



On June 21st 2023, WPBG(FM) was granted an experimental permit to continue operation of hybrid digital FM in-band on-channel (IBOC) operation using asymmetric power levels in the digital sidebands. This experimental authority allowed station WPBG(FM) to operate with lower sideband (LSB) digital effective radiated power (ERP) of -14 dBc and upper sideband (USB) digital ERP of -10 dBc. On

WPBG(FM) has operated with these digital power levels continuously from April 6, 2016, to the present day with short periods of symmetrical operation for comparison. During this testing period, including the past year, WPBG(FM) staff has continued to conduct listening tests to determine the effect that asymmetrical power level operation has had on analog and digital reception.

These tests were conducted with a variety of receivers including OEM and aftermarket automotive radios, desktop radios, portable radios, and tuners. Locations of the tests were local, distant and fringe coverage areas roughly corresponding to the 7060, 50 and 40 dB contours.

With more and more HD radios available in newer model automobiles WPBG(FM) has continued to survey listeners to determine the extent of HD listening and to see if the experimental operation was causing any noticeable degradation of the station's analog signal.

The results of these tests and surveys indicate a substantial increase in HD listening to all 4 HD audio sub-channels. Without issues with WPBG(FM) analog reception in any of the station's coverage area whether operating symmetrical or asymmetrical. There is continued indication of more robust digital coverage in all areas when operating with upper sideband (USB) digital ERP of -10 dBc.

We have received no reports and are unaware of any interference to any first adjacent stations on 93.5mhz. The conclusion is that asymmetrical operation has had no detrimental effect on WPBG(FM)'s analog operation and has, in fact, improved digital coverage over symmetrical operation.

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