

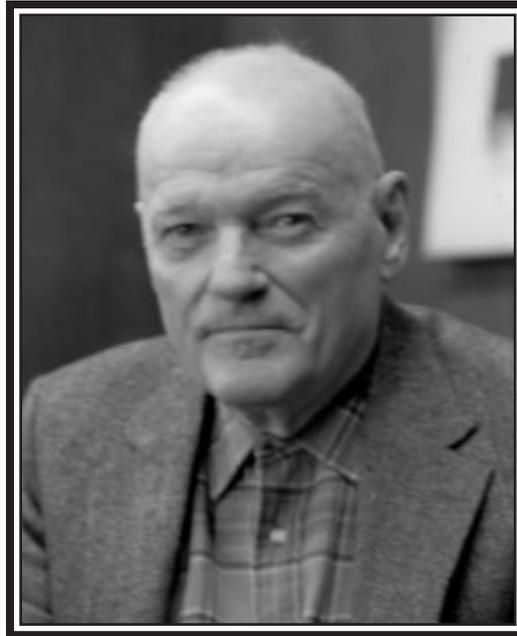
# In Memoriam

**E**mory Cook, AES member and audio innovator, died on February 19. He was 89 years old. Cook was known for the left-right binaural disc and launching a recording label devoted to pushing the boundaries of high fidelity in the 1950s and 60s.

Born in Albany, New York in 1913, Cook was the only child of Lavinia and Harry Cook. He attended Phillips Exeter Academy and spent a year at M.I.T. before enlisting in the Army Air Corps in 1932. In 1934, when he was discharged, he enrolled at Cornell University and graduated with an engineering degree in 1938.

After graduation, Cook worked for the New York Power and Light Company, and then for CBS in the general engineering and construction department. Subsequently, Western Electric hired him to work in the Field Engineering Force. During World War II, while working for Western Electric, he designed and supervised the construction of a fire-control radar "Trainer" and installed radar on destroyers. For this achievement, he received a Commendation which stated, "The Trainer [was] enthusiastically received by the Service and is, insofar as destroyer Fire-Control Radar is concerned, one of the most valuable training aids ever developed." Cook was extremely proud of this achievement.

A rugged New Englander who was continually formulating new ideas, plans and projects, Cook played a critical role in the development of vinyl disk technology and the introduction of high fidelity recordings. His company, Cook Laboratories, which he started in the basement of his home in Floral Park, New York,



Emory Cook  
1913–2002

in 1945, served as an umbrella organization for many of his inventions.

A newly designed feedback disk cutting head, which improved the quality of the transfer from tape to vinyl, was the first invention. Cook marketed this cutter to be sold directly to recording companies when most manufacturers were renting their cutters to record makers on a per project basis. In response to Cook's cutter, MGM Records commissioned him to design and equip three recording studios. This endeavor allowed him to familiarize himself with the myriad devices and aspects of recording. He then began to think about other modifications that could be made to achieve what he considered to be that ever-elusive aim of high fidelity.

As a result of his experiments on microphones, amplifiers and electronic devices such as oscillators, Cook soon discovered that he was able to record frequency spectrums ranging

up to 20 kHz. He made a few sample recordings of piano and organ recitals to show what could be accomplished with the proper juxtaposition of tools, then rented a small suite at the 1949 Audio Fair in New York to demonstrate these novelty records. Hundreds of audiophiles flocked to his suite to listen to these records; and the reaction from attendees was so overwhelming that Cook immediately knew where his future lay.

In 1950, he founded the company Sounds of Our Times, which produced and released high fidelity records. These recordings demonstrated increased frequency range and innovative microphone placement techniques. The initial recordings were of storms, trains, airplane noises, ships whistles, babies crying, bull frogs, and a variety of environmental sounds. Although initially designed for high-fi buffs, the records sold out as fast as they could be pressed and proved to be a hit among the general public.

There are many anecdotes told of Cook and his pursuit of sound. He could spend hours listening to and recording the sound of rain until it sounded "wet," or lightening until it brought up the hairs on one's neck. One of his most famous recordings, "Rail Dynamics," featured the clickety-clack of the New York Central Line between Peekskill and New York City. To get the sounds, Cook perched atop trestles, hopped across switches and third rails and hung precariously out of the window of speeding trains. The results, however, were so realistic that a neighbor, who had just moved in to the house next door to Cook's Pound Ridge barn, became disturbed after hearing the screeching of wheels and whistles and com-

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plained the next day to his real estate agent for not informing him about the railroad that ran close to his property. The record was a sensation at the 1951 Audio Fair and sealed Cook's reputation as a high fidelity guru.

Cook was always looking for ways to improve recorded sound. In 1952, he developed the first binaural record. This prototype differed from the current monaural type in that it had two sets of grooves to be played with a binaural arm with two needles. Each needle connected to a loudspeaker at either end of a room, to create one of the first simulated stereo recordings.

Eventually, Cook's interests turned to the vinyl, itself. In 1955, he introduced a process called microfusion, which resulted in a powdered form of vinyl, which had fewer imperfections than the harder vinyl then in use. Cook set up a small factory out of Stamford, Connecticut, the new location of his home-based company, in order to process microfusion records for all of his releases. The *Sunday Times* cited Cook's microfusion records as one of the outstanding developments in sound recording during 1955.

Cook was a founding member and fellow of the Audio Engineering Society. He published many papers, and in 1985 received the Silver Medal for four decades of achievement in the recording field. Many articles have been written about Cook during his lifetime, including a two-part profile written by Daniel Lang for the *New Yorker*. In the profile, Lang quotes an engineer for a large manufacturer, who described the ceaselessly striving Cook as somewhat of a catalyst. "His [Cook's] business is small enough so that he can act as a kind of trial balloon for the rest of us... Things might get pretty stodgy without Emory around," he said. Described as a modest man with a reverence for sound, he was loyal to friends, family and his staff.

Cooke is survived by his wife Martha, two stepchildren, and three grandchildren.