

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.

Figure 1
Mascoutah, IL 247D
Average Protected F(50-50)= 6.41 km
Omni-directional

REFERENCE
38 32 51.0 N.
89 55 03.0 W.

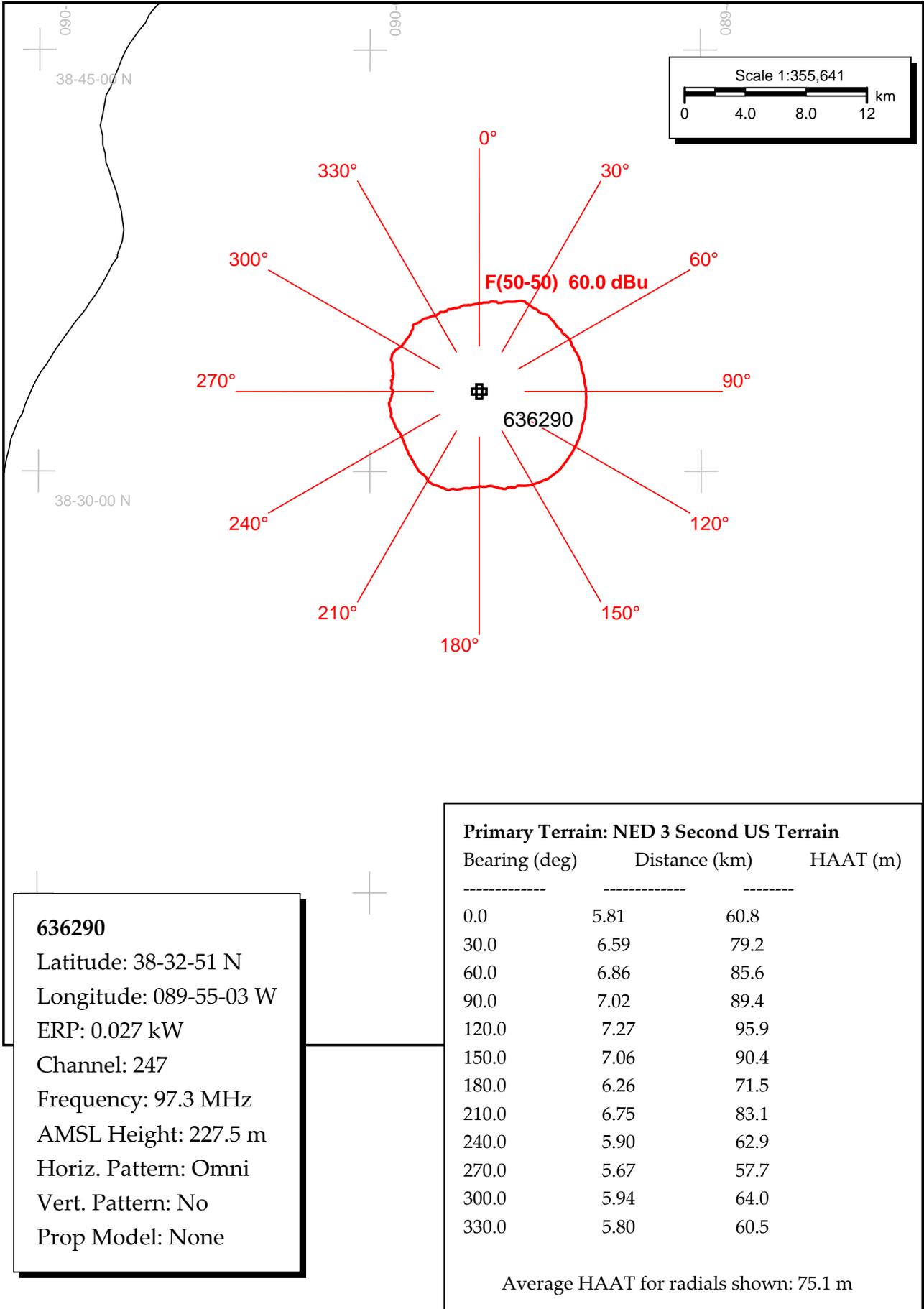
CH# 247D - 97.3 MHz, Pwr= 0.027 kW, HAAT= 75.1 M, COR= 227.5 M

DISPLAY 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*
246C1	KFTK	LIC_CN MO	290.3 109.8	75.13 BLH19851127KC	38 46 45.0 90 43 43.0	100.000 171	91.3 334	61.3 Emmi s Radi o Li cense,	-22.4*	5.1 Li c
247D	636290	APP_C_ IL	136.9 316.9	12.31 BNPFT20030317ACN	38 28 00.0 89 49 15.0	0.170 17	21.5 150	6.4 Covenant Network	-16.5*	-18.8
248A	WDLJ	LIC_CX IL	81.3 261.6	46.21 BLH20030212AAV	38 36 33.0 89 23 35.0	2.500 156	42.5 290	28.1 Km Radi o OF Breese,	-3.3	8.2 L. I. c.
246D	KFTK-FM1	LIC_CN MO	291.2 111.0	25.49 BLFTB19940930TD	38 37 48.0 90 11 26.0	0.070 154	17.4 293	11.9 Emmi s Radi o Li cense,	1.8	4.8 Li c
247B	WRUL	LIC_CN IL	108.5 289.6	158.76 BLH19860107KC	38 04 54.0 88 12 04.0	50.000 149	137.3 272	64.6 W. Russell Wi thers,	14.3	59.7 Jr.
244A	WCXO	LIC_ZCN IL	77.5 257.8	48.12 BLH19990621KA	38 38 24.0 89 22 40.0	2.100 158	2.4 293	27.1 Clinton County Broadcastin	38.8	20.6
244D	K244EP	LIC_C_ MO	281.5 101.2	37.17 BLFT20121113AAQ	38 36 47.0 90 20 09.0	0.250	1.1 296	15.8 Missouri River Christian B	30.0	20.9
247A	WTIM-FM	LIC_CX IL	28.3 208.7	114.36 BLH20011109ACK	39 27 08.0 89 17 10.0	4.600 114	84.8 306	28.2 Miller Communications, Inc	22.9	64.1
249C2	KHZR	LIC_NCX MO	228.7 48.2	98.74 BLH20061106ABW	37 57 31.0 90 45 47.0	26.500 207	6.2 483	54.6 Gateway Creative Broadcast	86.1	43.6
247A	KYRX	LIC_CN MO	186.3 6.2	130.34 BLH19991209ACW	37 22 49.0 90 04 49.0	3.600 130	77.5 335	24.5 Dana R. Wi thers	46.3	83.2

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



636290
 Latitude: 38-32-51 N
 Longitude: 089-55-03 W
 ERP: 0.027 kW
 Channel: 247
 Frequency: 97.3 MHz
 AMSL Height: 227.5 m
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: None

Primary Terrain: NED 3 Second US Terrain

Bearing (deg)	Distance (km)	HAAT (m)
0.0	5.81	60.8
30.0	6.59	79.2
60.0	6.86	85.6
90.0	7.02	89.4
120.0	7.27	95.9
150.0	7.06	90.4
180.0	6.26	71.5
210.0	6.75	83.1
240.0	5.90	62.9
270.0	5.67	57.7
300.0	5.94	64.0
330.0	5.80	60.5

Average HAAT for radials shown: 75.1 m