

ISSUE: [March 2017](#)

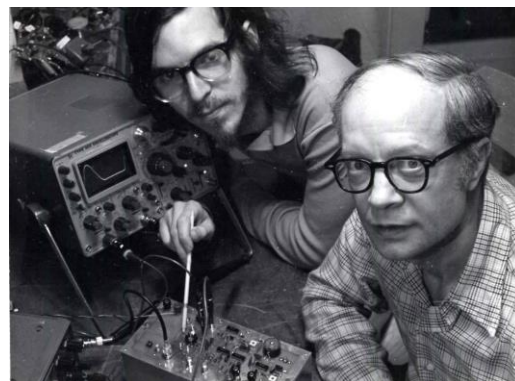
### ***Nathan Sokal's Story***

Nathan (Nat) Sokal, 87, died on May 8, 2016 at his home in Newton, MA, surrounded by his beloved wife, three children and trusted caregiver. He had previously lived in Lexington, MA for 54 years.

Born in Brooklyn in 1929, Nat was the American baby for his mother, father and older siblings who had emigrated from Poland five years earlier. With two doctors as parents, he was encouraged to excel in science and math, attending Stuyvesant High School and the Massachusetts Institute of Technology, where he received BS and MS degrees in electrical engineering in 1950. In Cambridge, Nat met his future wife, Zelda Kaufman, a fellow New Yorker and student at Radcliffe College. After spending most of their married life and raising their three children in Lexington, in 2010 they moved to Lasell Village, an active senior retirement community in Newton.

Nat worked as an electronics engineer for over sixty years. At the start of his career, Nat helped to design equipment for an atomic weapons test site in the Marshall Islands, and then served with the US Air Force at MIT Lincoln Laboratory working on the US air-defense system. In 1965, Nat founded Design Automation, Inc. in Lexington, providing electronics engineering design, consulting, design review, and what Nat described as "emergency fixes."

As a professional engineer, Nat is best known for inventing the Class E high efficiency power amplifier in the early 1970s with his teenaged son, Alan. This invention contributed to the development of many modern conveniences such as cell phones and microwave ovens. In 1989, Nat was named as a Fellow of the Institute of Electrical and Electronics Engineers (IEEE), and in 2007 he received their Microwave Pioneer Award. In 2011, Nat received an honorary Doctorate degree from the Polytechnic University of Madrid, culminating his six-decade career in engineering.



*Nathan Sokal working with his son Alan.*

The 2011 Madrid award ceremony lauded his 130 papers, 8 patents, and contributions to many technical books – "figures that would be noteworthy for a university professor, but extraordinarily unusual for an engineer in industry." Nat was recognized for "efficient, useful and practical solutions to real problems in engineering." He was also praised for his "affability of character, simplicity, patience and warmth" and being a source of "inspiration, leadership, honesty and selfless support" for scores of young engineers around the world.

Richard Redl, one of Nat's colleagues, reflected on his friend's impact.

"Nat's passing was a very sad event for me personally. He was my mentor and friend for more than forty years. I'll never forget the lessons I learned from him about how an engineer should tackle a difficult project, how to write technical papers, and how to become an active participant in the engineering community. My most productive years were spent with him at Design Automation, and those years created the foundation for my subsequent professional career as a consultant. I'll always remember his warmth, generosity, curiosity, creativity and openness," said Redl.

Throughout his life, Nat enjoyed nature and outdoor activities—hiking, skiing, bicycling and canoeing with his family and friends. His children recall how, on weekend adventures in the woods, their father taught them how to identify the local trees, flowers, rocks and birds. Nat and Zelda enjoyed ballroom dancing—especially the waltz, swing and rumba—and traveling together to Europe, Asia, Latin America and Australia, where they had many friends and professional colleagues.



In addition to his wife of 63 years, Zelda Sokal, Nat leaves his children Alan Sokal (Marina PapaSokal) of London, England, Karen Sokal of Piedmont, CA and Diane Sokal (Randolph Meiklejohn) of Brookline, MA; six grandchildren—Seth and Lia Sokal Gutierrez, Elizabeth and Henry Meiklejohn, and Serena and Julia Papa-Sokal; and a large extended family.

*A photo of Nat with his family in 2013. Nat is shown here with his wife Zelda, his children Alan, Karen and Diane, daughter-in-law Marina and granddaughters Serena and Julia.*