

## MEMORIAL RESOLUTION

**WILLIAM WEAVER, JR.**

**(1929–1994)**

William Weaver, Jr., Professor of Civil Engineering, died of acute leukemia in Kaiser Foundation Hospital in Redwood City on April 28, 1994, at the age of 64. Bill had joined the Stanford faculty in 1959 and served with distinction until his retirement in 1984. Throughout that period he was active in the field of structural engineering and was especially noted for his pioneering work in the application of numerical methods and computers to the analysis of complex structural systems.

Bill is survived by his wife of 16 years, Connie Weaver; two daughters, April Weaver of San Diego and Alissa Weaver of Charlottesville, Virginia; four sisters; two brothers; and many nieces and nephews. Bill and Connie lived in Los Altos.

Born on August 19, 1929, in Sacramento, where he spent his childhood with his large family, Bill was educated in civil engineering at the University of California, Berkeley, receiving a bachelor's degree in 1951. He then attended the Massachusetts Institute of Technology, earning a master's degree in 1952. From 1953 to 1955 he served in the United States Army Corps of Engineers, and from 1955 to 1957 he worked as a structural engineering designer in Sacramento. Bill then returned to MIT where he received a doctorate in 1959.

During his active years on the Stanford faculty, Bill was both a researcher and a teacher in the field of structural engineering. He was noted for applying advanced mathematical methods, particularly the finite-element method, to the static and dynamic analysis of large structures. The techniques he developed have become essential for the use of computers in the design of buildings, towers, antennas, and other complicated structures to withstand earthquakes and strong winds.

Bill authored or co-authored numerous technical papers and six textbooks in structural engineering, several of which were translated into foreign languages and each of which filled a major need. He was a registered professional engineer in the State of California, a consultant to industrial companies, and a lecturer at conferences and special courses. In his early years on the faculty, he organized a series of short courses on computer methods—these courses brought engineering faculty from other colleges to the Stanford campus to learn the latest techniques in structural analysis.

His regular Stanford classes, both undergraduate and graduate, were both popular and rigorous. To get a class underway, he invariably began by telling a joke. Regardless of their quality, the jokes served their purpose, and students looked forward to these ice-breakers, often speculating about the subject matter of the next “joke-of-the-day.” In addition, Bill was considered one of the best student advisors in civil engineering, and he would spend many hours with his advisees and doctoral students.

Bill always wrote and spoke with exceptional succinctness, as he had little tolerance for verbosity. He disliked committee meetings that went on and on, preferring to be back in his office consulting with students or doing his research. When he had no choice but to attend a meeting, he would arrive at the last moment.

In 1983, Bill was diagnosed with a brain tumor. Although not expected to live, he underwent two major operations and recovered fully. As a result of that experience, he took early retirement in 1984. He continued to be productive, occasionally teaching courses on a part-time basis and regularly preparing new editions of his textbooks. He also found time to pursue various hobbies, including golf, reading, and traveling with Connie to Kauai, where they had a vacation home. Many of their friends benefited from this second home, because Bill and Connie enjoyed inviting their friends to join them for a week or two on the Garden Isle.

Throughout his adult life, Bill maintained an exercise program that included at various times swimming, running, and bicycling. He also enjoyed river rafting and hiking in the mountains. For some time prior to his death, Bill was in good health and full of energy. He was scheduled to teach during autumn quarter at Stanford’s Berlin campus and was eagerly looking forward to the overseas teaching experience. He had even made a successful effort to master the German language. Then his last illness came suddenly and prematurely.

Bill Weaver is sorely missed by his colleagues, friends, and family. He will be long remembered for his strength of mind and body, his enthusiasm for his chosen field, his dedication to his students, and his devotion to his daughters, April and Alissa. To them and to Connie we extend our most sincere condolences.

James M. Gere, Chair  
Thomas R. Kane  
Haresh C. Shah