

Clearance to WAMJ and WYAY

This instant translator application clears all allocation constraints of Section 74.1204. On first glance, it appears that interference is created to WAMJ, Roswell, GA and WYAY, Gainesville, GA. However, Section 74.1204(d) instructs us:

“In addition, 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 other factors as may be applicable.”

WAMJ places 64.5 dBu over the proposed translator site. Adding the 40 dBu U/D ratio to the 64.5 dBu signal produces an interfering contour of 104.5 dBu. This interfering contour extends a distance of 394 meters in the main lobe of the signal. The antenna that is being proposed is a Shively 7-bay $\frac{1}{2}$ wave spaced antenna. This antenna significantly focuses the 104.5 dBu interfering contour over the heads of any nearby resident. Please see the drawing that follows. The nearest the 104.5 dBu interfering contour comes to the ground is 4.9 meters. This occurs at a distance of 256.7 meters from the tower base. This is generated by the 8 degree azimuth of the antenna. Therefore, the interfering contour does not touch the ground and cannot be received by any listener.

WYAY places 100.2 dBu over the proposed translator site. Adding the 40 dBu U/D ratio to the 100.2 dBu signal produces an interfering contour of 140.2 dBu. This interfering contour extends a distance of 6.5 meters from the antenna. Since the antenna is located 41 meters AGL, the interference to WYAY never touches the ground.

In conclusion, based on the foregoing explanation showing that no persons will receive interference, it is thought this application is in compliance will Section 74.1204 using Section 74.1204(d).

104.5 dBu Interference Above Ground Shively 7-Bay 0.5 Wave Spaced

