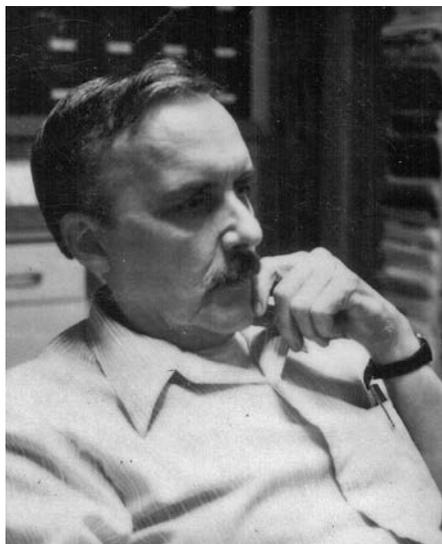


# Obituaries

## William H. (Bill) Watkins (1929–2018)



William H. (Bill) Watkins was a true American audio innovator. Developer of the famous Watkins Dual-Drive Woofer, the renowned WE-1 large floor-standing speaker system, the recently introduced compact Generation 4 unit, and numerous other high-performance speakers, he passed away at his home February 1, 2018 in Kingsport, TN.

He was a veteran of the U.S. Army in the Korean War era and served in active duty overseas. In his youth he became an accomplished musician, especially on the mandolin, guitar, and violin.

He was also a longtime member of the Audio Engineering Society, which he originally joined in 1974. He maintained an extensive library of AES publications over a span of several decades, which he heavily utilized in his ongoing audio and electroacoustics research and development activities.

He had been involved in the high-fidelity audio business in Kingsport since the late 1950s, having owned and operated Watkins Stereo, a retail and custom audio firm, and Watkins Engineering, which manufactured several of his later advanced loudspeaker systems, including the highly regarded WE-1 and Generation 4 models. He was

granted three U.S. patents in the area of acoustics, including U.S. #3,838,216 in 1974 for the Dual-Drive Woofer concept, which significantly improved low-end performance of an acoustic-suspension system by effectively canceling the low-frequency resonance impedance peak, thus extending the bass frequency response by close to an octave.

He also authored a landmark article on the technology, “New Loudspeaker with Extended Bass,” in the December 1974 edition of *Audio* magazine. The patented concept was subsequently licensed to Infinity Systems in California for use in many of their high-end speaker systems and soon became widely known as the “Infinity/Watkins” Woofer. In 1982 Watkins collaborated with his son Bill Jr. on a second patent, U.S. #4,443,744, on reviewer-acclaimed sound-damping panels for home listening use, later marketed as the Watkins Echo Muffs. A third patent, on resistively damped crossover networks to optimize speaker transient response, U.S. #4,475,233, was issued to Watkins in 1984.

His prolific speaker design career con-

tinued into the 21<sup>st</sup> century, culminating in the current highly reviewed compact Generation 4, a two-way system incorporating multiple patent-pending features to assure unusually wide, smooth frequency response, along with precise damping and stereo imaging from a small ( $\frac{1}{2}$  ft<sup>3</sup>) enclosure. He also recently completed a uniquely insightful book on dynamic loudspeaker operation, *Loudspeaker Physics and Forced Vibration*, which is anticipated to be published by his family in the near future.

He leaves his devoted wife of 68 years, Nell; a son, William D. (Bill Jr.) Watkins, who is continuing the speaker and audio business; a daughter, Renee W. Dean, a health-care consultant; and two granddaughters, Audrey Altonen and Adriana Watkins. Truly his wit, rare insights, and deep knowledge of sound and music will be sorely missed by those of us in the audio field who knew him.

The Watkins company, under Bill Jr., is continuing in the hi-fi audio business in Kingsport; their website is [www.watkinsstereo.com](http://www.watkinsstereo.com), and the email address is [info@watkinsstereo.com](mailto:info@watkinsstereo.com).