

In Memoriam, David Sweetman

**Researcher, Collector, and Author;
Director of the Oughtred Society.
Managing Editor of the Journal of the
Oughtred Society**



**David Sweetman
(January 30, 1948 - February 15, 2022)**

David Sweetman died peacefully at home, on Tuesday, February 15, from VCP disease, also known medically as inclusion body myopathy (IBMPFD), the conditions detrimental to his body caused by the mutation of the Valosin Containing Protein gene finally taking its toll. He is survived by his wife of 47 years, Donna, who as we all observed numerous times at our California and Las Vegas meetings, took great care to ensure that David could attend, enjoy, and contribute to all of our meetings. Those of us who are members of The Oughtred Society Board also saw Donna in action at these Board meetings, where again, she was always close to his side, prepared to assist David in every way possible. As Donna noted in her message to the OS, "After 47 years of marriage I feel like I will grieve for another 47 years. I know it will get better. David is off the ventilator and now at peace."

David was born on January 30, 1948, in Passaic, New Jersey, the oldest of six children, four of whom also inherited VCP disease. This disease is a very rare, adult-onset, neuromuscular disease caused by several variants in the gene called Valosin Containing Protein. It is medically known as a multisystem proteinopathy because it is a protein disorder that affects multiple body systems. A typical symptom of the disease is muscle atrophy which is usually progressive. For over 20 years, David recorded the progression of his disease, which was ultimately published in a paper with Dr Virginia Kimonis, Professor and Chief of Genetics at UC Irvine. His study was a motivation for the group 'Cure VCP Disease', which was started by David's nephew, Nathan Peck, who also has the disease, and to which David was a founding board member. This organization has enabled the creation of a larger study with a group of participating VCP patients with the ultimate goal of a better understanding and a cure to this rare disease. There are currently no known cures or treatments; through the assistance of organizations such as Cure VCP, more is being learned, and through this learning, the closer the research moves towards a potential treatment.

David's early years were spent moving from place to place, attending twelve different schools in twelve years in three different states and two foreign countries. He was educated in the US Navy as an Electronics Technician (USS Edward McDonnell DE-1043) and as a Reactor Operator, qualifying aboard the nuclear-powered submarine, USS Kamehameha SSBN-642. He later obtained an MBA from Santa Clara University and a BS in Physics from San Diego State University as a Phi Beta Kappa member. His initial positions out of college were as a plant operator at both coal and nuclear power plants in South Carolina.

After marriage to Donna and a move to California, David began a career in Silicon Valley, ending as VP of Quality and Reliability at two different start-up companies. His position included aspects of sales, marketing, operations, product engineering, and design development. David published numerous articles on the topics of quality in the areas of statistical process control and statistical quality control and on reliability focused on stress methods for non-volatile memories. He also contributed to two IEEE publications on nonvolatile memory device

physics and authored an IEEE paper regarding radiation and floating-gate memories. He is a co-holder of a US patent for a nonvolatile memory product. He has also published articles on his Nevada homes renewable energy systems, including solar, solar thermal, wind and photovoltaic sources in Home Power magazine and has contributed to other articles on trouble-shooting and preventive maintenance.

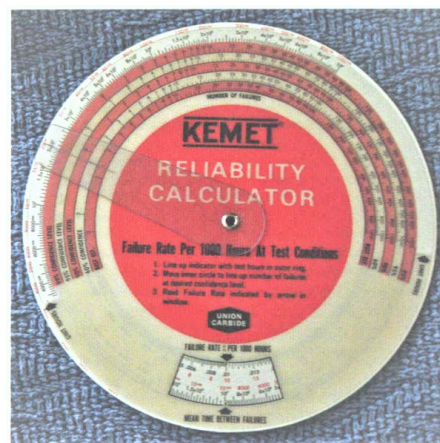
David chaired the JEDEC JC-13 committee, JEDEC being the world-wide standard setting organization for solid state devices. After retirement, he volunteered to continue work with the JEDEC JC-10 committee on solid state devices. He retired from his responsibilities in Silicon Valley in 1999 to spend time traveling and pursuing personal projects, which included renewable energy, model trains, refurbishing his homestead, and reading. This also gave David the opportunity to add new focus to his hobby as an avid collector of various scientific gadgets, slide rules, slide charts, and measuring and drawing instruments.

David joined the Oughtred Society in 2005 and became a regular attendee to our meetings held at the Computer History Museum in Mountain View, CA. He quickly established himself as an active member and contributor, taking on the responsibility of managing our Oughtred Society message board and writing articles for the Journal. Recognizing his efforts and contributions, he was named a Fellow of the Oughtred Society in 2011 and received the Oughtred Society Award in 2014. David worked for a time as Assistant Editor of the Journal with Bob Koppany as Managing Editor, and then assumed the responsibility of Managing Editor in 2013. David served as Managing Editor of the Journal of the Oughtred Society for six years, from 2013 through 2018, until his illness progressed to the point that he was not able to continue, at which time our current Managing Editor, Jim Bready, assumed this key position. As Editor, David joined the Oughtred Society Board of Directors in 2013 where he remained as a very active contributor and advisor throughout 2021.

David was interested in all types of slide rules, including linear, circular, and cylindrical rules. He also took a special interest in slide charts, the very highly specialized calculating rules generally made of cardboard stock that were common in the mid-20th century and given by scientific and engineering firms to employees and as gifts to customers and students.

Many of David's articles focus on areas with which he was most familiar, namely statistical process and quality control. He was especially fond of the Kemet Reliability Calculator that he used for over 20 years in his work with semiconductor reliability. He attributes this device in helping him to internalize the concepts of interpolation and approximation and to illustrate that many calculations are estimates that, by definition, exhibit variability. David also wrote a comprehensive article on the 'octal-decimal' and 'hexadecimal-decimal' conversion calculators and their utility in assisting computer programmers and integrated circuit memory quality and reliability engineers. He covered the topic of slide charts very thoroughly, noting that often in dealing with specific calculations, they were much quicker and easier to use than a normal slide rule. As David noted, solutions which require a number of operations using a standard slide rule can be greatly reduced using a specialized slide chart that is directly calibrated as a single operation for that specific calculation. Finally, David co-authored and edited several monographs on general collecting topics, documenting advice on how to store and document one's collection.

David was certainly an inspiration to all of us who knew him. He exhibited tremendous courage in fighting his disease, continuing to work diligently through all of his difficulties to make significant contributions to our Society. He was a captive and articulate speaker both at our dinner events as well as at our meetings and was the source of many discussions at these events. His knowledge, leadership, advice, friendship, and courage will be sorely missed by us all.



The Kemet Reliability Calculator, used by David for over 20 Years Working to Determine Integrated Circuit Reliability and Failure Rates