

This report is prepared on behalf of Sandyworld, Inc., licensee of W294AH, Columbus, OH, in support of an application for a change of site, and channel because of a loss of the antenna site and interference from the STA operation caused to Full Service FM station WCGX, Dublin, OH. The channel change is not within the three adjacent channels above or below the authorized frequency, nor intermediate frequency channels, however the proposed and authorized 1 mV/m service areas substantially overlap. A waiver of § 74.1233(a)(1) is requested.

Waiver Request

This application is filed because the operation of WCGX, Dublin, OH has changed so as to displace W294AH from its authorized STA operation. This displacement is because the operation caused interference within the service area of WCGX, as evidenced by the attached letters from listeners complaining of interference to their reception of WCGX.

W294AH has suspended operation of its STA operation, and is, simultaneously with this application, requesting a Silent STA.

The FCC has established policies to waive the restrictions of § 74.1233(a)(1) for FM Translator stations which have displaced from their authorized channel by actual interference to full service stations. This application meets these requirements, and the change to channel 244 from channel 294 because no adjacent channel, nor IF Spaced channel is available in the area. This waiver is justified because there is no channel which meets the restrictions of § 74.1233(a)(1) in the area. Without this waiver, Columbus will lose the service of W294AH.

Channel Allocations

Exhibit 13 Figure 1 is a co-channel and first adjacent channel allocations map showing that there is no overlap of protected contours of other stations and applications and the proposed interference contours specified in § 74.1204 of the FCC rules. It also shows that the proposed facility does not receive overlap from authorized translators and boosters. Figure 2

is a map showing the allocations contours for second and third adjacent channels. There is a large clearance between the proposed nuisance contour. This map also shows that no overlap or spacing issue exists with with any station excepting second and third adjacent channel stations WLVQ and WBNS-FM, Columbus, OH.

Figure 3 shows compliance with respect to these class B, Second Adjacent channel stations.

In a letter granting Jersey Shore Broadcasting Corporation's application BPFT-950830TD (September 26, 1996 1800B3-JDB) the FCC stated that the Ratio method is suitable for translator applicants to demonstrate lack of interference for application purposes.

The 54 dbu F(50,50) contours of WLVQ and WBNS-FM (dark blue) are shown extending well beyond the proposed facility. The WLVQ and WBNS-FM 105 dbuV F(50,50) dbuV contour is shown in purple, extending well beyond the proposed transmitter site. The second and third adjacent channel protection ratio is 40 db, so it is required that the 105 dbuV contour be protected from the proposed 145 dbuV contour of the translator.

Since the distance to this contour is below the minimum distances for the F(50,10) and F(50,50) curves, the signal level existing on the ground in the vicinity of the translator was calculated using inverse distance with an adjustment for ground reflections. This procedure has been accepted by the FCC in recent applications. Exhibit 13 Figure 3 is a tabulation and chart of these calculations showing the location above ground at which the proposed translator will produce an interfering contour. This table and chart shows that the 145 dbuV signal is more than 3 meters above the building roof at its closest approach.

There are no taller buildings within 0.01 km of the antenna location.

Since this proposal is for less than 100 Watts, no IF Spacing is required.

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 roof of the building is not accessible to the general public, and has locked doors to restrict access. The RF exposure worksheet is included to show that there is no accessible 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, Life 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.



14 November 2013

Edward A. Schober, PE