

Engineering Report
Exhibit 12 Page 1
Minor Modification of Construction Permit W260BW
Spread the Gospel, Inc
January 2016

This report is prepared to support an application for minor change to FM translator W260BW, to move it under a Mattoon Waiver to Bridgeton, NJ. The primary station is changed to AM station WSNJ Bridgeton, NJ.

Mattoon Waiver

The FCC has granted a waiver of its minor change processing rules under specific conditions:

The translator to be relocated is to change the primary station to an AM station. This application requests a waiver under the conditions of a Mattoon standard.

The translator must be a fill in translator for an AM station.

The primary station is changed to WSNJ (AM), Bridgeton, NJ, where it will be used as a fill in translator for this class C AM station, transmitting from the WSNJ transmitter site.

The translator must be licensed and operating.

The translator has been licensed since 2011

The proposed facilities must be mutually exclusive with the licensed facilities.

W260BW remains on channel 260, as shown in Exhibit 13 Figure 1. As can be seen, the proposed F(50,10) 40 dbu contour completely encompasses the licensed F(50,50) 60 dbu service contour which would not be permitted under Section 74.1204(a)(3)

The translator shall not have been previously relocated.

W260BW is licensed at the location applied for in the original 2003 window.

This change to the translator will not effect LPFM considerations.

Bridgeton is not within any rated market.

Bridgeton already has two LPFM stations WZFI-LP and WCNU-LP

According to the LPFM finder tool, there are two additional LPFM channels available at

the proposed translator location.

The application must be otherwise in the public interest.

This application increases the population served by 60 dbu contour of W260BW from 3666 to 89,615 a 24 times increase. The Noncommercial Educational Station WEHA will be provided a replacement translator which will greatly increase the population served compared to that of the licensed W260BW facilities.

Channel Allocations

Exhibit 13 Figure 1 is an overall allocations map showing that there is no overlap of protected contours of other stations' and applications' protected contours and the interference contours specified in § 74.1204 of the FCC rules. Figure 2 is a map showing the second and third adjacent channel allocations. There is no overlap with any stations except WJBR-FM and WRNB with WRNB protection being more restrictive, Figure 3 is a showing with respect to Second Adjacent channel station WRNB, Media, PA. Figure 3 shows that there is no potential for interference between the proposed facilities and WRNB outside a 150 meter radius area on the transmitter site. Figure 4 is a satellite photo showing that there are no structures or highways within that 50 meter radius area excepting unattended transmitter shelters, and that there are no multi-story buildings within the area where the potentially interfering contour approaches the ground.

The 54 dbu F(50,50) contour of WRNB (dark blue) is shown extending beyond the proposed facility, the WRNB 55.5 dbu F(50,50) contour is shown in blue, extending beyond the proposed transmitter site. The second and third adjacent channel protection ratio is 40 db, so it is required that the 55.5 dbuV contour of WRNB be protected from the proposed 95.5 dbu contour of the translator.

Exhibit 13 Figure 4 is a satellite photograph showing the translator tower location, and its surroundings. The area where the 102 dbuV contour reaches the ground is uninhabited, consisting of the antenna field with no occupied structures.

In conclusion, the proposed translator meets all the overlap requirements of § 74.1204 of the FCC rules and regulations.

Environment

Exhibit 17 is a study showing that the proposed translator is excluded from environmental processing according to § 1.1306 of the FCC rules. The RF exposure worksheet is included to show that there is no location where the radiation from the translator exceeds exposure standards for general public.

Engineer's Statement

This is to certify that this report has been prepared by myself. It is correct and accurate of my own knowledge, except where stated otherwise, and where that is so, the information is correct to the best of my knowledge and belief.

I further certify that I am a Licensed Professional Engineer in the State of New Jersey, and the Commonwealth of Pennsylvania with a BSEE degree from the Newark College of Engineering of NJIT, and that I am, and have been for over thirty years, regularly engaged in the practice of radio engineering with the firm of Radiotechniques Engineering, LLC, with offices at 402 Tenth Avenue, Haddon Heights, NJ. I am a member of the AFCCE, Senior member of the IEEE and SBE and hold a FCC General Radiotelephone Operator License. My qualifications are a matter of record with the FCC.



28 January 2016

Edward A. Schober, PE