



Chip
Morgan
Broadcast
Engineering

Monday September 25, 1995

Mr. S. R. Morss
R2, Lake Shore Road
Boxford, MA 01921

Dear Mr. Morss:

Thanks for your signal strength report on the **KUSA 1680 kHz test station broadcasting from Las Vegas, NV** during the National Association of Broadcasters Convention.

This was the *first public broadcast of AM digital technology that is in-band-on-channel*. The tests were conducted by USA Digital, a consortium of radio operators including Gannett, Westinghouse and several others. The purpose of the tests was to show that digital modulation could be superimposed with standard AM broadcasts. Visitors to the NAB show who were interested in the tests rode in a special bus outfitted with a digital receiver and listened in headphones to the analog and digital signal for comparison. The AM digital signal provides 15 kHz stereo audio response with no fading, static or noise.

The transmitter was a Harris DX10 10kW standard AM transmitter modified to accept the digital signal. It simultaneously broadcast the standard AM signal and the digital signal on a non-directional tower near Las Vegas.

The reason you heard our phone number on the air was that we were advertising our digital experience to visitors at the NAB show. We actually have nothing to do with the test broadcasts other than being advertisers! Our firm performs **architectural and engineering** design, installation and troubleshooting for broadcast stations nationwide, based in Sacramento, California. We specialize in strategic planning, signal improvement, facilities improvement and project management for broadcast clients.

Reports are coming in from all across the US, showing just how far standard broadcasts could go if there was no interference on local channels! 1680 kHz is in what's called the "expanded band" recently approved by the FCC for new AM broadcast stations. I hope this information proves useful to you, and we appreciate your report!

Best Regards,

Chip Morgan
President **CMBE**

21-9-95

P.O. Box 5233
El Dorado Hills
California 95762

916.933.9330
Fax 916.933.3903