# WEEB 990 kHz, Southern Pines NC Occupied bandwidth Measurement September 13, 2012

## Purpose.

To confirm compliance by WEEB (AM) with 47 FR 73.44, AM transmission system emission Limitations, measurements were made on September 13, 2012. The results are detailed in this report.

# Equipment.

- Agilent N9340B handheld spectrum analyzer, Serial CN03488216, calibrated July, 2012
- Pixel Technologies shielded loop antenna

#### Location.

A site was chosen that was free of overhead electrical lines and was positioned to minimize interference from a station in Sanford NC on 1050 Khz. The loop antenna was able to produce a twenty decibel null on WEEB, which suggested minimal local re-radiation. The measurements were made on the northeastern edge of a cul-de-sac at the end of Royal Birkdale Ct, Southern Pines, NC, a distance of 1.03 kilometers from the WEEB tower as established by Delorme Street Atlas 2010 and confirmed via Garmin GPS-60.

#### Method.

The above referenced equipment was set up and confirmed to be operating correctly. In 'peak hold' mode, a continuous recording of emissions from WEEB were made during the period from 12:08 PM to 12:18 PM on September 13, 2012. The data from those measurements were saved to memory for later reproduction.

## Results.

A careful visual analysis of the captured waveform confirmed that WEEB's emissions were attenuated in compliance with 47 FR 73.44. Figure 1 (below) is an accurate representation of the captured waveform.

## Qualifications.

The undersigned made all preparations and measurements for this report. He is an experienced broadcast engineer have been involved in radio and television engineering since 1968. He has served as chief and assistant chief engineer for AM, FM and television stations as well as working with manufacturers and vendors of broadcast equipment in a technical capacity. He currently serves as engineering consultant to WEEB.

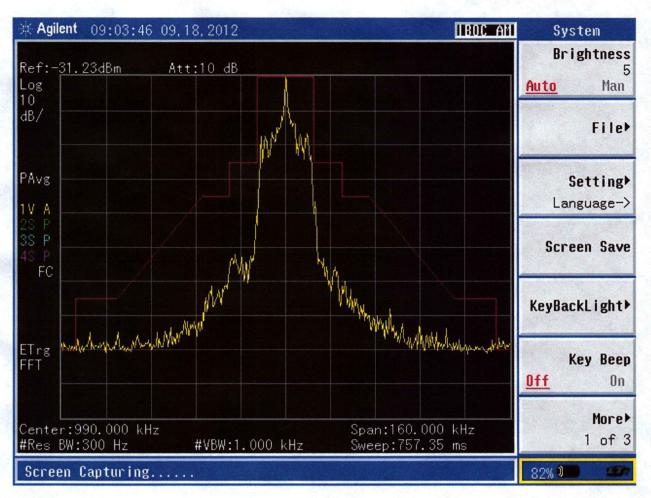


Figure 1.

The signature below certifies that all representations made in this report are true and correct to the best of the undersigned's knowledge.

\_\_\_ September 18, 2012

James Heim

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