



P. O. BOX 1138  
GALVESTON, TEXAS  
PHONE SO 3-4329

March 6, 1958

David F. Thomas  
Radio W.U.M.S.,  
Proctorville, Ohio

Dear David,

Thank you for your letter to KGBC which we received today. This letter is sent as a "Thank You" for monitoring our signals, and also sent to verify the signals you heard as described in your letter. KGBC did broadcast a special test. KGBC was on the air with a special transmission of speech and music to test our dual-audio equipment, broadcasting in Expanded Sound. The Transmission started 2:00 A.M. and ended 2:31 A.M. CST, February 16, 1958.

As I understand it here and explain it, dual-audio or multi-audio transmission consists of broadcasting two or more similar signals slightly out of phase, thus actually "Elongating" the signals as seen on the scope. The original, individual signals are not changed or distorted, but the resultant transmitted signals is a composite of the two or more, therefore gives the impression of a bigger, expanded signal or sound. Unless the two or more signals that are transmitted go beyond the optimum phase shift in time, (actually separated), the ear cannot distinguish the two separate signals, but hears only the combination of signals as a fuller, expanded sound, in a more resonant dimension. Resonant Dimension and Expanded Sound used by us, since words like Full-Dimension, Enhanced-Sound, do not adequately describe the electrical, acoustical, or mechanical change that results from such a transmission. We feel the term "Expanded Sound" correctly describes the resultant audio-product and interpretation of the ear.

We have used dual-audio transmission for more than two years, and to our knowledge we were the first to experiment with this type of sound, at least as far as commercial AM radio stations are concerned, and if we are'nt, no pride lost. PRESENTLY WE ARE NOT BROADCASTING ENTIRELY IN EXPANDED SOUND, but since we started with this type of sound medium, one station in the area uses this method throughout the broadcast day, and calls it "Full-Dimensional" sound. Some call it Enhanced Sound. I feel that "Expanded Sound" is more technically correct.

This type of sound transmission greatly improves the readability, (particularly speech), gives speech more depth and resonance, music is much fuller, increases the Amount (not the Number) of Audio Harmonics with increased resonant dimension, and greater presence.

Hope this may answer any questions you may have. Once again, "THANKS FOR LISTENING.....THANKS FOR WRITING".

Sincerely yours,

*Louis Jay*  
Louis Jay  
Program Director

LJ:erf