

# Howard Newton Fairchild

*November 16, 1906 — September 1, 1990*

Howard Fairchild, Professor Emeritus in the Sibley School of Mechanical and Aerospace Engineering, died unexpectedly on September 1, 1990 at the age of 83.

Born in Liverpool, New York, he lived most of his life in New York State. He married Helen Brodhead in 1944 and their son, Howard Newton Fairchild, Jr., was born in 1945. Helen Fairchild died in 1989. Howard Fairchild, Jr. graduated from the Sibley School in 1967 and went on to do graduate work and pursue a career in engineering. He now lives in Fairborn, Ohio.

Howard was graduated from the Sibley School of Mechanical Engineering with the M.E. degree in 1929. He went on to fulfill the requirements for the E.E. degree in 1930. The breadth of interest and versatility suggested by these dual degrees have characterized his entire career as an engineer and as a teacher. He began his teaching career in 1930 as an instructor in Cornell's College of Engineering and continued teaching at Cornell until his retirement, except for two years as an instructor in the Mechanical Engineering Department at Pennsylvania State University. At Cornell he advanced from instructor to assistant professor, to associate professor, to professor, and to professor emeritus in 1972.

Professor Fairchild had a wealth of experience in engineering and technology. Even before entering college he had worked as a pipe fitter during a summer vacation. He was a licensed professional engineer in New York State and was generally recognized as an outstanding member of the department in the area of engineering practice. He used his sabbatical leaves and summer vacations to achieve and strengthen this diversity of engineering experience. During one sabbatical leave he served as a visiting professor of mechanical engineering in the Department of Reactor Science and Engineering of the Brookhaven National Laboratory. Following this assignment he was granted a leave of absence for a semester to serve as a mechanical engineer in the same department. He later was called upon on two different occasions to serve as a consultant for the same department of the Brookhaven National Laboratory. He was also appointed as a visiting professor of mechanical engineering in the Experimental Reactor Division of Oak Ridge National Laboratory. During his teaching career at Cornell he also served as an engineering consultant to a number of corporations including the Frankfort Arsenal in Philadelphia, the Babcock and Wilcox Company and the Westinghouse Electric Corporation.

Professor Fairchild's importance as a member of the Sibley School's faculty was never so keenly felt as during World War II. Cornell was asked to operate a Naval Midshipmen Training School and a major part was to be a Diesel School for training engineering officers. Although the Sibley School of Mechanical Engineering had professors with competence and interest in the sciences and engineering which are the basis of design and analysis of performance of engines, the scope and emphasis of this school was to be quite different. The Sibley staff would be expected to teach engine operation, engine overhaul, troubleshooting and other pragmatic aspects of propulsion engines. A laboratory of operating diesel engines would also have to be established and staffed. Howard Fairchild was the obvious choice to be in charge of this new school; he was not only an excellent teacher and a competent engineer, he was also a skilled mechanic. The Diesel School which resulted and was operated until the end of the war was generally recognized as the best in the country.

Professor Fairchild was a competent researcher and experimental investigator, and was the author or coauthor of several technical papers. However, his first love was always teaching. He taught a wide diversity of subjects including thermodynamics, heat transfer, internal combustion engines, steam power generation, and refrigeration and air conditioning. He was as much at home in the laboratory as in the classroom.

As a teacher he was patient, soft-spoken, and unassuming. In spite of this mild manner, he set high professional standards for his students as well as for himself. He was highly respected by both his students and his teaching colleagues. He always accepted teaching assignments cheerfully—even unpopular ones.

Howard Fairchild will long be remembered by his colleagues and former students. His contributions to Cornell and to his profession were many. He was a gentleman in every sense of the word and a valued and deeply respected colleague.

*Richard M. Phelan, Dennis G. Shepherd, Bart Conta*