

**Technical Exhibit
Gary L. Moss
Minor Modification K291CG
Facility ID# 156281
.250 kW Horizontal and Vertical
Waco, TX**

Purpose Of Application

Gary L. Moss ("Moss"), the licensee of K291CG, proposes through this instant application to modify a K291CG. This proposal is a move to a non mutually exclusive channel, Ch 297, due to the frequent and devastating interference from KHKS, Ch 291C, Denton, TX FID 23084. This proposal is in compliance with the new policies set out for translator operators per FCC 19-40. This frequent ducting interference renders the 60 dBu contour un-useable in Waco Texas over 50% of the time. See attached map detailing the interference from KHKS. This proposal utilizes the same existing tower where it is presently licensed at N31°32'15.3" W97°05'32.9" (NAD83) with power of .250 kW horizontal and vertical at a height above average terrain of 106.2 m. The HAAT was calculated using the Computer program V-Soft Probe 4 using 12 radials in compliance with the methodology of 47CFR 73.313. NED 03 second terrain data was used for all contour calculations. The antenna used for the instant proposed facility is the same antenna, an SWR FMB 2 bay, double vee EPA type 2 .8 wave antenna, mounted 126 meters above ground level. This facility is located at the tower site of KBHT, Bellmead TX FID 21494, the translator's primary facility. See the following pages for a demonstration of the interference caused by KHKS.

Interference To Other Facilities

This proposed facility complies with 47CFR 74.1204 of the Commission's rules for interference to other facilities. There is no overlap of the proposed facility's interfering contours with the protected contours of any other application or facility, with the exception of third adjacent Ch. 294 C3 KIXT, Hewett, TX FID 170995, and the third adjacent KWPW Ch. 300A Robinson, TX FID 57377. In both cases Moss demonstrates in this application that no actual interference will occur, as the interference contour of the proposal never reaches ground level. KIXT has a calculated contour of 69.12 dBu 50-50 at the proposed translator location. The interference contour of the proposed facility with respect to KIXT, 109.12 dBu 50-10, does not reach ground level. The closest it comes to ground level is 34.97 meters above ground, which occurs at 250 meters from the tower base. As shown in the following exhibit, this contour does not reach ground level when the vertical radiation pattern of the SWR FMEC 2 .8 wave antenna is taken into consideration. KWPW has a calculated contour of 84.86 dBu at antenna site in this proposal. The proposed 124.86 dBu 50-10 interference contour at the lowest point is 111.138 meters above ground level. This point occurs at 40.82 meters from the base of the tower. No actual interference will occur anywhere at ground level, as this interference contour, does not reach the ground at any point. There are no structures occupied or unoccupied that extend above one story anywhere in this contour.

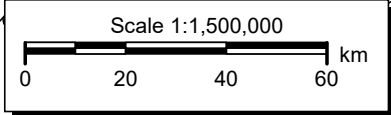
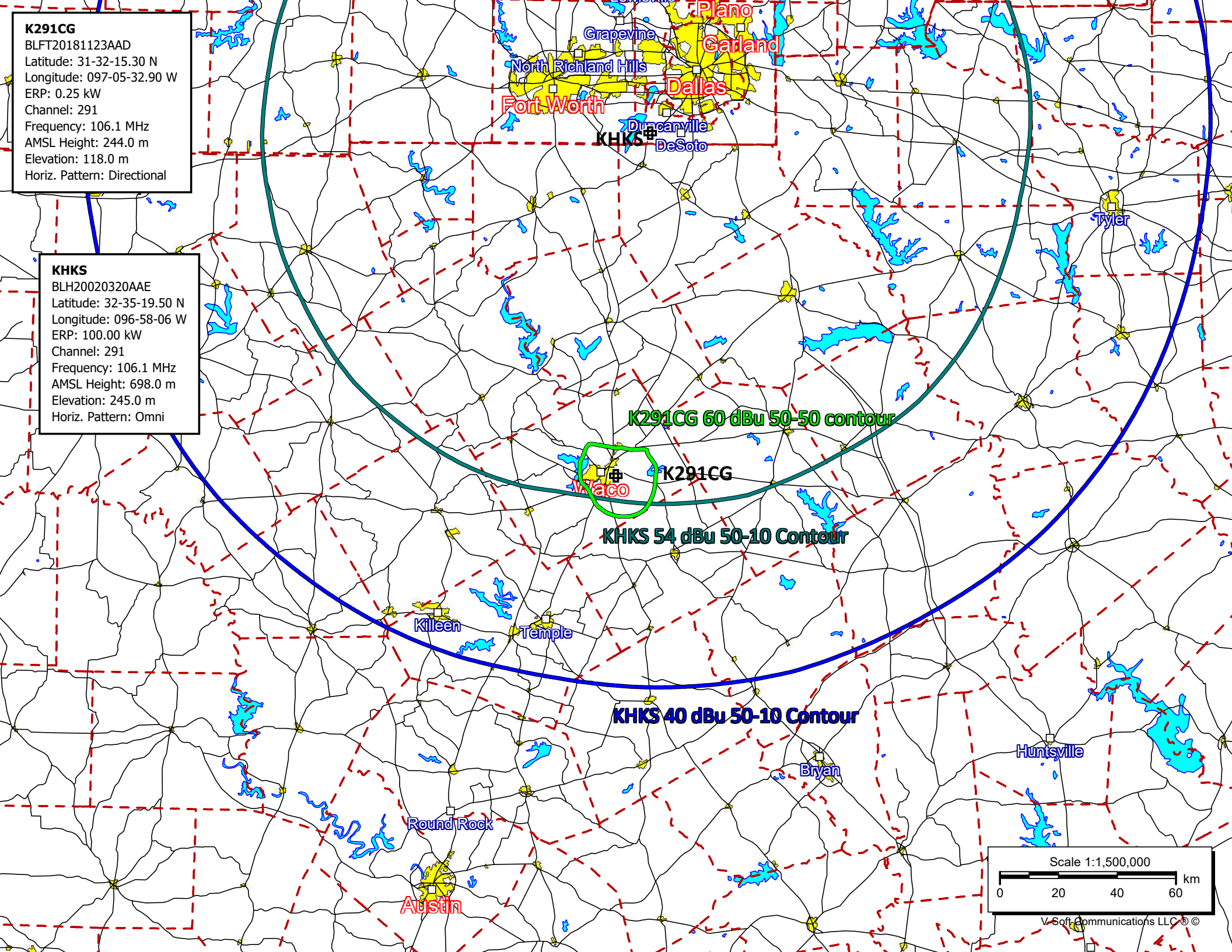
The present and existing tower proposed for the K291CG is located in a rural area. Moss acknowledges that operation of this facility will cease if there are any complaints of interference. See the following pages for demonstration of no interference and compliance with 74.1204 d.

Environmental

The proposed location is an existing 129 m tower. No alterations of any sort will be made as this proposal uses the existing broadband antenna. The antenna proposed above was studied using the OET FM model program. Using this program, with the antenna mounted at 126 meters above ground level, the worst case power density at 2 meters above ground level was found to be .00003254 microwatts/cm², which occurs 100 meters from the base of the support structure. This is .0016% of the maximum level for the general population, uncontrolled exposure level, and exempts the facility from further study, as it is an insignificant contributor.

K291CG
BLFT20181123AAD
Latitude: 31-32-15.30 N
Longitude: 097-05-32.90 W
ERP: 0.25 kW
Channel: 291
Frequency: 106.1 MHz
AMSL Height: 244.0 m
Elevation: 118.0 m
Horiz. Pattern: Directional

KHKS
BLH20020320AAE
Latitude: 32-35-19.50 N
Longitude: 096-58-06 W
ERP: 100.00 kW
Channel: 291
Frequency: 106.1 MHz
AMSL Height: 698.0 m
Elevation: 245.0 m
Horiz. Pattern: Omni



REFERENCE CH# 297D - 107.3 MHz, Pwr= 0.25 kW DA, HAAT= 0.0 M, COR= 244 M DISPLAY DATES
 31 32 15.30 N. Average Protected F(50-50)= 7.09 km DATA 01-28-20
 97 05 32.90 W. Standard Directional SEARCH 01-28-20

CH CITY	CALL	TYPE STATE	ANT AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
300A Robinson	KWPW	LIC ____ TX	246.3 66.2	7.80 BLH20020212AAO	31 30 33.60 97 10 04.00	6.000 100	3.0 252	31.8 waco Entertainment Group,	-5.8*	-25.1*
297A Nolanville	KLFX	LIC N____ TX	223.4 43.1	67.68 BLH20071011ABH	31 05 38.60 97 34 52.00	1.350 167	77.7 386	26.5 Clear Channel Broadcasting	-21.7*	1.3
294C3 Hewitt	KIXT	LIC N____ TX	213.3 33.3	24.16 BLH20100616AHJ	31 21 20.60 97 13 57.00	10.000 150	3.9 332	39.2 Prophecy Media Group, LLC	8.1	-16.1*
298C1 Fort worth	KMKV	LIC ____ TX	5.9 186.0	116.67 BLH20041112AEJ	32 35 02.50 96 57 49.00	17.000 574	103.4 764	70.0 Entercom License, LLC	3.5	33.2
296C1 Benbrook	KESS	LIC N____ TX	329.4 149.0	135.61 BLH20020719AAZ	32 35 10.50 97 49 53.10	74.000 320	107.2 577	73.0 Tichenor License Corporati	14.5	42.3
296A Marquez	AU9112451	VAC ____ TX	116.5 296.8	74.04 RM11487	31 14 20.65 96 23 45.90	6.000 100	40.7 218	26.4 Charles Crawford	19.3	26.2
297A Caldwell	AL0724	USE ____ TX	155.7 336.0	118.99 RM7419	30 33 31.73 96 34 50.90	6.000 100	84.4 187	26.4 Brazos Valley Communicatio	19.8	42.5
297A Caldwell	KAPN	LIC ____ TX	155.7 336.0	118.99 BLH20011210AAC	30 33 31.70 96 34 50.90	6.000 100	84.3 186	26.3 Brazos Valley Communicatio	20.0	42.6
297C2 Whitehouse	KISX	LIC ____ TX	64.5 245.5	197.50 BLH19890308KA	32 17 19.50 95 11 56.80	50.000 148	136.5 291	51.0 Townsquare Media Tyler Lic	47.3	100.3

Terrain database is FCC 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.
 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.

K291CG Waco, TX, Showing Protection to KIXT
 Geographic Coordinates: N. 31 32 15.30 W. 97 05 32.90
 74.1204(d) Study - Using NED 03 SEC Terrain Database
 Translator Maximum Licensed ERP = 0.25
 Translator Antenna Height AG = 126 Meters
 K291CG Antenna Model = SWRFMB2

Protected Station's Contour = 69.12305 dBu
 Translator's full Interference contour 109.12305

Review Azimuth = 213 Degrees True
 Horizontal Relative Field at Review Azimuth = 1.000
 Translator ERP on the horizontal at Review Azimuth = 0.25 kW
 Distance between stations = 24.2 km
 Protected Station= KIXT, 10 kW, 332 M Meters COR AMSL

Depression Angle From Degree (Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle (m)	Dist to IX Contour From Tower Base (m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.2500	387.9873	387.9873	126.000
05.00	0.978	1.0	0.2391	379.4516	378.0076	092.929
10.00	0.914	1.0	0.2088	354.6204	349.2329	064.421
15.00	0.814	1.0	0.1656	315.8217	305.0603	044.259
20.00	0.686	1.0	0.1176	266.1593	250.1079	034.968
25.00	0.542	1.0	0.0734	210.2891	190.5867	037.128
30.00	0.391	1.0	0.0382	151.7030	131.3787	050.148
35.00	0.246	1.0	0.0151	095.4449	078.1839	071.255
40.00	0.113	1.0	0.0032	043.8426	033.5854	097.819
45.00	0.001	1.0	0.0000	000.3880	000.2743	125.726
50.00	0.088	1.0	0.0019	034.1429	021.9466	099.845
55.00	0.151	1.0	0.0057	058.5861	033.6036	078.009
60.00	0.189	1.0	0.0089	073.3296	036.6648	062.495
65.00	0.205	1.0	0.0105	079.5374	033.6140	053.915
70.00	0.201	1.0	0.0101	077.9854	026.6726	052.718
75.00	0.181	1.0	0.0082	070.2257	018.1757	058.167
80.00	0.148	1.0	0.0055	057.4221	009.9712	069.450
85.00	0.107	1.0	0.0029	041.5146	003.6182	084.643
90.00	0.06	1.0	0.0009	023.2792	000.0000	102.721

K291CG Waco, TX, Showing Protection to KWPW
 Geographic Coordinates: N. 31 32 15.30 W. 97 05 32.90
 74.1204(d) Study - Using NED 03 SEC Terrain Database
 Translator Maximum Licensed ERP = 0.25
 Translator Antenna Height AG = 126 Meters
 K291CG Antenna Model = SWRFMB2

Protected Station's Contour = 84.86526 dBu
 Translator's full Interference contour 124.86526

Review Azimuth = 246 Degrees True
 Horizontal Relative Field at Review Azimuth = 1.000
 Translator ERP on the horizontal at Review Azimuth = 0.25 kW
 Distance between stations = 7.8 km
 Protected Station= KWPW, 6 kW, 252 M Meters COR AMSL

Depression Angle From Degree (Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle (m)	Dist to IX Contour From Tower Base (m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.2500	063.3442	063.3442	126.000
05.00	0.978	1.0	0.2391	061.9506	061.7149	120.601
10.00	0.914	1.0	0.2088	057.8966	057.0170	115.946
15.00	0.814	1.0	0.1656	051.5622	049.8053	112.655
20.00	0.686	1.0	0.1176	043.4541	040.8335	111.138
25.00	0.542	1.0	0.0734	034.3326	031.1159	111.490
30.00	0.391	1.0	0.0382	024.7676	021.4494	113.616
35.00	0.246	1.0	0.0151	015.5827	012.7646	117.062
40.00	0.113	1.0	0.0032	007.1579	005.4833	121.399
45.00	0.001	1.0	0.0000	000.0633	000.0448	125.955
50.00	0.088	1.0	0.0019	005.5743	003.5831	121.730
55.00	0.151	1.0	0.0057	009.5650	005.4862	118.165
60.00	0.189	1.0	0.0089	011.9721	005.9860	115.632
65.00	0.205	1.0	0.0105	012.9856	005.4879	114.231
70.00	0.201	1.0	0.0101	012.7322	004.3547	114.036
75.00	0.181	1.0	0.0082	011.4653	002.9674	114.925
80.00	0.148	1.0	0.0055	009.3749	001.6279	116.767
85.00	0.107	1.0	0.0029	006.7778	000.5907	119.248
90.00	0.06	1.0	0.0009	003.8007	000.0000	122.199