Howard Vollum (1913–1986)

By Jeffrey Kovac

Howard Vollum was a founding partner of Tektronix, an innovative electronics company in Beaverton, Oregon. In 1947, he developed the Type 511 oscilloscope, which revolutionized oscilloscope design. Under Vollum's leadership as president and chief engineer from 1946 to 1971, Tektronix became the dominant company in the field of oscilloscope development and by 1976 was Oregon's largest employer. He was a major philanthropist who contributed to many Oregon institutions.

Charles Howard Vollum was born in Portland on May 31, 1913, the first son of Charles A. and Julia (Rieschel) Vollum. He grew up in the Sellwood neighborhood in southeast Portland, attended grade school at St. Agatha's and high school at the now-closed St. Stephen's. He began his college education in 1931 at Columbia Catholic University (now the University of Portland) but left after completing the school's two years of science instruction. A year later, he entered Reed College, graduating in 1936 with a bachelor's degree in physics.

Vollum worked as a radio repair technician, first independently and then at Murdock Radio and Appliance, founded by M. J. "Jack" Murdock. When he was drafted into the U.S. Army in 1940, his talent in electronics earned him a commission in the U.S. Signal Corps in 1941. For several years, he worked on accurate fire control radar at the Air Research and Development Establishment in Christchurch, England. For his efforts, the U.S. Armed Forces awarded him the Legion of Merit. Returning to the United States, Vollum worked on a precision mortar locator at the Evans Signal Corps Laboratory in Belman, New Jersey, for which he earned an Oak Leaf Cluster of the Legion of Merit. His research and development work on radar served, for him, as a graduate education in electronics.

After the war, Vollum returned to Portland and reestablished his relationship with Murdock. Together with Miles Tippery and Glenn McDowell, they founded Tektronix on January 2, 1946. Originally located at Southeast Seventh Avenue and Hawthorne Boulevard, the company had a radio retail store and service department on the first floor. Vollum worked on the second floor developing an oscilloscope (an electronic test instrument that displays and measures waveforms), which he had been interested in since his college days. Within a year, he had developed the Type 511 model, which was both better and less expensive than competing instruments. Although oscilloscopes were Tektronix's main product, the company designed and manufactured other electronic equipment, including test instruments used in television, signal generators, and information display devices. Vollum married artist Jean Kettenbach in August 1950. The couple had five sons.

Tektronix purchased land on Barnes Road in northwest Portland and built its Sunset plant, which employees moved into in 1951. The company continued to grow and purchased 300 acres in Beaverton in 1956, the current site of the Tektronix–Howard Vollum Park. The Beaverton campus was first occupied on May 1, 1959. Vollum was president of Tektronix from its founding in 1946 until 1971 and continued as a member of the board of directors until his death in 1986.

Vollum received several awards for his contributions to oscilloscope design, including the Howard N. Potts Medal from the Franklin Institute and the Morris E. Leeds Award from the Institute of Electrical and Electronics Engineers. He was elected to the National Academy of Engineering in 1977 and received honorary doctorates from several institutions, including the University of Portland and Reed College.

For many years, Vollum was a Reed trustee, and the Vollum College Center is a tangible recognition of his contributions to the school. In 1975, Reed created the Vollum Award for Distinguished Accomplishment in Science and Technology, endowed by a grant from the Millicent Foundation (now part of the M. J. Murdock Charitable Trust). Vollum also supported other institutions, including the Oregon Graduate Center in Washington County in 1963, now part of Oregon Health Sciences University (OHSU); the Vollum Institute at OHSU; Catlin Gable School; and the Oregon Zoo. Jean Vollum was her husband's partner in philanthropy, and she continued those efforts until her death in 2007. One of their projects was financing the renovation of the library

at the Mount Angel Abbey in Mt. Angel, a renovation designed by Finnish architect Alvar Alto and one of the few Alto buildings in the United States.

Howard Vollum died in Portland on February 3, 1986. He was "as good and decent a human being as one could hope to know," Reed President Paul Bragdon remembered. "He had an unselfconscious, spontaneous recognition of the dignity of other human beings...modest, humble, down-to-earth, independent, and original in his thinking, and curious, endlessly curious, to the end of his days."

Sources

"Inventor Played Key Role in the Electronics Revolution: Charles Howard Vollum '36." *Reed Magazine* (Spring 1986). (Accessed July 21, 2020.)

Hewlett, W. R. "Charles Howard Vollum." *Memorial Tributes, National Academy of Engineering* 3 (1989). (Accessed July 21, 2020.)

"The Vollum Institute Story." OHSU.

"Howard Vollum in WWII." VintageTek. https://vintagetek.org/howard-vollum/ (accessed July 21, 2020).

Vollum, Howard, interview by Linda Dodds, March 26, 1980. SR 9060, Oregon Historical Society, Portland. Transcript.

Fitzsimmons, Eileen G. "Southeast History: The story of a Sellwood cottage, linked to Tektronix." *Sellwood Bee*, November 29, 2019. (Accessed July 21, 2020.)

The Oregon Encyclopedia

https://www.oregonencyclopedia.org/articles/vollum-c-howard/