

SECTION 74.1204(d) STUDY

This narrative exhibit demonstrates that the predicted interference to the 60 dBu contour of the second-adjacent WQJU, Mifflintown, PA is allowable under the rules stated in 47 CFR 74.1204(d).

In support thereof this Applicant states the following:

1. WQJU, Mifflintown, PA, second adjacent channel facility to this translator proposal, is protected from interference within its 60 dBu contour from the associated interference contour (based on 47 CFR 74.1204(a)(1); using the FCC F(50/10) curves) which need be 40 dBu greater than the associated coverage contours (WQJU) that would encompass the proposed translator antenna site and that contour which is 40 dBu greater than the associated coverage contour.
2. This translator's antenna location is located within the 60 dBu contour (based on 73.333 F(50/50)) of WQJU, Mifflintown, PA. This proposal will use the predicted desired to undesired coverage method to determine the appropriate interference contour that need be used with regard to WQJU. Included as an attachment (W298CR Mexico Desired to Undesired) is a map showing that the 100 dBu coverage contour of WQJU encompasses the proposed antenna site along with the entire proposed 140 dBu interference contour. As the proposed 140 dBu interference contour is 40 dBu greater than the 100 dBu contour of WQJU then this contour is the appropriate interference contours for this analysis and it is clearly evident that interference will only occur within this interference contour for this proposed translator.
3. Given this translator's requested effective radiated power of 210 watts, Directional; the predicted 140 dBu interference contour for this proposal would be very small. At any HAAT value, the 140 dBu contour

distance for this proposal is 0.0102 kilometers (10.2 meters) at 300 degrees from true north and smaller than this in all other directions.

4. This proposed translator is situated in a sparsely populated hilltop area 35 meters above ground on a radio communications tower. Because of this location 35 meters above ground height, the entire area of interference is located far above ground and thus no interference will be caused to WQJU, Mifflintown, PA. Also, the tower is in a rural, unpopulated area. The rule in 47 CFR 74.1204(d) states "an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such factors as may be applicable." In this particular case, as shown in this exhibit, it is clearly evident that there is a "lack of population" as defined in 47 CFR 1204(d) thus allowing this translator to operate at this proposed location.

For the foregoing reasons this applicant submits that the predicted interference to WQJU, Mifflintown, PA is allowable under Section 74.1204(d) of the Commission's rules. Furthermore, grant of this application is in the public interest as it would increase the coverage area of a radio facility in this area and impose no hardship to the referenced facilities, WQJU, Mifflintown, PA.

By: Kevin Fitzgerald, Technical Consultant