

Technical Exhibit  
Troy, MO 279D  
264m RC-AMSL 97.5m Highest Radial  
50m AGL  
250 Watts

TABLE OF CONTENTS

	Technical Statement
Figure 1	Interference Study Table
Figure 2	HAAT

### 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 97.5m 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  $7.22218 \mu\text{W}/\text{cm}^2$  or 0.7% 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 CH# 279D - 103.7 MHZ, Pwr= 0.25 kW, HAAT= 71.0 M, COR= 264 M  
39 04 18.2 N. Average Protected F(50-50)= 10.96 km  
90 58 36.2 W. Omni-directional

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)
279D Troy	647193	APP_C_ MO	183.3 3.3	9.82 BNPFT20030317BI L	38 59 00.0 90 59 00.0	0.250 56	24.7 235	7.4 Covenant	-27.1*	-43.0
280A Montgomery City	KMCR	LIC_ZCX MO	258.5 78.2	47.21 BLH20111122CAJ	38 59 10.0 91 30 39.0	6.000 91	41.5 323	26.6 Chirillo Electronics, Inc	-5.6	3.7
279B Springfield	WDBR	LIC_CX IL	55.3 236.2	142.72 BMLH20120629AAB	39 47 37.0 89 36 18.0	50.000 91	127.7 268	53.8 Saga Communications Of Ill	5.6	45.5
277C1 St. Louis	KLOU	CP_CX MO	134.2 314.6	79.04 BPH20120605AAH	38 34 27.7 90 19 31.5	93.000 309	9.8 462	71.0 Citicasters Licenses, Inc.	57.1	6.8
277C1 St. Louis	KLOU	LIC_CX MO	134.3 314.7	79.14 BLH20071212ABJ	38 34 24.0 90 19 30.0	90.000 313	9.8 466	71.0 Citicasters Licenses, Inc.	57.2	6.9
279D Mascoutah	W279AQ	APP_C_ IL	134.2 314.6	79.04 BMPFT20130219ACP	38 34 27.7 90 19 31.5	0.250	54.6 341	17.2 Educational Media Foundati	12.4	21.0
282C3 Vandalia	KKAC	LIC_CX MO	313.1 132.8	56.53 BLH20031112AHC	39 25 04.0 91 27 26.0	11.380 148	3.8 368	37.7 Twenty-one Sound Communica	39.8	17.6
279C0 Lebanon	KJEL	LIC_CN MO	228.5 47.4	207.89 BLH19881115KC	37 49 10.0 92 44 51.0	100.000 300	172.0 620	72.4 Waynesville/ Lebanon Licen	23.5	92.9
281C2 Hazelwood	WHHL	LIC_ZCX MO	127.7 308.1	76.04 BLH20080110ABC	38 39 08.0 90 17 03.0	50.000 140	5.3 293	46.4 Radio One Licenses, Lic	59.1	27.9
278D Hermann	647172	APP_C_ MO	223.7 43.5	58.37 BNPFT20030317BHL	38 41 30.0 91 26 30.0	0.250 44	14.0 238	10.1 Covenant Network	32.6	31.1
279D Mascoutah	W279AQ	CP_DC_ IL	122.6 303.1	80.08 BPFT20120413ACG	38 40 53.0 90 12 02.0	0.250	19.9 276	6.1 Educational Media Foundati	48.6	35.5
278C2 Huntsville	KCKZ	CP_CX MO	291.3 110.4	124.55 BNPED20100224AAR	39 28 09.0 92 19 35.0	50.000 102	72.1 345	46.9 Lake Area Educational Bro	39.9	60.3

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= West 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

