

Channel Study

The FCC F(50/50) 60dBu contour of the construction permit and proposed facility of K224EH overlap.

3rd adjacent KNAL and 2nd adjacent KQVT are addressed in Exhibit 13 - A.

REFERENCE		CH# 224D - 92.7 MHz, Pwr= 0.115 kW, HAAT= 136.1 M, COR= 163 M								DISPLAY DATES	
28 48 58.0 N.		Average Protected F(50-50)= 12.3 km								DATA	01-11-15
97 03 58.0 W.		Omni-directional								SEARCH	01-11-15
CH CITY	CALL	TYPE STATE	ANT TX	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
224D Victoria	K224EH!	CP	C	126.9	4.36	28 47 33.0	0.140	32.6	9.8	-41.3	-48.9
			TX	307.0	BNPFT20130826ACT	97 01 49.0	79	101	Wendolynn Tellez		
227C1 Port Lavaca	KNAL	LIC	NCN	115.3	28.60	28 42 22.0	100.000	5.6	49.2	10.2	-21.3*
			TX	295.4	BLH19920518KB	96 48 03.0	97	107	Victoria Radioworks, Llc		
222A Victoria	KQVT	LIC	ZCX	124.1	9.41	28 46 07.0	6.000	2.6	26.5	-6.2*	-17.9*
			TX	304.1	BMLH20050311ADL	96 59 10.0	91	109	Townsquare Media Victoria		
224C2 Kingsville	KKBA	LIC	NCX	201.1	137.77	27 39 33.0	13.000	120.1	48.9	5.1	46.6
			TX	20.9	BLH20130401AKD	97 34 12.0	251	260	Malkan Interactive Communi		
225C1 San Antonio	KROM	LIC	NCN	293.9	127.14	29 16 29.0	45.000	105.7	71.8	9.9	38.3
			TX	113.4	BLH19970530KA	98 15 52.0	412	570	Tichenor License Corporati		
277D Bloomington	K277CO	CP	C	138.7	29.22	28 37 06.0	0.150	4.4	41.8	9.5R	19.7M
			TX	318.8	BNPFT20130826ACV	96 52 06.0	46	56	Gwendolynn Tellez		
223C3 Markham	KKHA	LIC	NC	85.7	90.47	28 52 25.0	18.000	57.1	37.2	20.8	34.5
			TX	266.2	BLH20140610AAQ	96 08 22.0	100	111	Edwards Broadcasting Co.		
225C Pasadena	KKBQ-FM	LIC	C	60.4	173.05	29 34 34.0	100.000	136.0	91.4	24.6	63.3
			TX	241.2	BMLH20060301ACF	95 30 36.0	585	605	Cox Radio, Inc.		
221A Kenedy	KCAF-FM	LIC	C	265.6	77.85	28 45 35.0	6.000	2.9	29.9	63.2	47.1
			TX	85.2	BMLH20131224AAI	97 51 45.0	80	192	Rufus Resources, Llc		

Terrain database is NGDC 30 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. Call signs with exclamation marks need not be protected.
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 restricted contour.
< = Station meets FCC minimum distance spacing for its class.
Reference station has protected zone issue: Mexico

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60 dBu contour of 3rd adjacent channel station KNAL channel 227C1 (Port Lavaca, TX) and 2nd adjacent KQVT channel 222A (Victoria, TX). According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for K224EH: 115 watts

The proposed COR for K224EH: 128 meters

KNAL F(50/50) contour at proposed site: 71.2 dBu

The F(50/10) contour of proposed K224EH 111.2 dBu

The predicted distance to K224EH interference contour: 207.2 meters

KQVT F(50/50) contour at proposed site: 79.4 dBu

The F(50/10) contour of proposed K224EH 119.4 dBu

The predicted distance to K224EH interference contour: 93 meters

By taking into account the antenna vertical elevation pattern for a one bay Nicom BKG77, it has been determined that the predicted interfering contour will not actually reach the ground (see Exhibit 13 - A1).

Therefore, EMF respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

EXHIBIT 13 - A1
74.1204(d) Showing
K224EH
VICTORIA, TX

ERP (kw): 0.115
Height of Antenna above Ground (m): 128
Translator's IX Contour: 111.2
Antenna Type: Nicom BKG77

Depression Angle from Horizon	Antenna Relative Field	ERP (kw) from the Antenna RF	Dist. To IX Contour (m)	Height IX Contour Above Ground (m)
0	1.000	0.1150	207.1805	128.000
5	0.999	0.1148	206.9733	109.961
10	0.982	0.1109	203.4513	92.671
15	0.954	0.1047	197.6502	76.844
20	0.918	0.0969	190.1917	62.951
25	0.872	0.0874	180.6614	51.649
30	0.818	0.0769	169.3701	43.315
35	0.758	0.0661	157.0428	37.924
40	0.691	0.0549	143.1617	35.977
45	0.616	0.0436	127.6232	37.757
50	0.538	0.0333	111.4631	42.614
55	0.465	0.0249	96.3389	49.084
60	0.391	0.0176	81.0076	57.845
65	0.313	0.0113	64.8475	69.228
70	0.239	0.0066	49.5161	81.470
75	0.176	0.0036	36.4638	92.779
80	0.129	0.0019	26.7263	101.680
85	0.103	0.0012	21.3396	106.742
90	0.104	0.0012	21.5468	106.453