



Sidney Meffer

SIDNEY METZGER

1917–2011

Elected in 1976

*“For development of early radio relay systems
and communication satellite systems.”*

BY DAVID METZGER, PHILIP METZGER, AND SALLY FASMAN
SUBMITTED BY THE NAE HOME SECRETARY

SIDNEY METZGER, a pioneer in the field of communication satellites, died on December 22, 2011, at the age of 94.

Sid, as he was called by all who knew him, was born in New York City on February 1, 1917, the third of four children. He was a bright, very hard working student and graduated with honors from New York University’s uptown campus in 1937. He was a member of Tau Beta Pi and Tau Kappa. In 1948 he received his master’s in electrical engineering from the Polytechnic Institute of Brooklyn. He started his career at the US Signal Corps at Fort Monmouth, New Jersey, in 1939. While there he helped develop radio-relay communications technology for the United States. He was the only civilian on the committee that oversaw the development and implementation of SIGSALY, the secure communications systems used by Churchill and Roosevelt during World War II.

After the war, Sid continued his pioneering work in communications technology. In 1946, while working for ITT, he was division head in charge of the development and initial production of commercial and military radio relay systems. These included early installation of 24 voice channel time-division multiplexing, 2000 MHz equipment in Canada, Mexico, Belgium, and several states in the United States. This design was later produced by various ITT companies worldwide.

In 1954, Sid and his family moved to Princeton, New Jersey, where he worked for RCA. From 1954 to 1957 he worked on satellite studies for the RAND Corporation and later for Dr. Wernher von Braun's group in Huntsville, Alabama. From 1957 to 1963 he was manager of the Communications Engineering Department of the newly formed RCA Astro Electronics Division, with technical and administrative responsibility for the communications engineering (system and equipment) for satellite projects SCORE (1958), TIROS (1960), and RELAY (1962). It was also during this time that he developed the idea for an orbital post office, which would use satellite technology to send messages over long distances. The idea was presented to the American Rocket Society in November 1958; alas, it never came to fruition (because of privacy concerns), but it was a precursor of today's email and fax technology.

In 1963, Sid Metzger was one of the first people to join the newly formed Communications Satellite Corporation (COMSAT) as manager of the Engineering Division. His responsibilities included the engineering aspects of planning for the satellite and earth station equipment for INTELSAT I through INTELSAT IV. He was also involved with the successful development and tests of a dual polarized antenna, which formed the basis of AT&T's agreement with COMSAT for a domestic satellite.

When he retired from COMSAT in 1982, Sid was vice president of engineering and chief scientist. He then formed his own consulting firm, specializing in communications satellite problems such as radiation from both terrestrial and maritime earth stations.

Sidney Metzger was the recipient of many awards and honors. He was a member of the National Academy of Engineering, a fellow of the Institute of Electrical and Electronics Engineers (IEEE), and he received the IEEE's award for International Communications and Aerospace Electronics. In 1984 he received the Aerospace Communications Award from the American Institute of Aeronautics and Astronautics, of which he was a fellow. He served on NASA's Space Applications Advisory Committee (Communications Group),

the National Research Council's Air and Space Engineering Board and its ad hoc Committee on Space Station Engineering and Technology Development as well as the NRC Committee on National Communications Systems Initiatives, and the board of Sigma Xi. In 1985 he was the recipient of the NEC Foundation's inaugural C&C Award for integration of computers and satellite technology. He was inducted into the Society of Satellite Professionals International Hall of Fame in 1993.

Mr. Metzger was well known for his regular 14-hour workdays throughout his 45-year career and for his ability to sustain such hours by taking quick naps during any nonworking activity. He would nap during meals, at concerts and Washington Senators baseball games, and once while sitting in the front row of a Manila auditorium during a lengthy speech by then-President Ferdinand Marcos of the Philippines—which led to a receiving-line snub the next day by Marcos' wife Imelda.

He took great joy in his family. He is survived by Miriam, his beloved wife of 67 years; a younger sister, Mildred; three children: David, an architect retired as principal from the firm of Heller and Metzger; Sally, a retired special-education professional in the Montgomery County (Maryland) School System; and Philip, counselor to the deputy administrator at the US Environmental Protection Agency; five grandchildren: Jonathan, Benjamin, Rebecca, Diana, and Lily; and two great-grandchildren: Leo and Zephyr. He deeply grieved the death in 1999 of his adored granddaughter, Sarah Emily. His family remember him with love for his serious dedication to work and commitment to inquiry lightened by a dry but gentle sense of humor; his consistent calm under stress; the values of diligence, honesty, and thoroughness, which he lived as much as he imparted; and for his dignity, modesty, and loving-kindness.