
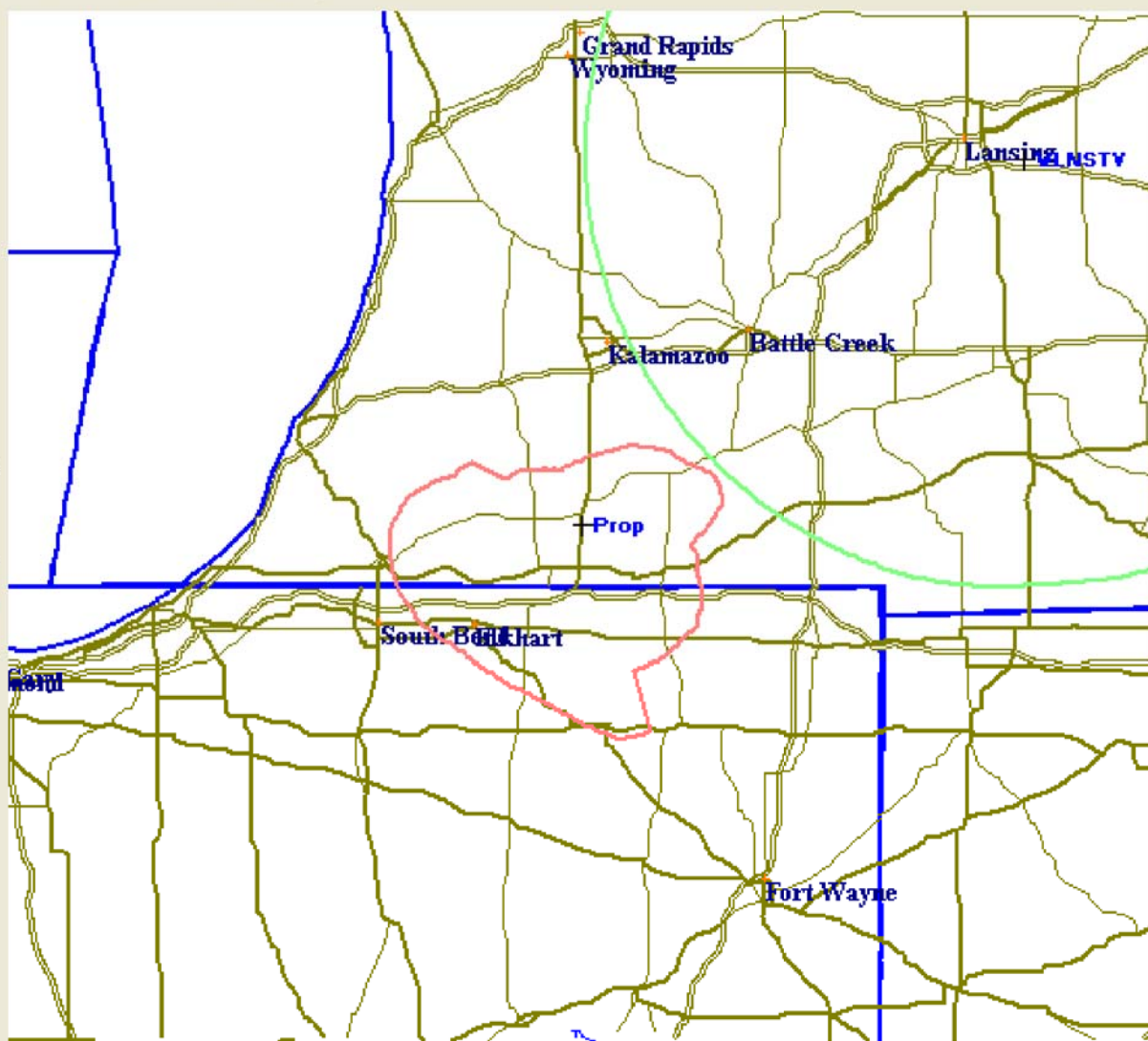


TV6 Calculation for Constantine, MI

TV6 Call sign		Fcc Search	
WLNSTV		36.3 dBu	
City		State	
Lansing		MI	
COR AMSL (m)		HAAT(m)	
575		305	
Latitude		Longitude	
424119		842235	
		TV ERP (kW)	
		100.000	
		FM Horizontal ERP	
		9.7	
<input type="checkbox"/> Outside City Of 50k <div style="float: right;"> <div style="background-color: green; color: white; padding: 2px 5px;">TV</div> <div style="background-color: red; color: white; padding: 2px 5px;">FM</div> </div>			
47	47	1	
Plot Scale			
200		<input checked="" type="checkbox"/> DLG <input type="checkbox"/> AJPL	
<input checked="" type="checkbox"/> Hide Zeros <input type="checkbox"/> Plot All Centroids <input type="checkbox"/> Plot Inside Centroid Counts <input type="checkbox"/> Plot All Centroid Counts <input checked="" type="checkbox"/> Plot Contours <input type="checkbox"/> Print All Centroids to <input type="text" value="0"/> dBu <input type="checkbox"/> Print Centroids <input checked="" type="checkbox"/> Print TV Contour Table			
Comp	Copy F Copy I	PrintText	Print Form



Channel Six TV Protection Study

WLNSTV	06	100.000kW	ERP	575.0M	COR	AMSL	305.0M	H&AT	Lat.	424119	Lon.	842235
Prop	203	9.700kW	ERP	343.0M	COR	AMSL	89.0M	H&AT	Lat.	415337	Lon.	853953

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Distance from TV to FM 138.1592km  Azi  50.3degr  Rev Azi 230.3 degr
Cutoff radius for channel 203 is 246 km
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The FM horizontal polarization component is 9.700 kW,
and the area of just perceptible interference does intersect a city of 50k,
so the effective ERP is $(P_v/10+P_h)$ 10.6700kW

The TV6 signal strength at the FM transmit site is 36.3 dBu
This strength is outside the 68 dBu Grade A contour,
allowing a 6 dB bonus to be applied to the allowable FM signal
to F centroids (centroids in the angles between the FM station and the TV station)

TV Contour	Undesired/Desired Ratio	Total	Directional	Total
47	6.5	53.5	59.5	

Population in affected area	0
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