIEE), and was the Chairman of the AIEE Summer General Meeting held in Ithaca in 1961. Bill was named a Fellow of the AIEE in 1962 “for contributions to engineering education.” When that organization became the Institute of Electrical and Electronic Engineers (IEEE), he continued his membership and became a Life Fellow of IEEE in 1981. He was elected to the engineering honor societies Tau Beta Pi, Eta Kappa Nu, and Sigma Tau, and was a member of the American Society for Engineering Education.

Bill was an avid golfer, had a keen interest in baseball, and organized the EE School Franklin Hall Bowling League. However, his particular long-time interest was in the “Sport of Kings.” His overall gaming success with the horses is not known but he always maintained that his principal concern was with statistics. On several occasions, he was a speaker at student-award banquets where he delivered a “lecture” that he called “Horse-Racing for Non-Horses”, a corollary of “EE for non-EE’s.” On these occasions, he would display his secret formula for track success: a long roll of paper covered with complex mathematical symbols.

In 1955, Bill was elected President of the Exchange Club, an Ithaca branch of a national service club. Soon after assuming office, Bill discovered to his dismay that the constitution of the club contained a clause that banned non-white persons from membership. Under Bill’s leadership, the local club voted to withdraw from the national organization and form a new group, the Ithaca City Club, that is still in existence. On April 23, 1956, the *Ithaca Journal* reported that on the previous Saturday Bill was presented with a plaque that reads: “B’nai Brith of Ithaca, New York honors William H. Erickson for outstanding achievement towards equality of man.”

Bill and Mary Margaret Mannion were married on December 27, 1941 in Chicago, Illinois. Their 40 years of life together, principally in Ithaca, ended when Mary Margaret died on August 19, 1981. Bill is survived by his son, James Paul and his wife Suzanne, of Fairport, New York; his daughter, Mary Ann and her husband, Thomas McMahan, of Stamford, Connecticut; a sister, Ada Dickey, of Monroeville, Pennsylvania; a sister, Dorothy

Erickson, of Fond du Lac, Wisconsin; his sister-in-law, Barbara Mannion, of Chicago, Illinois; and his brother-in-law, Robert Mannion, of Cleveland, Ohio. He was predeceased by his brother, G.F. Erickson.

Bill Erickson will be long remembered as a dedicated teacher and advisor; a man of exemplary honesty and integrity who set high academic and professional standards for himself, his associates, and his students; and a highly respected colleague, and a true friend.

Paul D. Ankrum, Norman M. Vrana, Simpson Linke