

November 24th, 2015

W242CL & W294BY Construction Permit Special Operating Conditions

On October 6th, 2015, the Federal Communications Commission issued construction permits for FM translators W242CL and W294BY owned by permittee Positive Alternative Radio. On November 24th, 2015, W242CL and W294BY have been constructed and we are applying for our license to cover.

On the permits for W242CL and W294BY, 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 Tuesday, November 24th, 2015, we conducted measurements using a spectrum analyzer on W242CL and W294BY 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 W242CL was 56 dB removed from the main carrier and W294BY was 56 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 W242CL was 60 dB removed from the main carrier and W294BY was 61 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 85.9 MHz to be 65 dB removed and the harmonic at 117.1 MHz to be 82 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 W242CL & W294BY 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 W242CL & W294BY have satisfied the special operating condition set forth in their construction permit.

Sincerely,

David Hodges
Engineer, Positive Alternative Radio