# 2020

# *NRSC SURVEY*

# *OF*

# *EMISSION*

# *PERFORMANCE*

# *FOR*

# *WRIE 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.

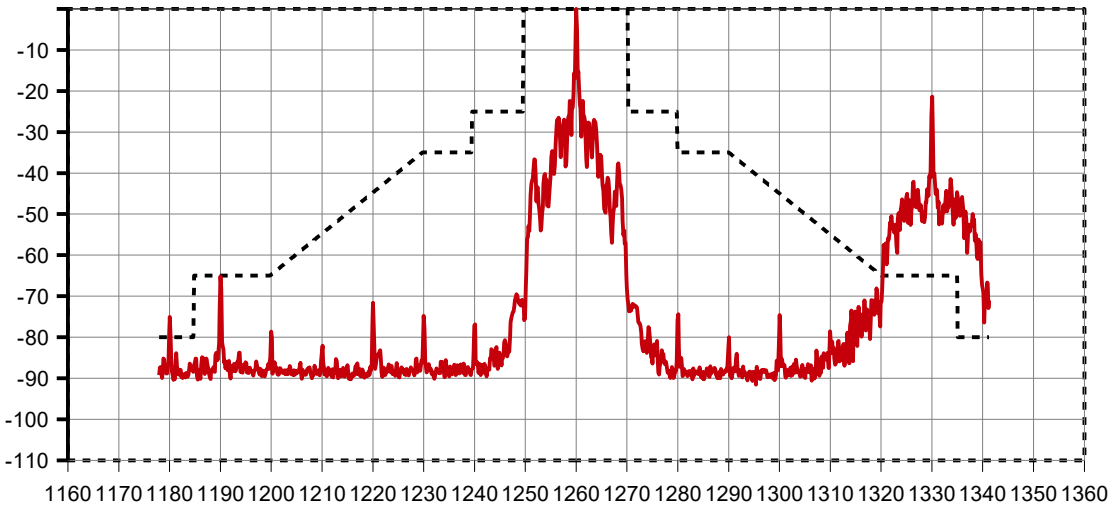
4. T and T Measurements has been retained by this station to prepare the attached report.

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
04/06/20

# WRIE

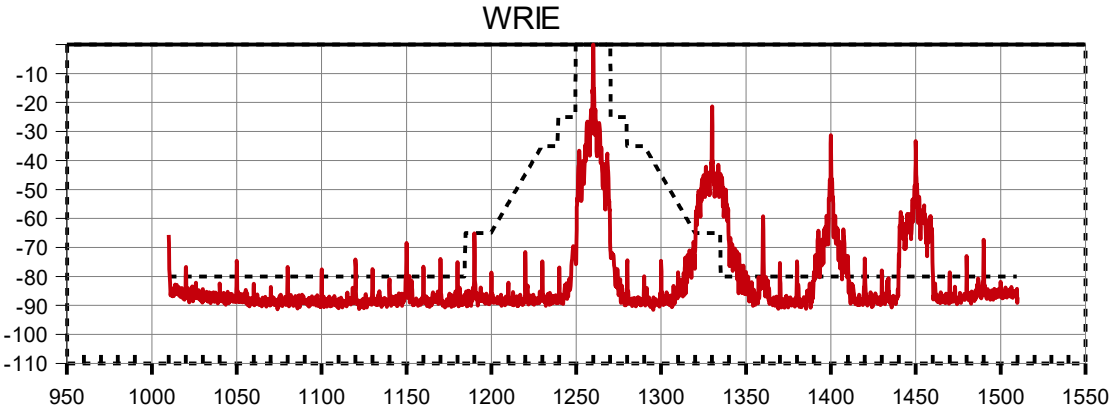



Legend: Solid line station data, Dash line NRSC mask.

Other Stations: 1330kHz

Electrical Noise: kHz

Analyzer: Center 1260 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: WRIE

City: Erie
State: PA

Date: 04/06/20
Time: 1630

Transmitter Location: 42 03 18 80 02 24 from FCC database.

Measurement Location: 42 04 30 80 02 28 from GPS receiver.
Pull off of Schultz Rd.

License Freq: 1260 kHz. Freq Measured: 1260.007 kHz.

Power/Tower: 5kw, 2twrs

Input: -21.5 dBm

| | | | |
|---|---|---|---|
| 2nd harmonic: | 2520 kHz | 2dBc: | -80dBc |
| 3rd harmonic: | 3780 kHz | 3dBc: | -80dBc |
| 4th harmonic: | 5040 kHz | 4dBc: | -80dBc |
| 5th harmonic: | 6300 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
04/06/20