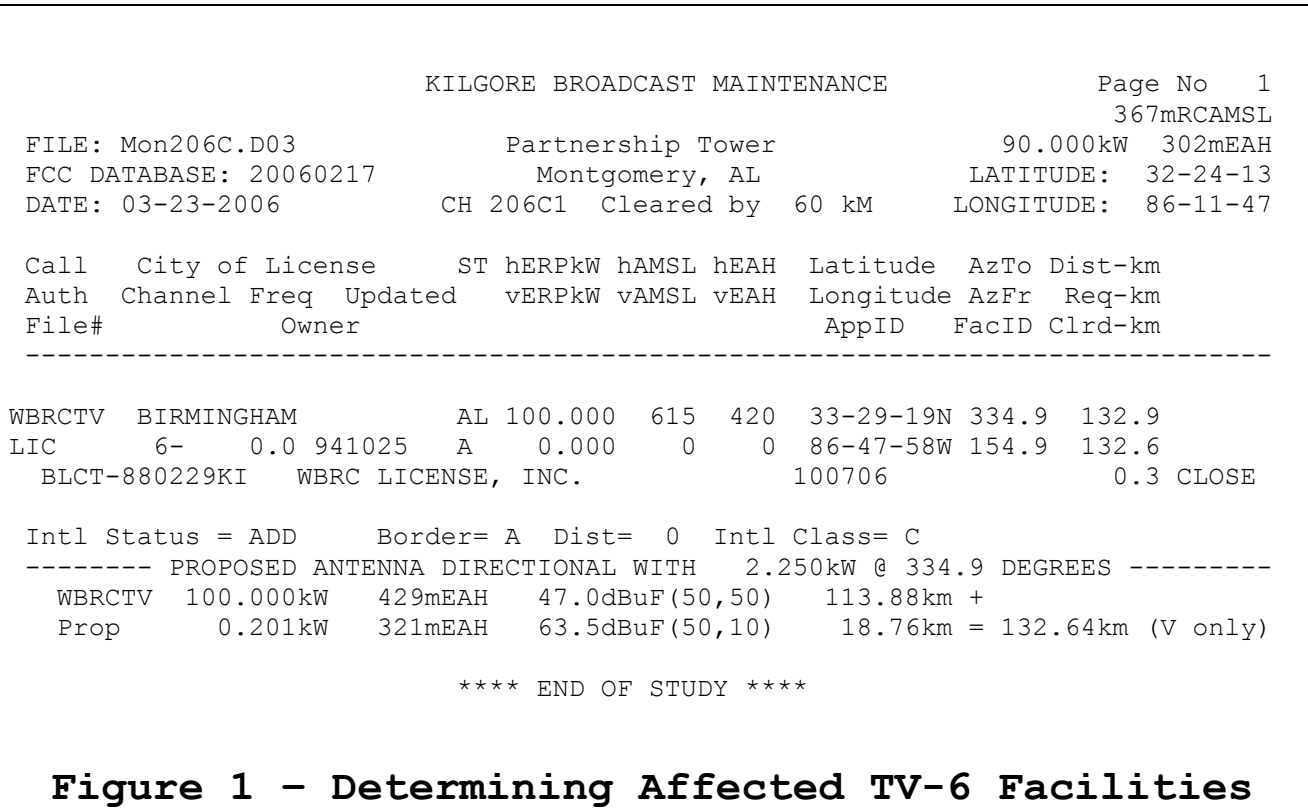


# TV Channel 6 Study

## Television Channel 6 Interference Protection

A study was conducted in accordance with 47CFR73.525 to determine the affected TV 6 stations. The results are included Figure 1. WBRC-TV was determined to be the only station requiring TV 6 contour protection study.



47CFR73.525(e)(4)(i) allows a multiplier for FM ERP vertical-only polarization. Furthermore, it allows a 40:1 ratio “if the predicted interference area lies entirely outside the limits of a city of 50,000 persons or more.” Figure 2 displays the contour for the proposed 90 KW FM facility overlapping the WBRC-TV Channel 6 Grade B contour. According to US Census 2000 datum, there are no incorporated cities within that area having a population of 50,000 or more persons. Even the two largest cities near but nevertheless outside of the contour overlap area have a combined population less than 50,000 (Prattville 24,303 and Selma 20,512).

Accordingly, this study uses 2.25 Kilowatts for the FM Interference Contour of the proposed 90 Kilowatt Vertical-only polarization minor-change modification.

## TV Channel 6 Study



**Figure 2:**  
**No 50,000 population within Overlap Area**

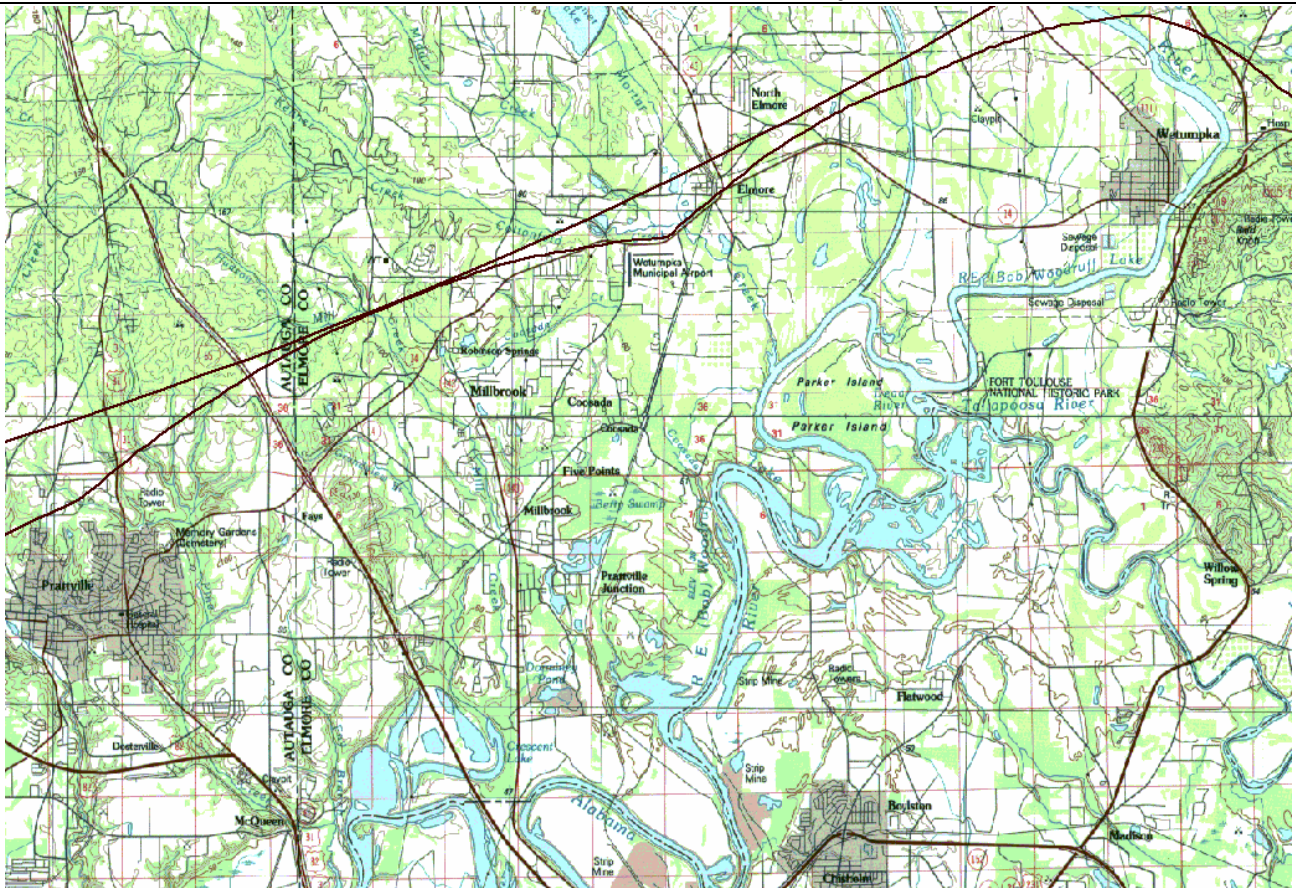
47CFR73.525(c) prohibits more than 3,000 persons, after appropriate adjustments, within the FM vs. TV-6 Interference Contour. Figure 3 shows the contours, using 40:1 ERP ratio for the proposed facility change. Figure 4 shows an even closer view. Although the contours are extremely close, there is no overlap and certainly no overlapped population area containing 3,000 persons. Therefore, this instant application meets the requirements of 47CFR73.525 for an acceptable interference level to potential TV-6 viewers.

## TV Channel 6 Study



**Figure 3:**  
**Proposed 206C1 40:1 63.5dBu Interfering Contour**  
**vs**  
**TV Channel 6 Grade B Protected Contour**

## TV Channel 6 Study



**Figure 4:**

**Proposed 206C1 40:1 63.5dBu Interfering Contour  
vs  
TV Channel 6 Grade B Protected Contour  
Closer View**