

Non-Interference Compliance Study

Alpha Media Licensee, LLC

K277CX (Facility ID: 147527)

This exhibit demonstrates compliance with all contour overlap and interference protection requirements and demonstrates full compliance with 47 C.F.R. §74.1204.

Applicant certifies that should any actual interference occur it will promptly cease operation in accordance with 47 C.F.R. §74.1203.

Below is a listing of area stations whose contours are less than 25 km clear of the proposed translator.

Callsign	State	City	Channel	ERP (kW)	Class	Status	Distance (km)	Clr (km)
K277CX*	TX	San Antonio	278	0.185	D	LIC	0	-65.3
KJXK	TX	San Antonio	274	100	C1	LIC	0	-62.93
KZAI	TX	Balcones Heights	279	2.3	A	LIC	3.36	-24.75
K279AB	TX	San Antonio	279	0.22	D	LIC	0	-14.47
KHHL	TX	Karnes City	276	34	C2	LIC	91.15	10.86
KSAG	TX	Pearsall	277	6	A	LIC	79.07	10.88
K276GR	TX	New Braunfels	276	0.25	D	LIC	49.41	12.12
K278CK	TX	Hondo	278	0.1	D	LIC	44.81	12.47
KEEP	TX	Bandera	276	3.5	A	LIC	76.2	18.61
KJAK	TX	Pearsall	277	6	A	CP	93.63	23.11

*License being modified per this application

The only stations that are of concern is KJXK, KZAI and K279AB. KJXK is a third adjacent Class C1 that requires that a minimum of 40 dB separation exist between its service contour and K277CX 's interference contour. KZAI is a second adjacent Class A that requires that a minimum of 40 dB separation exist between its service contour and K277CX 's interference contour. K279AB is a second adjacent Class D that requires that a minimum of 40 dB separation exist between its service contour and K277CX 's interference contour.

The following pages demonstrate that this proposal is in compliance with these requirements.

Compliance with 47 C.F.R. §74.1204(d)

All Authorized second and third adjacent stations with which the proposed translator's contour overlaps their service contour are listed below. The table lists the minimum signal level of the station's service contour that reaches the proposed tower site for K277CX. KJXK and K279AB are co-located at the same site as K277CX therefore no interference is predicted to occur.

Facility ID	Call Sign	Contour at Tower F(50,50)
7084	KZAI	95.17 dBu

Minimum protected contour signal level at K277CX's proposed tower site: **95.17 dBu**

This study will use the minimum contour of 95.17 dBu to represent a worst-case potential interference level. At 40 dB above 95.17 dBu, the translator interference contour is 135.17 dBu. Calculation of distance at this power and signal level requires the use of the free-space calculation due to the distance being less than 1.5 km.

The following table uses the free space formula to calculate the worst-case height above ground level. At 135.17 dBu and 250 watts, the interference contour extends to 19.3 m horizontally from the tower and reaches a minimum height of 180.4 m AGL at 12 m. The antenna is 12.9 meters above any uncontrolled area which is 173.1 meters AGL. Therefore the interference will not reach the uncontrolled space below.

The applicant will insure that signs are posted in the vicinity of the tower warning of potential radio frequency hazards at the site. The applicant will cooperate with other user(s) of the tower to reduce power or discontinue operation, as necessary, to limit human exposure to levels less than specified by the Federal Communications Commission when anyone is required to climb the tower for inspection or maintenance.

§74.1204(d) Contour Protection Study K277CX vs. KZAI

Antenna: PSI FMR - 2 Bay/Half-Wave ERP (watts): 250
 Protected Contour at tower - F(50,50): 95.17 dBu RC-AGL (m): 186
 Interference Ratio: 40 dB Relative field at Azimuth: 1.000
 Interference Contour - F(50,10): 135.17 dBu ERP (watts) at Azimuth: 250

DEPRESSION ANGLE	RELATIVE FIELD	ERP (WATTS)	dBk	DISTANCE (m)		
				Contour	Horizontal	AGL
0	1.000	250.0	-6.02	19.3	19.3	186.0
5	0.988	244.0	-6.13	19.1	19.0	184.3
10	0.952	226.6	-6.45	18.4	18.1	182.8
15	0.881	194.0	-7.12	17.0	16.5	181.6
20	0.791	156.4	-8.06	15.3	14.4	180.8
25	0.686	117.6	-9.29	13.3	12.0	180.4
30	0.577	83.2	-10.80	11.2	9.7	180.4
35	0.463	53.6	-12.71	9.0	7.3	180.9
40	0.354	31.3	-15.04	6.8	5.2	181.6
45	0.256	16.4	-17.86	5.0	3.5	182.5
50	0.174	7.6	-21.21	3.4	2.2	183.4
55	0.110	3.0	-25.19	2.1	1.2	184.3
60	0.061	0.9	-30.31	1.2	0.6	185.0
65	0.028	0.2	-37.08	0.5	0.2	185.5
70	0.007	0.0	-49.12	0.1	0.0	185.9
75	0.004	0.0	-53.98	0.1	0.0	185.9
80	0.008	0.0	-47.96	0.2	0.0	185.8
85	0.008	0.0	-47.96	0.2	0.0	185.8
90	0.009	0.0	-46.94	0.2	0.0	185.8
WORST CASE HEIGHT AGL (m)						180.4



