

MONTROSE BROADCASTING CORP.
FM Translator W240AJ
Endicott, NY
Proposed CH238FT, 95.5 MHz, 0.1 kW, - 4.5m AAT

ENGINEERING STATEMENT

This engineering statement was prepared on behalf of Montrose Broadcasting Corp., which has purchased FM translator W240AJ (FCC ID #31836; File #BLFT-19871221TB), Endicott, NY from the estate of John W. Pike. W240AJ is presently licensed to operate on 95.9 MHz (Ch240) with 8 watts at 117 meters AAT from the estate's property. Montrose Broadcasting Corporation seeks to move the translator to the site of commonly owned W234BT and change frequency to 95.5 MHz (Ch238) and operate with 0.1 kW directional at - 4.5 meters AAT.

It should be noted that W240AJ will serve as a fill-in translator for WPEL(AM) with its 60 dBu contour within the 2 mV/m contour of WPEL(AM).

ENVIRONMENTAL CONSIDERATIONS

This was addressed in FCC Docket # 93-62, released August 1, 1996. Table 1(A) on Page 67 of the document depicts the ANSI/IEEE C95.1-1992 (IEEE C95.1-1991) protection requirements. The maximum permissible exposure for an occupational or controlled environment in the 30 to 300 MHz spectrum is a power density of 1 milliwatt per centimeter squared (mw/cm^2).

It is pointed out that this FM translator site is within a fenced compound of the local power utility company where the public is not permitted entry.

Since the applicant shall employ a Scala CA2-CP single-bay directional circularly polarized antenna, the vertical elevation pattern of that antenna has been used in determining the effective radiated power below the horizon toward all areas 2 meters above ground level. For the controlled environment in the commercial FM spectrum 2 meters above ground level, the power density will be $0.35 \text{ mw}/\text{cm}^2$, or 0.35 % of the allowed $1 \text{ mw}/\text{cm}^2$. FM translator W234BT is co-located at this antenna structure and will contribute $0.038 \text{ mw}/\text{cm}^2$ for a total of $0.388 \text{ mw}/\text{cm}^2$, which is still well below the $1 \text{ mw}/\text{cm}^2$ limit for a controlled environment.

Should any maintenance worker require access to the structure, the applicant will either reduce power or cease operation until workers are outside the utility's fence. Appropriate RF warning signs exist on all sides of the fence and it may be assumed that there will be no significant effect on the human environment with regard to exposure of the general public.

ATTACHED EXHIBITS

The following tabulation describes exhibits supporting this instant application:

Figure 1 is a vertical plan sketch of the translator antenna supporting structure.

Figure 2 is a portion of the Endicott, NY 7½ minute topographic map depicting location of the translator site.

Figure 3 is a polar graph and tabulation for the Scala CA2-CP antenna, oriented at 160°T.

Figures 4A and 4B are allocation maps showing absence of prohibitive contour overlap with pertinent FM facilities.

Figure 5 is a tabulation of facility data for the proposed W240AJ operation, along with the other Fm facilities studied in this instant application.

Figure 6 is a channel 238 spacing study.

Figure 7 is an allocation map demonstrating the proposed 60dBu of W240AJ will be within the 2 mV/m daytime contour of WPEL(AM).

July 31, 2014


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