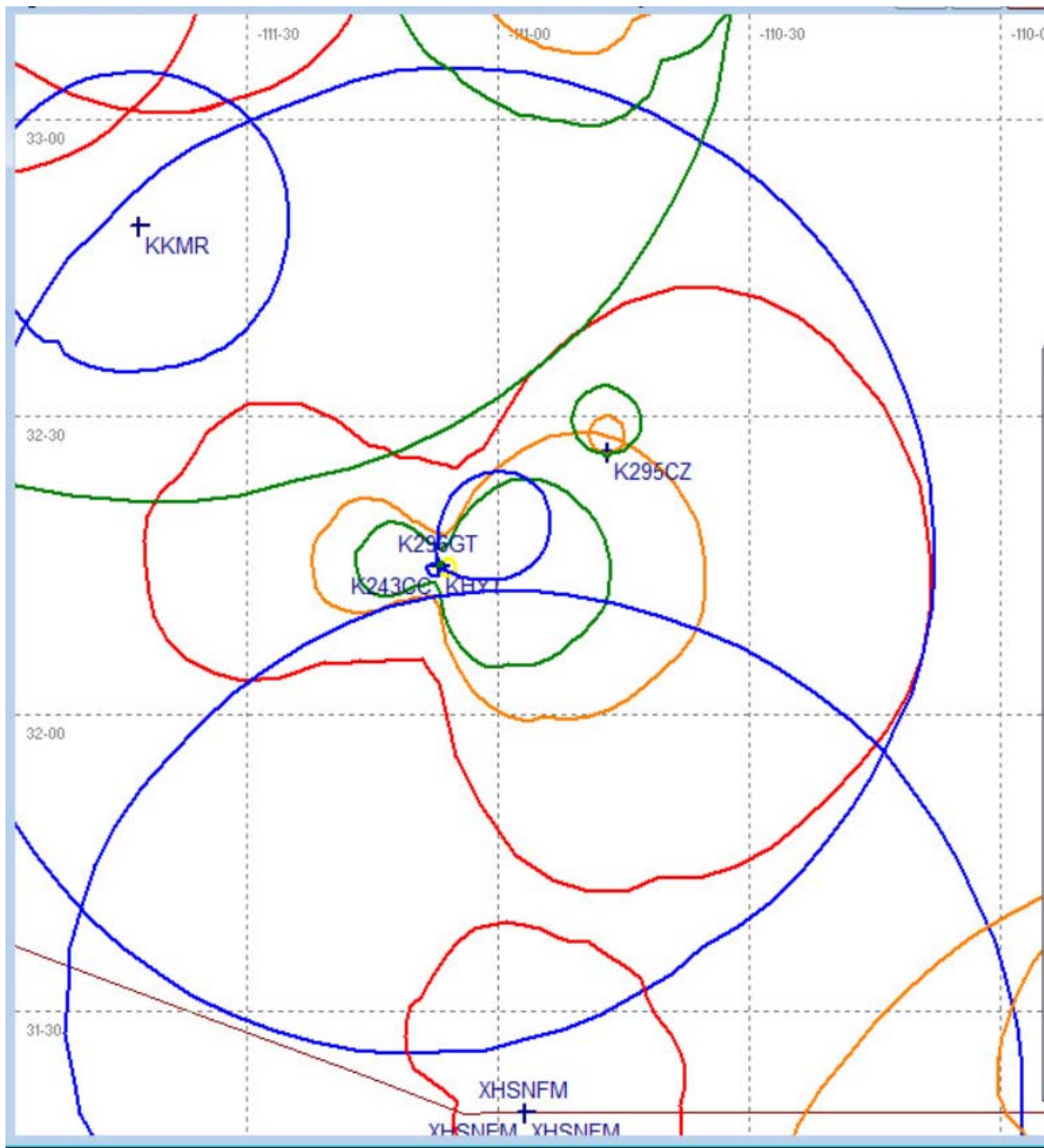


Purpose of Application & Technical Statement

This minor change to the licensed facility requests a new tower location, elevation and antenna at a modified effective radiated power on the licensed operating channel. The translator will repeat KNST (AM) as a fill in translator facility. The maps below will demonstrate compliance with fill-in requirements.

OVERLAP REQUIREMENTS:

The map of contours depicts the proposed allocation situation with respect to all pertinent co and adjacent facilities. All facilities have been depicted utilizing either the maximum ERP or directional pattern data as on file with the commission and 1 degree radial intervals on close in contours in the interest of accuracy. AAT data for the proposed facility was derived from the FCC's 30 second database, *Comstudy*.



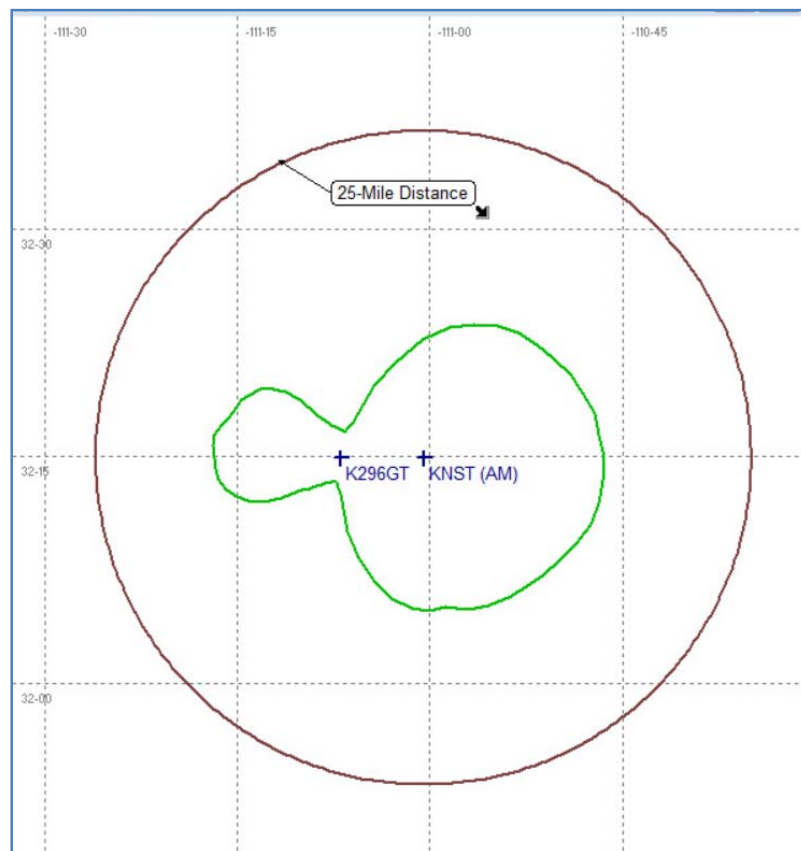
As seen on the map of contours, channel 296-D is operable at the proposed location with the following facility notes:

- In compliance with 47 CFR 74.1204(g) the proposed facility operates at an effective radiated power which is over 100 watts, therefore protection to intermediate frequency facilities has been calculated and meet all mileage separation requirements.
- Overlap to K295 translator is received-only interference and is not calculated
- The proposed location is within the protected 60dbu (50,50) contour of second -adjacent station KHYT (FM) channel 298C and second-adjacent translator facility K294CR, both located mere meters away on adjacent towers in the multiple tower farm array. An interference analysis would be conducted based on the u/d ratio of +40 dB at the proposed site and both adjacent channel facilities would have very high signal levels at the proposed translator site. The free space distance to the corresponding interference contour in a worse-case scenario utilizing a single dipole antenna would be mere meters from the aperture of the proposed antenna. Even with an antenna height of only 27.2 meters above ground, this interfering contour cannot come in contact with the general public at any point.

Based on this showing, a waiver of section 74.1204 is requested in accordance with Living Way Ministries, Inc. (FCC 08-242) on the basis of zero population in the area of interference. It should be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 CFR. 74.1203.

PRIMARY STATION:

The translator proposes to provide fill-in service for AM station KNST, FACID 53589, owned by iHM Licenses, LLC. The applicant herein has obtained written permission to specify this AM station as primary on the application and it meets the requirements for fill-in service as seen on this map:



iHeartMedia
Troy Langham

K296GT at 1218277 Scala CA2-CP DA

Radio By Grace, Inc.

REFERENCE CH# 296D - 107.1 MHz, Pwr= 0.25 kw DA, HAAT= 579.7 M, COR= 1350 M DISPLAY DATES
32 14 56.40 N. Average Protected F(50-50)= 31.65 km DATA 10-24-22
111 07 00.50 W. Standard Directional SEARCH 10-25-22

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*
298C Tucson	KHYT	LIC _CN AZ		0.0 73.5	0.00 BLH199601116K	32 14 56.20 111 07 01.30	92.000 620	14.0 1392	93.2	-27.1*	-93.4*
296D Tucson	K296GT	CP _CN AZ		97.6 277.7	22.22 0000120105	32 13 20.30 110 52 57.30	0.050	857	---Reference---		
296D Mt Lemmon	K296GT	STA DVN AZ		88.2 268.2	14.48 0000199306	32 15 11.20 110 57 46.30	0.002	736	---Reference---		
296D Mt Lemmon	K296GT	LIC DVN AZ		88.2 268.2	14.48 BLFT20170901AAZ	32 15 11.20 110 57 46.30	0.002	736	---Reference---		
294D Tucson	K294CR	LIC DCN AZ		48.4 228.4	0.04 BLFT20170221AAX	32 14 57.30 111 06 59.30	0.067	0.0 1341	2.2	-18.1*	-2.5*
295D Marana	K295CZ	CP _CN AZ		55.6 235.8	38.11 BNPFT20180418ABE	32 26 31.20 110 46 53.30	0.001	0.8 2766	0.4	15.3	4.1
296C3 Apache Junction	KVVA-FM	LIC _CN AZ		340.6 160.3	141.17 BLH20130315ABB	33 26 44.10 111 37 21.40	17.000 124	118.8 651	46.7	10.5	50.1
294C Nogales	XHSNFM	LIC DHN SO		171.0 351.1	103.33	31 19 51.40 110 56 47.30	20.000 150	6.1 1416	92.0	87.1	11.2
294C Nogales	XHSNFM	ALO _ SO		171.0 351.1	103.33	31 19 51.40 110 56 47.30	100.000 600	15.5 1866	92.0	77.7	11.2
296C2 Sun Lakes	KVVA-FM	CP _CN AZ		324.0 143.4	149.58 BPH20190723AAO	33 20 00.20 112 03 51.50	2.050 508	119.8 880	47.6	20.2	64.9
296B Caborca	AL07449	ALO _ SO		210.1 29.5	198.79	30 41 50.40 112 09 31.40	50.000 150	137.7 150	65.0	48.1	68.3
295C Fronteras	AL05233	ALO _ SO		135.1 315.9	210.37	30 53 59.40 109 33 34.20	100.000 600	138.0 690	92.0	49.1	82.7

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference zone= West Zone, Co to 3rd adjacer
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.

K296GT.C

11-01-2022

RMS(V)= .433

Graph is Relative Field

Azi	Field	dBk	kw
000	0.181	-20.867	0.008
010	0.157	-22.103	0.006
020	0.142	-22.975	0.005
030	0.134	-23.479	0.004
040	0.190	-20.446	0.009
050	0.329	-15.677	0.027
060	0.528	-11.568	0.070
070	0.718	-08.898	0.129
080	0.866	-07.270	0.187
090	0.952	-06.448	0.227
100	1.000	-06.021	0.250
110	0.952	-06.448	0.227
120	0.866	-07.270	0.187
130	0.718	-08.898	0.129
140	0.528	-11.568	0.070
150	0.329	-15.677	0.027
160	0.190	-20.446	0.009
170	0.134	-23.479	0.004
180	0.142	-22.975	0.005
190	0.157	-22.103	0.006
200	0.181	-20.867	0.008
210	0.187	-20.584	0.009
220	0.171	-21.361	0.007
230	0.140	-23.098	0.005
240	0.123	-24.222	0.004
250	0.135	-23.414	0.005
260	0.160	-21.938	0.006
270	0.182	-20.819	0.008
280	0.193	-20.309	0.009
290	0.182	-20.819	0.008
300	0.160	-21.938	0.006
310	0.135	-23.414	0.005
320	0.123	-24.222	0.004
330	0.140	-23.098	0.005
340	0.171	-21.361	0.007
350	0.187	-20.584	0.009

