



W. F. Allen

WILLIAM F. ALLEN JR.

1919–2014

Elected in 1986

*“For creative design and analysis of advanced electric generating stations and outstanding leadership of a large and innovative engineering-construction company.”*

BY KENNETH F. REINSCHMIDT

WILLIAM F. ALLEN JR., of Braintree, Massachusetts, passed away September 21, 2014. He was born on June 22, 1919, in North Kingstown, Rhode Island. Bill graduated with a BS degree in civil engineering from Brown University where he later worked as a mechanical engineering instructor. He served in the US Navy as a Lieutenant (jg) from 1944 to 1946. In August 1945 he was on board one of the vessels in the US invasion fleet headed toward a landing in the Japanese home islands when the atomic bombs fell on Hiroshima and Nagasaki to end the war. He often recollected later that atomic weapons had saved his life. He served in Japan for 10 months, describing in his own words, “I was at sea on LST 751 when the Japanese capitulated. Since we were supposed to storm the beaches we were initially not equipped to occupy Japan; we were ordered to find equipment and material to supply our forces and to feed the Japanese people who were starving when we arrived.”

He was a staunch supporter of civilian nuclear power and was instrumental in seeing the need to adapt military technology such as nuclear submarines to the civilian energy sector. He firmly believed that civilian nuclear power would be a clean, safe, economical, and unlimited source of energy for years to come.

After the war's conclusion Bill stayed with the US occupation forces to house and feed the Japanese civilian population and to rebuild and replace infrastructure destroyed by US bombing. Although a relatively junior Navy officer, Bill had a high level of responsibilities and learned much in a short time about large project management, project engineering, construction of large engineering projects, supply chain management, and collaboration among different organizations, disciplines, and backgrounds (for example, the US Navy and US Army). This project experience would serve him well on his return to civilian life in engineering and construction. After demobilization in 1946, Bill returned to the US and enrolled in Harvard University under the GI Bill of Rights. He received an MS degree in mechanical engineering from Harvard in 1947, where he then became a teaching fellow.

In 1948 Bill joined the Stone & Webster Engineering Corporation in downtown Boston. At that time the company was relatively small by today's standards and served largely industrial and utility clients but had completed projects across the width of the US as well as in selected foreign countries. It was founded in 1889 by Charles Stone and Edwin Webster, members of the Massachusetts Institute of Technology's first graduating class in electrical engineering. They emphasized engineering professionalism, integrity, and service during their stewardship of the company. Bill Allen exemplified the founders' traditions, professionalism, and management ethics.

He rose rapidly in the company's organizational ranks, from mechanical engineer to engineering manager, to vice president and director of engineering (1968), to senior vice president (1971), to president (1972) and chief executive officer (1973), and retired in 1995 after serving as CEO for more than 20 years. On his watch, Stone & Webster expanded to more than 17,000 employees and opened new offices in New York City, Houston, Cherry Hill, New Jersey, Denver, Chicago, Pleasanton, California, Atlanta, Toronto, London, and other locations in order to have close access to clients as well as local engineering resources.

Bill participated in many engineering and construction projects throughout the world and was noted for his commitment to technical excellence and innovation. He wrote 16 significant technical publications, generally in the areas of steam electric power plants, two-phase flow (water/steam), improvements in overall steam power plant efficiency, the heat cycle, and properties of steam.

One of his major impacts was in the field of nuclear power where he recognized its potential and very quickly moved Stone & Webster into the nuclear era, starting with the first civilian nuclear power plant in Shippingport, Pennsylvania. Space is too short to list the projects, nuclear and otherwise, that Bill and Stone & Webster worked on serving the nuclear, electric utility, and process chemical industries worldwide. Unfortunately, events such as the accident at Three Mile Island Nuclear Power Station, the accident at Chernobyl in Ukraine, and inconsistent policies of government agencies made it difficult to succeed in the nuclear power sector.

Under Bill's leadership, Stone & Webster was also innovative in other areas. He acquired computers for use on projects as early as the 1970s, when a computer was a huge IBM water-cooled mainframe. Stone & Webster expanded its use of computers for project management and then acquired minicomputers for computer-aided design (CAD) and construction long before its competitors made the investment in this technology. Making use of Stone & Webster's expertise in engineering, construction, procurement, plant operations, and the use of powerful computer systems, he led Stone & Webster in developing and applying a computer-based integrated project management system for use in the engineering and construction industry. Then, in the 1980s, Stone & Webster led the trend from mainframes and minicomputers to personal computers for engineering, design, and drafting applications.

Bill was a licensed professional engineer in 46 states and Canada. He displayed all his licenses on his office wall, an awe-inspiring sight for new employees as well as prospective clients.

Reflecting his many contributions to the field of mechanical engineering, especially multiphase flow and properties of

steam, Bill was elected a member of the Newcomen Society, the world's oldest society specializing in the history of engineering and technology, in 1990. As a result of his interest and involvement with engineering education, he received the honorary degree of doctor of technology from the Wentworth Institute of Technology in Boston in 1983 and the honorary degree of doctor of engineering from Northeastern University in 1990.

He was well known for caring about the people who worked with and for him. He was invariably polite, cordial, and gentlemanly. He answered all his incoming telephone calls himself and dialed all outgoing calls rather than deferring to his secretary or an answering machine. If an employee called Bill's number, the CEO himself would answer. Part of his humanity was his phenomenal ability to remember the names and faces of all acquaintances and employees. If he encountered a newly hired employee whose name he didn't know, he would ask other employees for the name until he learned it; after that he never had to ask again.

One former employee recalls the time that Bill sent an inter-office memo (in pre-email days) to all staff with a reprint of an article that he had read, while on an airplane, regarding hotel safety and how to survive a hotel fire. Bill felt that it would be useful for the many Stone & Webster people who traveled to read the article. Later that year, an employee was on vacation when the hotel he was staying at caught on fire. The employee was able to escape from the inferno by using information from the article that Bill had distributed. While 85 people perished in the fire, the employee was fortunate to escape and still contends that, if it were not for Bill's thinking of others and sharing the article, the outcome of his vacation could have been much different.

Bill was down to earth and could communicate with clients and employees at all levels. His father died when Bill was young, and he was devoted to his mother who lived to be 94. He would personally perform maintenance to his mother's house and yard every other Saturday as he had done since childhood.

Bill gave generously of his time to participate on public service boards and charitable organizations, including as vice chairman of the Board of Trustees of Northeastern University, chairman of the Board of Trustees of Thayer Academy, and member of the Board of the Massachusetts Eye & Ear Infirmary and of Massachusetts Blue Cross/Blue Shield, among others. He was a director of the National Board of Junior Achievement and the US Council for Energy Awareness. He was a member of Sigma Xi, Tau Beta Pi, and the National Society of Professional Engineers. He was a founder of St. Clare's Parish in Braintree, MA, later joking that he helped found St. Clare's because his former parish was too far to walk to Mass on cold snowy mornings.

Bill was known as a stalwart leader and dear friend to many who was devoted to his family, community, and church. He will be remembered for his intellect, generosity, modesty, sincerity, charm, and wit. He could be very humorous, with a very dry wit, some of which passed over his listeners' heads, so Stone & Webster employees had to be alert to his remarks to be sure he was being understood and not just being facetious. His technical understanding coupled with his direct, low-key management style inspired great loyalty among his employees, many of whom stayed with Stone & Webster for 20 years and more. Even those who left for other employment would later, when making a decision, ask themselves, "What would Bill Allen do in this situation?"

He was married for 62 years to the late Doris (Pendoley) Allen and is survived by sons William, Thomas, and Paul; daughter Janet; and five grandchildren.

Bill Allen's influence was widespread; he will be greatly missed by his family, friends, coworkers, colleagues, and many others whose lives he impacted. As Ralph Waldo Emerson said, "An institution is the lengthened shadow of one man." This was never truer than in the case of Bill Allen and Stone & Webster.