

Technical Exhibit
Mascoutah, IL 247D
227.5m RC-AMSL 95.9m Highest Radial
37m AGL
27 Watts

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Interference Compliance

Contour protection, as required by C.F.R. Section 74.1204 to co-channel and first, second and third adjacent channels is demonstrated herein by Figure 1.

Height Above Average Terrain

The proposed HAAT and the predicted 60 dBu contours were calculated in accordance with Section 47 C.F.R. 73.313. The average terrain elevations were calculated along 12 radials using the NED 03 Sec terrain database.

Figure 2 shows the HAAT of the 12 radials. The highest radial is 95.9m above average terrain.

RF Electromagnetic Exposure Analysis

The proposed facility will not have a significant environmental impact and complies with maximum permissible radio frequency electromagnetic exposure limits for a controlled environment, in accordance with OET Bulletin No. 65.

Using a worst case assumption of maximum downward radiation ($F=1.0$) the RF exposure at 2m above ground level is $1.46202\mu\text{W}/\text{cm}^2$ or 0.1% of the controlled standard. This is inconsequential when added to existing RF on the tower.

The site is fenced and RF warning signs are posted. The power will be reduced or shut off to allow necessary access to the tower.

REFERENCE
38 32 51.0 N.
89 55 03.0 W.

CH# 247D - 97.3 MHz, Pwr= 0.027 kW, HAAT= 75.1 M, COR= 227.5 M
Average Protected F(50-50)= 6.41 km
Omni-directional

DI SPLAY DATES
DATA 04-13-13
SEARCH 04-14-13

CH CITY	CALL	TYPE	ANT STATE	AZI ---	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* (in km)
246C1	KFTK	LIC	CN	290.3	75.13	38 46 45.0	100.000	91.3	61.3	-22.4*	5.1
Florissant		MO		109.8	BLH19851127KC	90 43 43.0	171	334	Emmi s	Radi o Li cense,	Li c
247D	636290	APP	C_	136.9	12.31	38 28 00.0	0.170	21.5	6.4	-16.5*	-18.8
Mascoutah		IL		316.9	BNPFT20030317ACN	89 49 15.0	17	150	Covenant	Network	
248A	WDLJ	LIC	CX	81.3	46.21	38 36 33.0	2.500	42.5	28.1	-3.3	8.2
Breese		IL		261.6	BLH20030212AAV	89 23 35.0	156	290	Km Radi o Of Breese,	L.I.C.	
246D	KFTK-FM1	LIC	CN	291.2	25.49	38 37 48.0	0.070	17.4	11.9	1.8	4.8
St. Louis		MO		111.0	BLFTB19940930TD	90 11 26.0	154	293	Emmi s	Radi o Li cense,	Li c
247B	WRUL	LIC	CN	108.5	158.76	38 04 54.0	50.000	137.3	64.6	14.3	59.7
Carmi		IL		289.6	BLH19860107KC	88 12 04.0	149	272	W. Russell	Wi thers, Jr.	
244A	WCXO	LIC	ZCN	77.5	48.12	38 38 24.0	2.100	2.4	27.1	38.8	20.6
Carl yle		IL		257.8	BLH19990621KA	89 22 40.0	158	293	Clinton County Broadcastin		
244D	K244EP	LIC	C_	281.5	37.17	38 36 47.0	0.250	1.1	15.8	30.0	20.9
St. Louis		MO		101.2	BLFT20121113AAQ	90 20 09.0		296	Missouri River Chri stian B		
247A	WTIM-FM	LIC	CX	28.3	114.36	39 27 08.0	4.600	84.8	28.2	22.9	64.1
Tayl orville		IL		208.7	BLH20011109ACK	89 17 10.0	114	306	Miller Communi cations, Inc		
249C2	KHZR	LIC	NCX	228.7	98.74	37 57 31.0	26.500	6.2	54.6	86.1	43.6
Potosi		MO		48.2	BLH20061106ABW	90 45 47.0	207	483	Gateway Creative Broadcast		
247A	KYRX	LIC	CN	186.3	130.34	37 22 49.0	3.600	77.5	24.5	46.3	83.2
Marble Hill		MO		6.2	BLH19991209ACW	90 04 49.0	130	335	Dana R. Wi thers		

Terrain database is NED 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
***affixed to 'IN' or 'OUT' values = site inside protected contour.

Figure 2

