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

STATEMENT OF QUALIFICATIONS

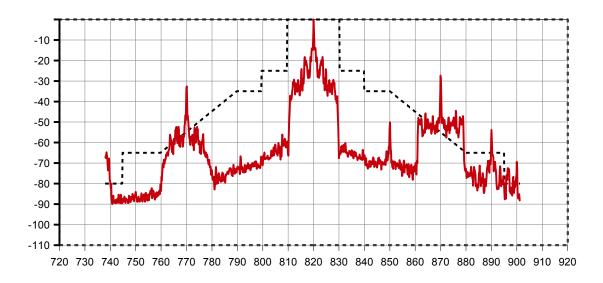
Lawrence R Taft states that:

- 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.

LR Jaft

Lawrence R Taft, PE October 5, 2018

WBAP

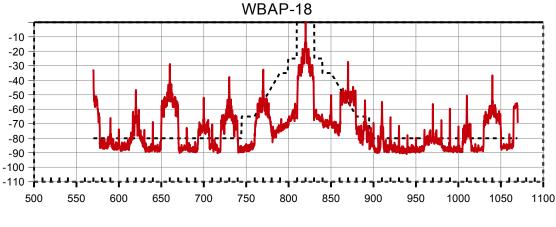


Legend: Solid line station data, Dash line NRSC mask.

Other Stations: 770,850,870,890 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: State:	Fort Worth TX			
Date: Time:	October 5, 2018 1800			
Transmitter L	ocation:	32 36 38	97 10 00	from FCC database.
Measurement Location: 32 36 21 97 09 12 from GPS receiver. Parking lot off of 287 frontage road.				
License Freq:	820 kHz.	Fre	q Measured:	820.000 kHz.
Power/Tower: 50kw,1twr				
Input: -27.6dBm				
2nd harmonic: 3rd harmonic: 4th harmonic:	2460 kH	lz 3dE	3c: -80dBc 3c: -80dBc 3c: -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. <u>dBm</u> is the actual signal level at the input to the analyzer referenced to 1 milliwatt. <u>dBc</u> 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.

LR Saft

Lawrence R Taft, PE October 5, 2018