



Dr. David W. Curkendall
May 13, 1936–May 11, 2011

David Curkendall was born to Howard and Georgia Curkendall and grew up in the Newark Valley of New York state. Dave spent his youth helping on his parents' dairy farm and, after an eventful journey to California and junior year at Burbank High, graduated from Newark Valley Central School in 1954. He received a bachelor's degree in electrical engineering in 1959 from Cornell's School of Engineering. After six months of active duty in the U.S. Army, he entered the Army Reserves.

Dave briefly took a position at Convair Astronautics in San Diego. He then joined the JPL Systems Division in 1961 and began work on spacecraft tracking and navigation. While at JPL, he resumed his studies in 1966 at UCLA, earning a PhD in astronautics in 1971. Dave continued his work on tracking and navigation and managed the Tracking Systems and Applications Section in 1980–1981. Dave's concepts were successfully employed for travel across the solar system and precise targeting of landers on Mars at the start of the next century.

Leaving JPL briefly, Dave was one of the founders of Action Computer Enterprises in Pasadena. He and his partners developed, manufactured, and marketed a series of multi-user, networked micro-computers in the days before the IBM PC.

Returning to JPL, he managed the hypercube project, evolving the Caltech Cosmic Cube into the modern-day parallel supercomputer. For a time, he was very successful in getting funds from Reagan's "Star Wars" initiative to develop a remarkable simulation of nuclear war between the U.S. and the U.S.S.R. with the U.S. protected by an anti-missile umbrella of kinetic kill vehicles (stone-throwing satellites). Dave exhibited remarkable poise in presentations. An accomplished raconteur, he was able to communicate and adapt to the circumstances for his military sponsors. The combination of hypercube hardware and hurriedly written application code was somewhat temperamental, but Dave learned to adapt his patten to application and machine crashes without missing a beat — including the day a truck rumbled past building 138 and the lights on the machines went out one by one. Dave also managed JPL's High-Performance Information Technology Office and led the Laboratory's Advanced Laboratory for Parallel High-Performance Applications. He retired in 2004.

Dave is survived by his wife Dotti; sons Eric and Jay; grandchildren Doni, Ramses, and Ivan; and his older brother Gerry (Ethel) and family.

It was my great pleasure to learn from and work with Dave. Dave was very generous in both his professional life and his personal life. He was open-minded and always available to help out. Dave maintained a positive attitude and always provided encouragement to his associates. He was a star shining for others.

James Border

I think that Dave had two outstanding qualities, besides his sharp mind. His ability to communicate his ideas and his talent for getting people to work together were great assets in all his fields of endeavor. It was always a pleasure to work with him.

Susan Finley