

October 21st, 2015

## W243AF Construction Permit Special Operating Conditions

On August 1st, 2014, the Federal Communications Commission issued a construction permit for FM translator W243AF owned by permittee Positive Alternative Radio. On October 21<sup>st</sup>, 2015, W243AF has been constructed and we are applying for our license to cover.

On the construction permit for W243AF, a special operating condition #3 stipulated:

3 BEFORE PROGRAM TESTS COMMENCE, sufficient measurements shall be made to establish that the operation authorized in this construction permit is in compliance with the spurious emissions requirements of 47 C.F.R. Sections 73.317(b) through 73.317(d). All measurements must be made with all stations simultaneously utilizing the shared antenna. These measurements shall be submitted to the Commission along with the FCC Form 350-FM application for license.

On Wednesday, October 21<sup>st</sup>, 2015, we conducted measurements using a spectrum analyzer on W255CK and W243AF which share an antenna. We concluded that we are in compliance with the spurious emissions requirements set forth in 73.317(b) through 73.317(d).

With respect to 73.317(b), we found that W255CK was 52 dB removed from the main carrier and W243AF was 53 dB removed from the main carrier. The minimum requirement set forth to be in compliance is 25 dB.

With respect to 73.317(c), we found W255CK was 54 dB removed from the main carrier and W243AF was 54 dB removed from the main carrier. The minimum requirement set forth to be in compliance is 35 dB.

With respect to 73.317(d), we measured the combined harmonics of the two stations outside of 600kHz from their main carriers. We measured the harmonic at 94.1 MHz to be 54 dB removed and the harmonic at 101.3 MHz to be 54 dB removed. The requirement states that these emissions must be removed at least  $43 + 10 * \text{Log}_{10}(\text{Power, in Watts})$ , or 80 dB, whichever is lesser. For W243AF licensed at 10 Watts, we calculated our the minimum requirement to be 53 dB removed from the main carrier.

These measurements conclude that Positive Alternative Radio and station W234AF have satisfied the special operating condition set forth in their construction permit.

Sincerely,

David Hodges  
Engineer, Positive Alternative Radio