

# In Memoriam



A. J. May  
1921-2004

**A**. J. May, a life member of both the Audio Engineering Society and the Acoustical Society of America, passed away at the age of 82, on March 19, 2004. May was born in Nashville, Tennessee, on December 2, 1921. He graduated from Vanderbilt University with a B.S.E.E. in 1943. He was hired by RCA in Indianapolis, Indiana, after interviewing with L. J. Anderson in June of 1943, but was drafted in 1944, and served with the U. S. Navy in the Pacific until 1946. He returned to RCA in 1946, joining the Acoustic Development Group in Camden, NJ, headed by John Volkmann.

Along with Volkmann and Steve Caldwell, May worked to research, develop, and introduce a new RCA theater sound loudspeaker system in 1955. This new system maintained a smooth, uniform, and phase coherent frequency response over a 90-degree horizontal coverage angle by using cylindrical sector low- and high-frequency radial horns. Designed to be versatile, elements of this system could be used in various combinations for custom installations to suit special acoustic requirements. May and Volkmann created a unique 360-degree radial horn from theater system components for the 1964 New York World's Fair. The design team even planned for multichannel appli-

cations by making the low-frequency cabinets exactly 7-feet wide, so that three cabinets would be able to fit behind a standard 21-foot wide projection screen.

In 1964, RCA marketing requested a smaller two-way loudspeaker system to compete with the well-entrenched small format theater playback loudspeaker systems then available. One system was desired for two very different applications: for use as a monitor system in recording studios and for use as a theater playback system for smaller theaters.

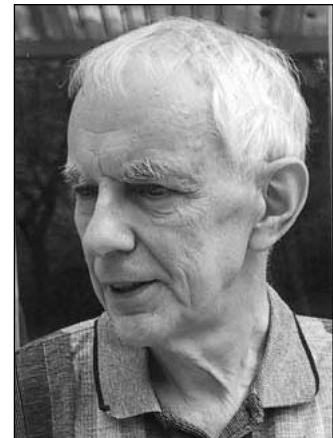
Again working with Volkmann, May designed and developed this system. He presented their initial findings in a paper delivered at the fall 1965 AES convention. Commercially introduced in 1967 as the LC-9A, this compact two-way system is unique in several ways. First, it maintains a horizontal dispersion angle of 120 degrees up to 15-kHz. Second, it provides true congruent cylindrical wave-front radiation. This matching of the acoustical wave fronts was achieved through developing low- and high-frequency horn mouths with equal shape and width. Much trial and error in the Princeton acoustic lab resulted in this carefully chosen and well-executed design, yielding a system that has a very smooth, wide range, and life-like sound. Attention to detail resulted in laboratory measured acoustic performance curves for the LC-9A that were unmatched by any of the competitive small-format theater playback loudspeaker systems that were commercially available at the time.

In addition to theater loudspeaker system design and development work, May was in charge of design for RCA's first solid-state stereo audio console, the fabled BC-7A. In a paper presented during the fall 1962 AES convention, he described the design attention paid to flexibility and simplicity of this new console. "Flexibility and simplicity are obtained by the use of interchangeable plug in units, which provide a wide choice of inputs for each mixer

position; liberal use of jumper terminals for easy access to key parts of the circuit; an uncluttered panel with function groupings of controls to minimize operator error; and particular attention to labeling." This highly functional design produced a very versatile stereo console, which is quickly and easily user adaptable for on-air, production, or public address applications. Broadcasters reacted very favorably to the BC-7A, and demand kept it in continuous production from 1962 until the mid 1970s. A large number of these audio consolettes are still in use today.

May continued his engineering work with RCA until retiring in 1981.

Paul McManus



Ulf Rosenberg  
1933-2003

**U**lf Rosenberg, Swedish acoustician and music producer, died on December 7, 2003, at the age of 70. He was born in Bromma, a suburb of Stockholm, where he grew up. Educated at Stockholm University, Rosenberg was a self-made man.

An active musician and a choir singer, Rosenberg dedicated his life to sound and music, and its technical applications. He founded the Bromma chamber orchestra together with violinist Lars Frydén. He was also a member of the Bach choir, the Academic choir, the Stockholm Philhar-

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monic choir, and two church choirs in the Stockholm vicinity.

Music and choir practice, together with his professional work at the Stockholm Philharmonic, Swedish National Testing and Research Institute, and other governmental departments, as well as Rikskonsert-er, the national concert organization, laid the foundation for his knowledge and experience in acoustics.

From the latter part of the 1970s, Rosenberg worked with Rikskonsert-er, and in the 1980s he was a production manager, supervising many large orchestral productions, for Caprice Records. One of his most important productions was the opera *Aniara*, which was honored with the Swedish Phonogramme Prize. His other outstanding orchestral productions include the music of the 18th century Swedish composer Johan Agrell, with the Drottningholm Baroque Ensemble. He was proud of this achievement.

By the middle of the 1990s, Rosenberg produced a CD recording of chamber music by Elfrida Andrée. His achievements as a musician, a flutist, and choir singer surpassed the usual amateur standard. This experience gave him a profound insight into a musician's task of conveying feelings and experiences, as well as a technician's desire for objective criteria. This resulted in his development as a knowledgeable acoustician with "Golden Ears."

In 1985, Rosenberg was employed by Ingemansson Technology AB where he had vast opportunities to develop his knowledge in acoustics, both in practice and in theory. He brought with him his vast experience and knowledge in music and speech acoustics. People who speak, sing, play and listen in various auditoriums, music halls, churches and concert halls owe him their gratitude. Some of his work worth mentioning includes the Linköping Cathedral, Håkan

Hagegård's retreat for musicians Hagegården, the Stockholm Concert Hall and the Uppsala Cathedral. His last projects, which were completed in 2003, involved Hedvig Eleonora Church in Stockholm and the Markelius Hall in the House of Stockholm Building Code Association.

Rosenberg is not with us anymore. Who will give us answers and advice founded on the practical experience of a lifetime? Those who have had the opportunity to benefit from his knowledge will miss his genuine interest in people who need to listen and learn and communicate. We ourselves are among those people. We shall remember his informative skill and his intelligent comments on work and life. He has left his daughters with their husbands and children, his sister and her family, and his dear friend Silja.

Sven Tyrland

Leif Åkerlöf

Friends and colleagues  
at Ingemansson Technology AB