

In Memoriam: Robert L. Wiegel

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With the passing of Robert L. Wiegel on July 9, 2016, we lost the acknowledged giant in the field of coastal engineering. This emerging discipline was defined by his pioneering 1964 book *Oceanographical Engineering* (Wiegel 1964). Its legacy is the hugely successful series of international coastal engineering conferences [the International Conference on Coastal Engineering (ICCE)], which originated in Long Beach, California, in 1950; the 36th ICCE is scheduled for Baltimore, Maryland, in 2018.

Bob Wiegel's international reputation as a pioneering researcher and prime mover in coastal engineering was well established by the 1960s. It would have been very easy for him to live off of this reputation for the balance of his career, but that was not Bob Wiegel. He always took his commitments to his family, his university, and his profession completely and seriously. Much of this is public record, and more still is documented compellingly in an oral history (Wiegel 1997). Parts of his life and career were known only to those privileged to know him well.

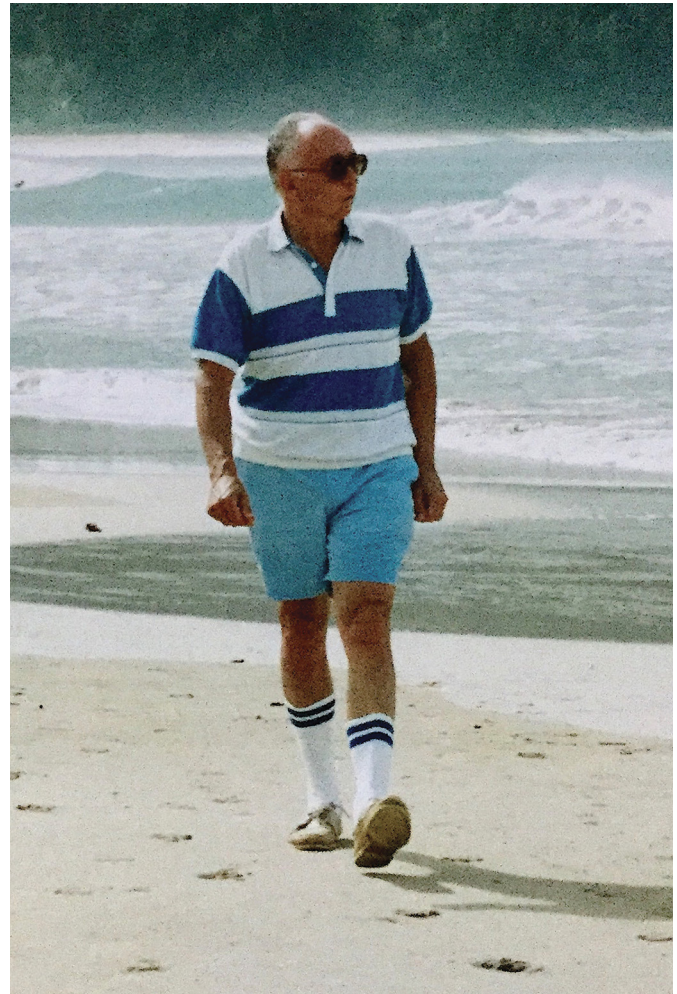
Robert Wiegel was born on October 17, 1922, in San Francisco, and he spent his early years and was schooled in Oakland, California. He took his first of more than 50 trips to the beaches of Hawaii in 1930, a practice he continued with his wife, Anne, well into retirement.

He commenced as an undergraduate in mechanical engineering at the University of California Berkeley in 1940. After the attack on Pearl Harbor in December 1941, he enlisted in the U.S. Army Ordnance Corps and was directed to complete his engineering studies. After graduating in 1943 and undergoing officer training in Maryland, he joined the Ordnance Corp in 1944 in Cheltenham, United Kingdom, and Paris.

In June 1946, Bob Wiegel returned to the University of California Berkeley, where he stayed until his retirement in 1987 and maintained a campus office as an emeritus professor for another decade. His initial appointment in 1946 was as a research engineer working on various wave projects for the U.S. Navy Bureau of Ships. Much of this work was classified, but his first publication (Wiegel 1948) set the tone for his future professional career.

He was appointed to the faculty of University of California Berkeley in 1957 and to full professor in 1963. Bob was the complete university academic, extensively involved in teaching, research, and university service. His interests were catholic in the extreme and belied the popular image of an engineering professor. He was always concerned with the entire spectrum of engineering, including research, instruction, investigation, environmental interaction, design, construction, and communication.

Bob always recognized the importance of the written word. Beginning in the 1950s, he developed and personally maintained a library, the Wiegel Ocean Engineering Archive, housed in the Water Resources Center archives as a reserve collection. It is a unique collection with a very Bob Wiegel personality. It has a wealth of historical documents from the early years of coastal



Robert L. Wiegel, Hanalei Bay, Kauai, Hawaii, January 1990
(photo by Carol Wiegel)

engineering together with numerous extracts from the respected newspapers and the scientific press on aspects of coastal and ocean engineering. It also includes a significant collection of gray literature (unpublished reports with a limited distribution list).

Bob was always an avid consumer of high-quality newspapers from all over the country. His particular interest was in the reporting of aspects of coastal engineering and natural hazards, but his concerns were never restricted to just coastal engineering. He was an equally avid reader of the scientific press. He was very well read on the "prehistory" of coastal engineering and was particularly interested in Mediterranean harbors in biblical and Roman times.

His legacy to his students was considerable and largely untold. Students were always his first concern. Cancelling class or office hours was never an option. His busy schedule of national academic and professional committee assignments was always scheduled around his classes. His teaching was committed and enthusiastic. To his students, he was always patient and encouraging. Bob was always available, and his open door was legendary in O'Brien Hall.

This continued for more than a decade after his “official” retirement. The place of a focused discussion in the entire spectrum of engineering was always a secondary theme in his classes, communicated through his anecdotes and through commentaries drawn from the current press. His passion for the written word and the value of library research were central themes in his graduate teaching. His insistence on assigning written term papers on a focused topic was, and still is, unusual in engineering. He recognized writing and library research skills as perennial weaknesses of engineering education.

Despite the ballooning literature, he remained exceptionally well informed. Hardly a week would pass without at least one item of “compulsory reading” in my campus mail box from Bob Wiegel. He was a consistent source of calm rational advice, encouragement, and moral support.

In my travels, it was always a pleasure to be identified as a colleague of Bob Wiegel. The genuine admiration and affection for the man who had come before me were a continuing source of pleasure. Apart from his expertise in coastal engineering, the message I heard every time was of Robert Wiegel, the gentleman.

His primary research and teaching interests were in the areas of coastal engineering, beach processes, offshore pipelines and liquid waste disposal, coastal wave characteristics, and wave-induced forces on offshore platforms. The Wiegel research contributions (almost 250 books, papers, and technical reports) are well known and a matter of public record (see [Wiegel 1997](#)). They were recognized by numerous research awards and equally numerous invitations to him as keynote speaker at national and international (Australia, China, Germany, India, Italy, Netherlands, Taiwan, United Kingdom) meetings. His ultimate recognition was the 2011 ASCE Civil Engineering Classics volume ([Edge et al. 2011](#)).

Less well known are his contributions to university service. From 1963 through 1973, he was assistant dean and then acting dean of the College of Engineering at the University of California Berkeley. He was on the board of directors of the Faculty Club from 1971 to 1973 and president in 1973. He was involved in

numerous other administrative activities on the Berkeley campus at the chancellor, academic senate, College of Engineering, and department levels, as well as at the Office of the President of the system-wide University of California. He was awarded the Berkeley Citation at retirement in 1987.

Bob Wiegel’s professional contributions outside the university match his university activities. His expertise was recognized widely in appointments to many key national committees (White House, Department of State, National Academy of Engineering, National Research Council, National Science Foundation, U.S. Army, and the states of California, Florida, and Alaska). He was elected to the National Academy of Engineering in 1975, and he was an honorary member and fellow of the ASCE, chairman of the Coastal Engineering Research Council (1978–1992), vice president and director of the American Shore and Beach Preservation Association (1988–1995), and editor of *Shore and Beach* (1988–1996). The Robert L. Wiegel Conference Room at the U.S. Army Coastal Engineering Research Center in Vicksburg, Mississippi, is named in his honor. He also was an honorary member of the Japan Society of Civil Engineers.

Bob Wiegel is survived by his wife Anne, daughters Carol and Diana, and son John.

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