

# Obituaries

## Roy F. Allison 1927–2016

Roy Allison, loudspeaker designer, audio researcher and writer, died March 1 in Manchester New Hampshire, age 88, of lung cancer. He was the last engineer and designer from the 1950s Acoustic Research days in Cambridge, Mass. that gave birth to today's consumer electronics industry with the first high-performance, affordable loudspeaker systems of acceptable size.

Roy Allison was born in Milford, Connecticut on May 6, 1927, the oldest of 12 children of Roy Henry Allison and Hazel Plumb Allison. Immediately upon graduation from high school, he enlisted in the U.S. Navy Reserve, serving 1944–46, spending his first year in intensive electronics and radar training and the next as instructor. Allison then attended the University of Connecticut to study electrical and chemical engineering but left a year short of a degree to support his new family. In 1951 he was recalled to serve during the Korean conflict.

A precise intellect and writer, Allison through the 1950s worked for a variety of audio and hobbyist electronics magazines in that booming field. Unusually intelligent and disciplined—sometimes solving differential equations for pleasure—he immersed himself in study of the acoustics classics from the 19th century through Harry Olson and Leo Beranek. In 1959, already widely regarded for his explanatory clarity and electronics expertise, he was hired by AR founder Edgar Villchur and became his protégé, “the best hire we ever made... the student who would surpass the teacher,” rising over the next dozen years from communications assistant to chief engineer to VP for engineering and manufacturing. The company was a dominant player in consumer electronics during that time, pioneering not only innovative loudspeakers but also an amplifier, tuner, receiver, and turntable, all showing Allison's highly inventive influence, not to mention AR's famously ample customer support.

A few years after AR was bought by Teledyne, in 1967, Allison left, and in the

early 1970s spent time extensively measuring the effects of listening rooms on loudspeakers, producing several peer-reviewed papers that have become anthologized references. His researches explained the almost inevitable audible playback dip that occurs in the lower midrange and upper bass, around and below middle C. In 1974 Allison Acoustics was founded to produce loudspeakers that worked around what is now called the Allison effect. The company's clever designs would overcome the problem through canny driver and cabinet configurations with guided placement, “taking beneficial advantage of room boundaries, which also happily places them where they take up minimum living space, and also getting equal and maximum dispersion from the higher audible frequencies.” For the latter point, Allison knew that to achieve the most natural stereo reproduction it was essential for upper-midrange and treble sound to be distributed throughout the listening room in the same way as all the other, lower sound. It was a revolutionary idea then and now. To that end Allison designed an original, still unequaled tweeter and midrange that in highly novel fashion disperse nearly as much sound sideways as forward.

Allison continued to write articles and books, lay and other, on room acoustics and high fidelity in general. He and Villchur also published an important work proving the inaudibility of a kind of loudspeaker-driver distortion that had been in the speculative news.

Allison loudspeakers were consistently highly rated both by the impartial Consumer Reports and by the more generous enthusiast magazines, the scientifically-oriented Stereo Review using the phrase “exceptionally neutral” and the subjectivist Stereophile finding the speaker under review to sound accurate where all others were wrong: “male voice, timpani, large brasses, and cellos somehow sounded more ‘right’ than usual.”

But consumer electronics, especially loudspeakers, is an exceedingly competitive market, with shifting product tastes and levels of dealer and customer (and engineer) sophistication. Neither of Allison's two pioneering contributions—beneficial real-

world boundary augmentation and uniformly wide broadband dispersion—has had lasting influence on loudspeaker design. Allison Acoustics folded by the 1990s. With significant backing from Villchur, new companies RDL (Room-Designed Loudspeakers) and subsidiary RAL (Roy Allison Labs) introduced mail-order, lower-priced lines of product. In the following decade the Allison brand name was purchased and moved to Kentucky for upscale relaunch with the same components and design principles and Allison as consultant. But the audio marketplace had since changed utterly, chiefly into mass-market and high-end stratifications. Roy Allison retired to do contract speaker design and customer support, to read and write, and to listen to his beloved classical music.

A member of the Institute of Electrical and Electronics Engineers and a life fellow of the Audio Engineering Society, Allison, like others of his empirically grounded engineering generation, had no patience with pseudoscience, tweak subjectivism, antagonism toward blind testing, and all of the similarly faith-based characteristics of the modern audio industry. Invariably described as gentlemanly, decent, fair, inordinately polite, generous, and modest, he yet had a sharp wit and a droll way with words.

He is survived by Nancy Miller Allison, his wife of 67 years, their three children, Jim, Christine, and Dottie, and numerous grandchildren. Donations may be made to the NH State Veterans Cemetery, Boscaawen NH.

One customer, also a working audio engineer, noted, “There was never smoke or mirrors associated with anything Roy made or said. Better than most he understood what a loudspeaker should and did do in actual use in a listening room, and from the beginning, with complete integrity and remarkable ingenuity, he designed, manufactured, and mated the components of his speakers to come closer to those goals than most do even now, so many years later. They still seamlessly fill my home theater with spectrally balanced and clearly imaged sound.”

David Moran