David Packard

Born September 7, 1912, in Pueblo, Colo.; with William Hewlett, creator of the computer company that bears their names; financial supporter and designer, Monterey Aquarium.

Education: BA, Stanford University, 1934; MS, electrical engineering, Stanford University, 1939.

Professional Experience: GE, Schenectady, NY, 1934-1938; cofounder, Hewlett-Packard Corp., 1939; deputy secretary of defense, 1969-1972; chairman, President Reagan's Blue Ribbon Committee Commission on Defense Management, 1985-1986; member, US-USSR Trade and Economic Council Committee on Science and Technology, 1975-1982; chair, US-Japan Advisory Commission, 1983-1985; member, President's Council of Advisors on Science and Technology, 1990, 199 1.

Honors and Awards: Honorary degrees from Colorado College, the University of California, Pepperdine University, South Colorado State College, University of Notre Dame, and Catholic University; Founders Medal, the Institute of Electrical and Electronics Engineers (IEEE), to Hewlett and Packard, 1973; Industrialist of the Year, to Hewlett and Packard, California Museum of Science and Industry and California Museum Foundation, 1973; SAMA (Scientific Apparatus Makers Association) Award, to Hewlett and Packard, 1975; Vermilye Medal, to Hewlett and Packard, the Franklin Institute, Philadelphia, 1976.

As a Stanford freshman in 1930, David Packard met fellow engineering student William Hewlett. Their friendship led to founding one of America's most successful companies. From its beginning in 1939, Hewlett-Packard has been a solid partnership, with both men sharing technical and organizational responsibilities. The company was incubated in a garage behind Packard's Palo Alto home.[1] Packard's wife, Lucile, served as secretary and bookkeeper.[2]

David Packard was born September 7, 1912, in Pueblo, Colorado, the son of a lawyer. He avidly read library books on science and electricity as a boy and built his first radio while he was in elementary school. After graduating from his local public high school, Packard enrolled as an electrical engineering student at Stanford University in California. There he met William Hewlett, a fellow student who shared his interest in electronics and the out-of-doors. In college he was a varsity athlete and president of his fraternity; he received a BA with honors in 1934.

After a few months of further work at Stanford, Packard went to Schenectady, New York, to work in the vacuum tube engineering department of General Electric Company. He returned to Stanford in 1938 to study the theory of the vacuum tube.

In 1939 Packard finished his electrical engineering degree under Stanford professor Frederick Terman. By then he had renewed his friendship with Hewlett, who had developed considerable expertise on negative feedback

[1] 367 Addison Street, Palo Alto, Calif.

[2] From Caddes 1986.

circuits. Hewlett and Packard set up a laboratory in the Packard family garage and soon were taking orders for apparatus ranging from air conditioning control units to electronic harmonica tuners to exercise machines. In 1939 Hewlett-Packard turned its emphasis from custom orders to mass-produced instruments. Particularly important were its audio oscillators, devices that generate a controlled signal at a predetermined frequency, and are generally used to check the performance of amplifiers and broadcast transmitters. Some provided sound effects for Walt Disney's movie *Fantasia.*

During World War II Hewlett-Packard expanded rapidly to meet the needs of various defense projects. Packard ran the company alone, as Hewlett was in the US Army. Business declined sharply at the end of the war, and Hewlett-Packard was forced to lay off employees for the only time in Packard's career. Demand rebounded by 1950; in 1957 the company's stock began to trade on the open market. Hewlett-Packard's product line grew to include not only thousands of electronic measuring devices for a wide range of frequencies but, from 1972, hand-held scientific calculators. The company had done custom work in computer manufacture as early as the 1940s, but did not begin to market its own computers until the late 1960s. Experienced in supplying engineers and scientists, Hewlett-Packard had some difficulty with wider business and consumer markets. Nonetheless, it developed a wide range of programmable calculators, minicomputers, and microcomputers.

Hewlett-Packard was one of the first and largest electronics companies in the region of California now called Silicon Valley. It gradually expanded its sales force from a handful of representatives into a national and then an international network. Manufacturing facilities also extended out of California, not only to Colorado and Oregon but to Europe, South America, and Asia. At the same time, staff trained at Hewlett-Packard came to have important posts at other electronics firms. For example, Stephen Wozniak, cofounder of Apple Computer, first worked at Hewlett-Packard.

With Packard as manager and Hewlett as technical expert, Hewlett-Packard followed conservative but unconventional business practices. Profits were reinvested in the company so that debt was low. Following General Electric's example, the company preferred to hire employees directly out of school. Staff received generous benefits and were entrusted with considerable responsibility. Hewlett and Packard set general objectives, assisted those who carried them out, and chose not to flaunt their wealth and power. Engineering, sales, and management were done by men, while women did much of the actual assembly work. Emphasis was on high quality. To retain the atmosphere of a small business when the staff came to number thousands, Hewlett and Packard divided the company according to product types, with each division having its own marketing, production, and research groups. Support functions such as sales and advertising often were handled by outside contractors.

In addition to his business activities, Packard took an active interest in civic affairs. From 1948 until 1956 he chaired the Palo Alto School Board. In 1968 he favored Nelson A. Rockefeller as the Republican candidate for president. When Richard M. Nixon was nominated and elected instead, the new president sought a skilled administrator to serve as deputy secretary of defense. Packard agreed to take the position, decreasing his salary from nearly a million dollars a year to about $30,000 annually. Congressional critics pointed out that Packard owned about one-third of the stock in Hewlett-Packard and that the company did about $100 million in defense-related business each year. To avoid conflicts of interest, Packard put his stock in a trust fund, with all dividends and capital increases going to charity.

In 1977 Packard returned to Hewlett-Packard as chairman of the board. He also served on the boards of directors of corporations such as Caterpillar Tractor, Standard Oil of California, and Boeing, and was a trustee

of the Herbert Hoover Foundation and of the American Enterprise Institute conservative research groups. He was named as one of President Ronald Reagan's informal advisers.

Packard held several patents in the area of electronics measurement and published papers in that field. He received honorary degrees from Colorado College, the University of California, Catholic University, and elsewhere.[1]

BIBLIOGRAPHY

Biographical

Caddes, Carolyn, *Portraits of Success: Impressions of Silicon Valley Pioneers*, Tioga Publishing Co., Palo Alto, Calif, 1986.

UPDATES

David Packard died March 26, 1996 (MRW, 2012). Portrait added (MRW, 2013)

[1] Based on a biography by Margaret Paull, longtime secretary to David Packard.