

Technical Exhibit  
Hermann 275D  
309.4m RC-AMSL 144.1m Highest Radial  
29.9m AGL  
140 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 144.1m above average terrain.

### Delivery Method

The instant application will re-broadcast KHJR, St. Thomas, MO (Fac. ID 171236) via Fulton, MO 277D (Fac. ID 153994).

### 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  $11.8804 \mu\text{W}/\text{cm}^2$  or 1.2% 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  
Hermann, MO 275D

REFERENCE  
38 40 08.2 N.  
91 26 35.4 W.

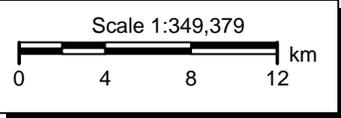
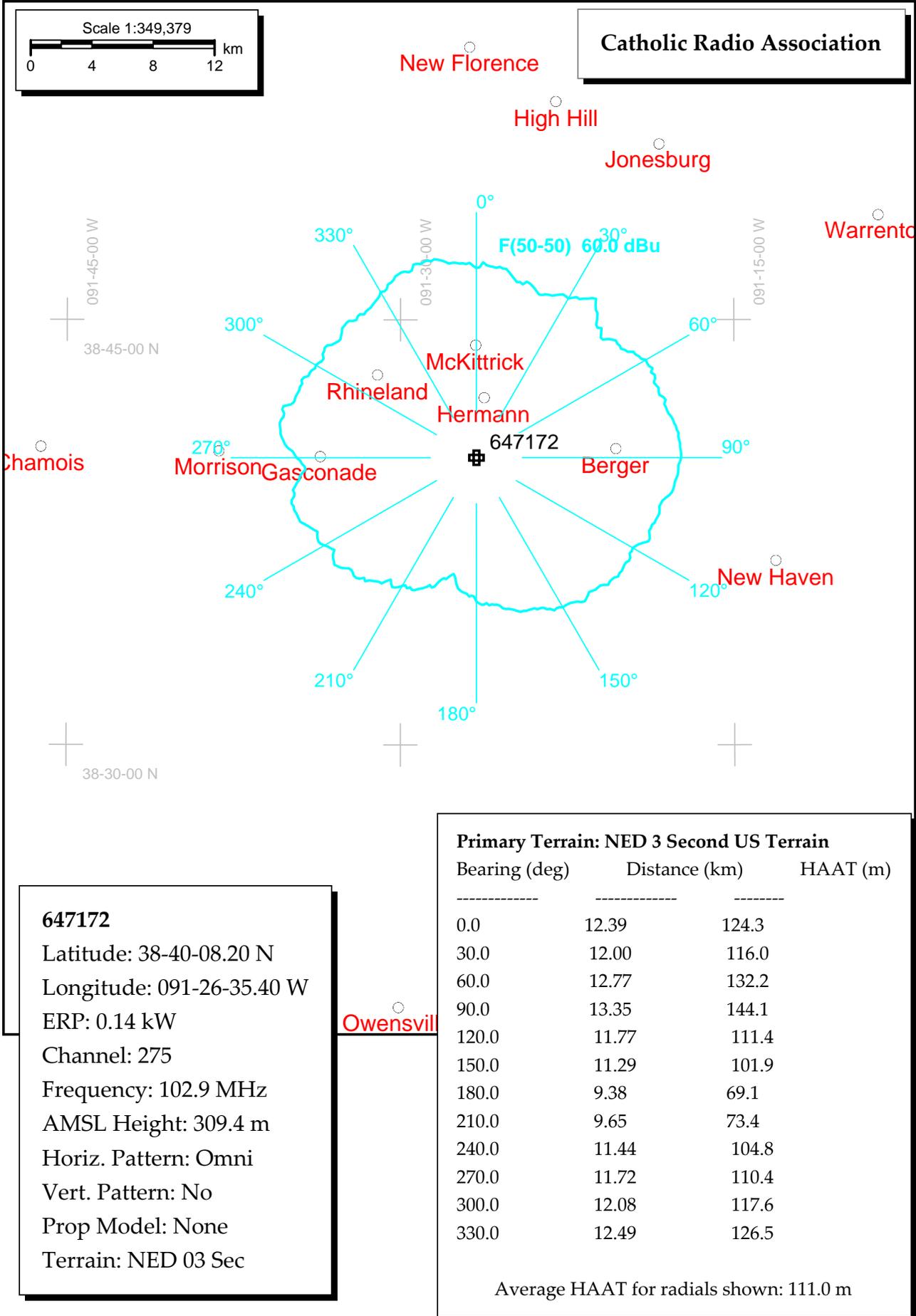
CH# 275D - 102.9 MHz, Pwr= 0.14 kW, HAAT= 111.0 M, COR= 309.4 M  
Average Protected F(50-50)= 11.75 km  
Omni-directional

DISPLAY DATES  
DATA 03-05-13  
SEARCH 03-23-13

CH CITY	CALL	TYPE STATE	ANT AZI <--	DI ST FI LE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LI CENSEE	*IN* (Overl ap in km)	*OUT*
278D Hermann	647172	APP _C_ MO	3.0 183.0	2.52 BNPFT20030317BHL	38 41 30.0 91 26 30.0	0.250 44	1.1 238	7.1 Covenant Network	-11.2*	-5.4*
275C1 Marshall	KMMO-FM	LIC _CN MO	289.1 108.0	162.71 BLH19931213KB	39 08 03.0 93 13 19.0	100.000 116	149.6 337	54.1 Missouri Valley Broadcasti	0.1	65.0
273C0 St. Louis	KEZK-FM	LIC _C_ MO	95.9 276.6	97.95 BMLH20061205ABQ	38 34 24.0 90 19 30.0	100.000 313	10.0 466	71.9 Cbs Radi o Stations Inc.	74.7	25.1
273C0 St. Louis	KEZK-FM	LIC _CX MO	95.8 276.5	97.90 BLH20110919ADL	38 34 27.7 90 19 31.5	100.000 309	10.0 462	71.6 Cbs Radi o Stations Inc.	74.7	25.4
277C1 St. Louis	KLOU	CP _CX MO	95.8 276.5	97.90 BPH20120605AAH	38 34 27.7 90 19 31.5	93.000 309	9.8 462	70.9 Citi casters Li censes, Inc.	74.9	26.2
277C1 St. Louis	KLOU	LIC _CX MO	95.9 276.6	97.95 BLH20071212ABJ	38 34 24.0 90 19 30.0	90.000 313	9.8 466	70.9 Citi casters Li censes, Inc.	74.9	26.2
276A Rolla	AL7107	RSV-A _ MO	199.8 19.6	83.16 RM10567*	37 57 50.0 91 45 54.0	6.000 100	40.8 399	25.8 32.5	44.1	
277D Ful ton	647212	APP _C_ MO	294.8 114.5	48.42 BNPFT20030317BJL	38 51 00.0 91 57 00.0	0.110 55	0.7 293	8.9 Covenant Network	34.9	38.0
275C1 Cape Girardeau	KEZS-FM	LIC _CN MO	129.9 311.0	216.57 BLH19870501KC	37 24 23.0 89 33 44.0	100.000 289	168.1 435	68.9 Mrr Li cense LI c	36.5	106.1
276A Rolla	KDAA	LIC _CX MO	196.8 16.6	91.75 BLH20060710AAT	37 52 39.0 91 44 45.0	2.050 174	42.2 480	27.7 Kttr-kznn, Inc.	40.5	51.9
272C3 Columbia	KBXR	LIC _NC_ MO	298.3 117.8	81.81 BLH20000208ABM	39 00 52.0 92 16 32.0	3.500 261	3.2 498	37.2 Cumul us Li censi ng LI c	66.0	43.8
276D Columbia, Etc.	K276DI	LIC _C_ MO	294.1 113.6	78.70 BLFT20120907ADD	38 57 18.0 92 16 20.0	0.250	17.9 346	12.3 Zim mer Radi o Of Mi d-mi ssou	47.9	47.8

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), Pol arizati on (C,H,V,E), Beamtilt(Y,N,X)  
"\*"affixed to 'IN' or 'OUT' values = site inside protected contour.

# HAAT Calculation



**Catholic Radio Association**

**647172**  
 Latitude: 38-40-08.20 N  
 Longitude: 091-26-35.40 W  
 ERP: 0.14 kW  
 Channel: 275  
 Frequency: 102.9 MHz  
 AMSL Height: 309.4 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No  
 Prop Model: None  
 Terrain: NED 03 Sec

**Primary Terrain: NED 3 Second US Terrain**

Bearing (deg)	Distance (km)	HAAT (m)
0.0	12.39	124.3
30.0	12.00	116.0
60.0	12.77	132.2
90.0	13.35	144.1
120.0	11.77	111.4
150.0	11.29	101.9
180.0	9.38	69.1
210.0	9.65	73.4
240.0	11.44	104.8
270.0	11.72	110.4
300.0	12.08	117.6
330.0	12.49	126.5

Average HAAT for radials shown: 111.0 m