

RE: EB_FIELDSCR-19-00029498

Response to FCC NOV

W247AY

Discussion of Issue and Resolution

On July 17, 2019 I received a telephone call from Michael Mattern, Resident Agent from the FCC Enforcement Bureau, Miami office. He stated that he was located at the transmit site for Cornerstone translator station W247AY. He further stated the fact that his monitoring equipment was receiving a spurious signal that appeared to be coming from the site and asked if I could meet him at the to further evaluate the spur. Upon my arrival I also met Bruce Williams, Electronics Engineer with the FAA from the College Park, GA office. After discussing the issue with the two representatives, I provided a signal sampler device which we inserted in the transmission line between the transmitter and antenna of W247AY and using Mr. Williams' portable spectrum analyzer it was determined that the spur in question was, in fact, originating from the W247AY transmitter. The stations transmitter was immediately shut down to prevent further interference.

The transmitter was subsequently removed from the site and bench tested operating into a 50 ohm dummy load at full rated power using the same sampler device feeding a LP Technologies Model LPT-3000 RF spectrum analyzer. During a 30 minute period of operation with normal modulation on the transmitter no spurious signals were observed. Approximately one week later I returned to the transmitter site with the transmitter equipment and a low power band pass cavity/filter tuned to the station's operating frequency. Using the same sample system and an Anritsu MS2712E spectrum analyzer, similar to the one used by Mr. Williams, the FAA agent, I observed the same spurious signal. The bandpass filter was then inserted in the RF system and the spur disappeared. After evaluating with the test filter the station was again shut down and the appropriate triple cavity bandpass filter system was ordered by the licensee (Shively Model 2914). The filter was received and installed on August 14, 2019. The station's signal was checked again both with the sampler and off air with a receive antenna connected to the Anritsu analyzer. The measurements resulted in no spurious signals observed and the station was returned to licensed service.

Affidavit of Accuracy

I, Louis V Mueller, am the Engineering Manager for Cornerstone Broadcasting Corporation, licensee of W247AY. I am a SBE Certified Professional Broadcast Engineer and hold a general Class Radiotelephone Permit PG-19-14917 issued by The Federal Communications Commission. My experience is a matter of record with the FCC. The information contained in this report is true and accurate, to the best of my knowledge and is submitted by me under the penalty of perjury.

SIGNED:  9/4/2019