W. DAVID SINCOSKIE

1954–2010

Elected in 2000

"For contributions in packet switching for integrated networks."

BY STEWART PERSONICK

We note with deep regret the death of our respected colleague, W. David Sincoskie, who passed away on October 20, 2010, at age 55. He was born in Wilmington, Delaware, in 1954, and received his bachelor's (1975), master's (1977), and PhD in electrical engineering (1980) from the University of Delaware.

A fellow of the International Electrical and Electronics Engineers (IEEE), Dave was a pioneering contributor for more than three decades to the field of computer communications and, in particular, to the emergence of today's ubiquitous Internet and its many applications. He was a member of the community of researchers who early on recognized that rapid advances in electronics, signal processing, and high-capacity communication systems would enable a single, integrated telecommunications network to economically provide transport of data, voice, and video information in the form of packets.

He worked for many years (1980–2008) in the telecommunications industry, at Bell Laboratories and at Bellcore (now Telcordia Technologies), before transitioning to a second career as a full professor and the founding director of the Center for Information and Communications Sciences at the University of Delaware.

During his career as a researcher and research manager in the telecommunications industry, Dave organized research groups and research initiatives in the then emerging areas of local area networks, packet switching, packet network architecture, Internet telephony, and packet video. His research activities and contributions also extended to packet network management, mobile and ad hoc networking, all-optical and wireless networking, and network security. He made many seminal contributions to the science and technologies of packet communications networks, including the first demonstration of a voice-over-packet telephone, the first virtual local area network (LAN), the first description of a digital video server, and the first wide area gigabit-data-rate computer network (the Aurora network). He cofounded the subfield of active networking. During the transition, circa 1995, of the US government-sponsored NSFnet (previously ARPAnet) to today's commercial Internet protocol (IP) networks, Dave played a key role in encouraging and assisting the traditional telecommunications carriers to establish network access points (NAPs) to enable them to accept and deliver Internet traffic.

From 1996 to 2008 he was group senior vice president of Telcordia's Networking Systems Laboratory where, among other achievements, he did much to advance Internet telephony. From 1989 to 2008, he was also an adjunct professor of computer and information science at the University of Pennsylvania.

Dave's record of service to the US Department of Defense through the National Research Council included membership on the Board on Army Science and Technology (BAST) and committees of the Air Force Studies Board. He served on the BAST Committee on Strategies for Network Science, Technology, and Experimentation, which recommended the creation of a government-sponsored research center in network science, directly contributing to the decision to create the Army Research Laboratory Network Science Collaborative Technology Alliance. He also served for many years on the US Defense Advanced Research Project Agency's (DARPA) Information Sciences and Technology group and the Internet

Architecture Board. In addition, as a Special (US) Government Employee since 2002, he provided technical and management advice to senior executives at the National Security Agency.

Dave received the IEEE Communication Society's Fred W. Ellersick Prize in 2003 for his paper "Broadband Packet Switching: A Personal Perspective," which detailed his research contributions over two decades to the development of the broadband Internet. In 2006 he was inducted into the University of Delaware's Alumni Wall of Fame. He was a member of Tau Beta Pi and Eta Kappa Nu.

His colleagues remember Dave as a dedicated and persistent researcher and research manager. He was also a conscientious mentor and generous research collaborator. People all over the world who are using high-performance and low-cost packet communications for business, education, entertainment, personal activities, and participation as informed citizens in democratic societies are the beneficiaries of his life and work.

Dave is survived by his wife JoAnn, who wrote that he enjoyed travelling around the world and gourmet dinners at home with her and their cats.

> Dave and I enjoyed spending our 25th anniversary in Paris and Cannes, France. He and I also spent a pleasurable time in Tokyo, Japan, and for several years had fun hiking in Austria and Switzerland. We had good memories of times in Boston after Dave's business trips to Woods Hole. His most recent hobby had been playing golf and he enjoyed it in Taiwan, Palm Springs, and at Hartefeld Country Club near his home in Delaware.

He was a wine connoisseur and his wife, a gourmet cook, added that they enjoyed dinners at home. She wrote that "Dave valued his friends and colleagues, who during nice weather would visit and dine outdoors" on their deck, but he also enjoyed an occasional pizza night with his wife and her father and aunt on their deck in Delaware.