2019

NRSC SURVEY

OF

EMISSION

PERFORMANCE

FOR

WBAP AM RADIO

THIS REPORT WAS PRODUCED
AND PUBLISHED BY

T AND T MEASUREMENTS
105 Riverside Lane
Marietta, OH 45750
740-706-1664

STATEMENT OF QUALIFICATIONS

Lawrence R Taft states that:

1. He is an Electrical Engineer. Professional Engineer 60954 NY (retired)

2. His credentials are contained in other filings and are a matter of public record with the Federal Communications Commission.

3. David Paskawych and/or Lawrence Taft made the R.F. measurements contained in this document, and that they are familiar with the proper and normally accepted procedures for making such measurements, as well as the use of the measurement equipment.

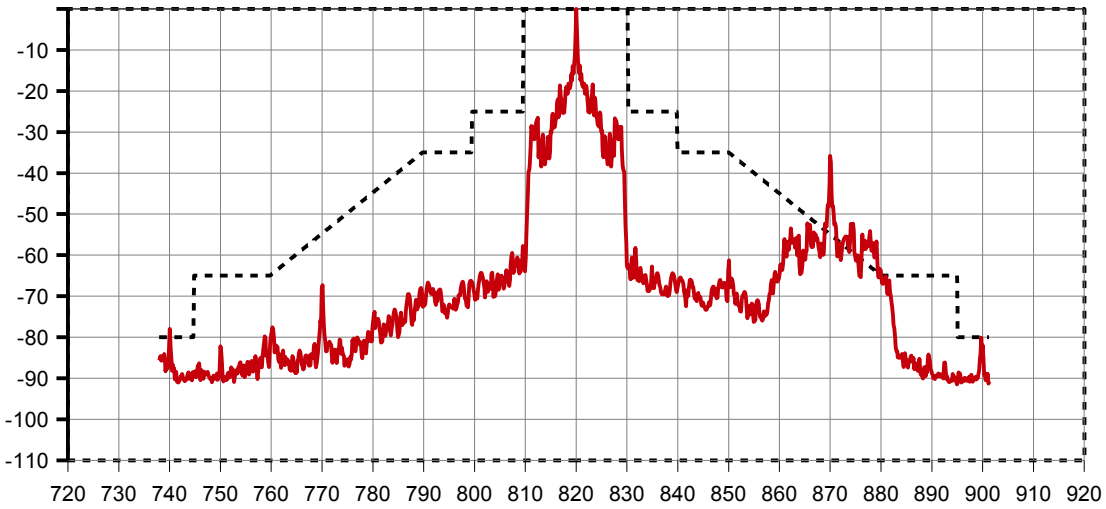
4. T and T Measurements has been retained by this station to prepare the attached report.

5. Section 73.44(d) of the FCC Rules states that NRSC measurements should be taken 1 KM from the transmitter site. If for any reason, a measurable signal is not obtained from that distance, the readings are taken closer to the transmitter.

6. All statements contained in the attached material are true of his own knowledge and belief.

Lawrence R Taft, PE
October 16, 2019

WBAP

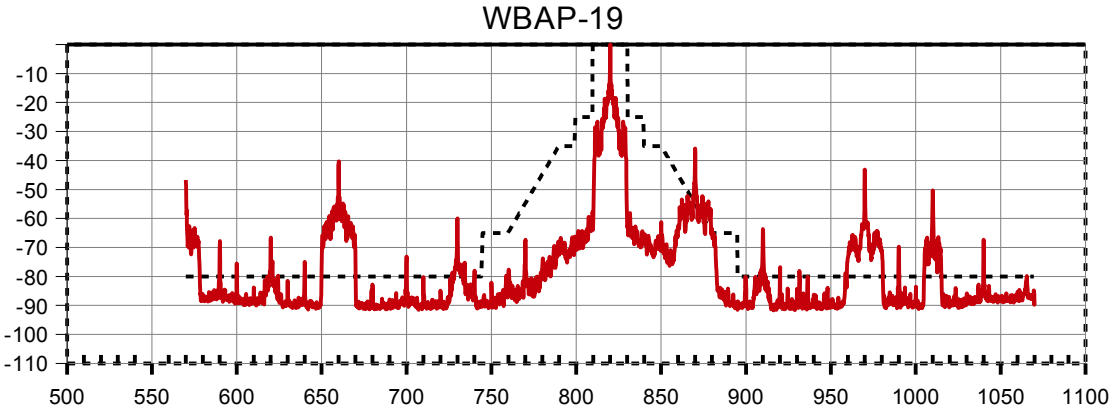


Legend: Solid line station data, Dash line NRSC mask.

Other Stations: 870 kHz

Electrical Noise: kHz

Analyzer: Center 820 kHz Horizontal Scale 10 kHz/div, Res BW 300 Hz
Settings: Span 160 kHz Vertical Scale 10 dB/div



Span: 500 kHz

Methodology

The measurements were made using a RF Space SDR-14 spectrum analyzer. The SDR-14 is calibrated to the Tektronix 2712 spectrum analyzer. The antenna is a Scott Associates LP-3 shielded loop antenna with notch filter. The antenna's frequency range is 0.5 to 10 MHz with a rising gain vs frequency response. The harmonic level readings are adjusted for the gain response of the antenna and meet or exceed the -80 dbc as referenced to the carrier of the transmitter. Plots are normalized to 0 db.

Call Sign: WBAP

City: Fort Worth
State: TX

Date: October 16, 2019
Time: 1600

Transmitter Location: 32 36 38 97 10 00 from FCC database.

Measurement Location: 32 37 08 97 09 58 from GPS receiver.
Parking lot off of W. Harris Rd.

License Freq: 820 kHz. Freq Measured: 820.000 kHz.

Power/Tower: 50kw,1twr

Input: -27.2 dBm

2nd harmonic:	1640 kHz	2dBc:	-80dBc
3rd harmonic:	2460 kHz	3dBc:	-80dBc
4th harmonic:	3280 kHz	4dBc:	-80dBc
5th harmonic:	4100 kHz	5dBc:	-80dBc

For the following power levels the harmonics must be at or below :
0.25kW -67dBc, 0.5kW -70dBc, 1kW -73dBc, 2kW -76dBc, 5kW and greater -80dBc.
dBm is the actual signal level at the input to the analyzer referenced to 1 milliwatt.
dBc is signal level of harmonic below peak of carrier. Unless noted, harmonics were at or below limits. The departure of the carrier frequency may not exceed, plus or minus, 20hz from the assigned frequency.

Lawrence R Taft, PE
October 16, 2019