TECHNICAL STATEMENT
K243BN LAVEEN, ARIZONA, CH. 243D
MOUNTAIN COMMUNITY TRANSLATORS, LLC
FCC FORM 349
NOVEMBER 2017

This Technical Statement is made in support of a minor modification of FM translator station, K243BN at Laveen, Arizona, facility ID 92373. K243BN seeks to relocate just 0.64 kilometers to an adjacent existing tower at the same Shaw Butte communications site. It will be a "fill-in" for KLVK(FM) Fountain Hills, Arizona, facility ID 76329, on channel 206C1. K243BN seeks to decrease its Height Above Sea Level antenna height from 688 meters to 669 meters. Its ERP will remain 250 watts with a directional antenna. No other changes are being made. The following will show that the new proposed operation of K243BN will meet all of the Commissions technical requirements for an FM translator station.

The new proposed operation of K243BN specifies a maximum Effective Radiated Power of 0.25 kilowatts (250 watts). It will operate with a directional antenna with an "off the shelf" type antenna, or a BEXT TFC2K-D with circular polarization. The antenna will be mounted on an existing non-registered tower, at the Shaw Butte communications tower site, with an overall height of 24 meters above the ground. The antenna will be mounted with a Center of Radiation of 24 meters above the ground, and 669 meters Above Mean Sea Level. The coordinates of this tower are located at N 33° 35' 39.1", W 112° 05' 08.0", NAD 27.

Figure 1 is a detailed interference study conducted on channel 243D with these new proposed facilities. It shows that the new operation of K243BN will not cause any

interference to any existing or proposed FM stations on any of the pertinent same channel or adjacent channels to channel 243 with the exception of second adjacent channel station, KMXP(FM) Phoenix, Arizona, facility ID 6361, operating on channel 245C and K241CS Phoenix, Arizona, facility ID 156046, channel 241D.

The proposed operation of K243BN on 243D is located within the protected 60 dBμ contour of 2nd adjacent channel of KMXP. Figure 2 shows the predicted F(50-50) field strength of KMXP at the proposed K243BN transmitter site is 85.7 dBμ. Therefore, the respective predicted interfering contour F(50-10) generated by the proposed K243BN on channel 243D is an additional 40 dBμ or 125.7 dBμ.

The proposed operation of K243BN on 243D is located within the protected 60 dBμ contour of 2nd adjacent channel of K241CS. Figure 3 shows the predicted F(50-50) field strength of K241CS at the proposed K243BN transmitter site is 109.3 dBμ. Therefore, the respective predicted interfering contour F(50-10) generated by the proposed K243BN on channel 243D is an additional 40 dBμ or 149.3 dBμ. K241CS also has a pending application, BPFT-20170206ACK. This application only calls for K241CS to increase its ERP from its current 200 watts to 250 watts and modify its directional antenna pattern. But it will remain at its present site and antenna heights. Thus the only effect of this application if granted will be to slightly increase the contour at the proposed K243BN site. K241CS is located on a tower directly adjacent to the proposed K243BN tower. Thus the predicted interference contour of K243BN will only extend 3.8 meters from the K243BN antenna. It will not reach the ground at any point.

Since the interference contour generated by K243BN will be larger towards KMXP(FM), only the 125.7 dBμ interference contour was studied for any population coverage.

Figure 4 shows the coverage area for the worse case 125.7 dBμ interference contour F(50-10) and shows that there is no population in the area of interference. The applicant, Mountain Community Translators, LLC, respectfully requests a waiver of C.F.R. 74.1204(d) of the Commission's rules based on the fact that there is no population within the area of predicted interference. There are no homes nearby the proposed existing tower site, which is a privately owned on 1/2 acres with private locked access. The transmitter building is uninhabited and does not have indoor plumbing. The area around the tower base has restricted access. The site is a dedicated communications tower site on top of "Shaw Butte". Should any unforeseen actual interference be caused, the licensee will immediately cease broadcasting with K243BN until such interference can be eliminated.

Figure 5 shows that the present 60 dBμ will completely overlap the proposed 60 dBμ of K243BN. In fact, the new proposed operation will be completely contained inside of the current 60 dBμ contour.

Figure 6 is the directional antenna data for the proposed operation of K243BN.

The proposed operation of K243BN Laveen, Arizona will be considered a "Fill-In" operation for KLVK(FM) Fountain Hills, Arizona. Figure 7 shows that the proposed 60 dBμ contour for the proposed K243BN will not extend beyond the present 60 dBμ of KLVK(FM). Since this is a "Fill-In" translator, the maximum ERP will not exceed the maximum permissible ERP of 250 watts in any azimuth.

It was found that the new proposed operation of K243BN Laveen, Arizona on channel 243D, will satisfy all of the required commission rules and regulations for an FM translator station.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE STUDY
K243BN LAVEEN, AZ, CH 243D

REFERENCE CH# 243D - 96.5 MHz, Pwr= 0.25 kW DA, HAAT= 0.0 M, COR= 669 M DISPLAY DATES
33 35 39.1 N. Average Protected F(50-50)= 7.09 km DATA 11-29-17
112 05 08.0 W. Standard Directional SEARCH 11-30-17

CH CALL CITY	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) INT(km) HAAT(M) COR(M)	PRO(km) LICENSEE	*IN* (Overlap	*OUT* in km)
243D K243BN Laveen	LIC _C_ AZ	292.4 112.4	0.64 BLFT20170920ABF	33 35 47.0 112 05 31.0	0.250 58.5 688	18.7 Mountain Community	-80.0* Transla	-85.0*
243D K243BN Laveen	APP _C_ AZ	0.0 0.0	0.00 BPFT20171005ACG	33 35 39.1 112 05 08.0	0.250 58.8 669	18.9 Mountain Community	-77.6* Transla	-77.4*
243C KIKO-FM Claypool	RSV-A ___ AZ	105.9 286.6	121.63	33 17 20.0 110 49 45.0	100.000 193.4 600 1945	83.6 1tv.com, Inc.	-77.0*	3.0
243C KIKO-FM Claypool	APP DCX AZ	105.9 286.6	121.63 BPH20170620ABH	33 17 20.0 110 49 45.0	34.000 189.2 966 2326	88.8 1tv.com, Inc.	-75.8*	1.7
245C KMXP Phoenix	LIC _CY AZ	175.3 355.3	28.93 BMLH19941024KC	33 20 03.0 112 03 36.0	100.000 12.5 475 834	85.8 Citicasters Licenses,	-0.4 Inc.	-57.4*
241D K241CS Phoenix	APP DC_ AZ	180.0 0.0	0.00 BPFT20170206ACK	33 35 39.0 112 05 08.0	0.250 1.1 663	18.6 Gabrielle Broadcasting	-17.4* Lic	-19.1*
241D K241CS Phoenix	LIC DV_ AZ	180.0 0.0	0.00 BLFT20170126ABP	33 35 39.0 112 05 08.0	0.200 0.0 663	1.0 Gabrielle Broadcasting	-16.3* Lic	-1.5*
243C2 KIKO-FM Claypool	CP _CX AZ	105.9 286.6	121.63 BPH20160927ADT	33 17 20.0 110 49 45.0	0.680 121.2 1015 2352	49.0 1tv.com, Inc.	-8.0	41.1
241D K241BQ Ft Mcdowell	LIC DC_ AZ	175.4 355.5	28.86 BLFT20171025AAL	33 20 05.0 112 03 39.0	0.140 0.0 803	2.4 Riviera Broadcasting,	12.0 Llc	17.4
242C3 KSWG Wickenburg	LIC ZCX AZ	299.6 119.2	75.28 BLH20020311ABB	33 55 34.0 112 47 40.0	6.400 39.8 197 943	26.2 Barna Broadcasting,	13.5 Llc	16.3
240D K240EU Tempe	LIC DC_ AZ	91.3 271.4	30.17 BLFT20170802ABN	33 35 16.0 111 45 38.0	0.250 0.1 665	3.7 Crc Broadcasting	19.7 Company,	24.1
242C3 KSWG Wickenburg	APP ZCX AZ	299.4 119.0	74.97 BPH20170510AAZ	33 55 22.0 112 47 34.0	5.300 33.2 217 960	22.3 Barna Broadcasting,	19.8 Llc	20.0
240D K240DC Buckeye	CP DV_ AZ	266.5 86.2	44.05 BPFT20160104AMC	33 34 09.0 112 33 33.0	0.250 0.0 1223	0.9 Advance Ministries,	21.3 Inc. D	27.7
240D K240DC Buckeye	LIC _V_ AZ	241.2 60.9	49.06 BLFT20070510ACT	33 22 51.0 112 32 53.0	0.060 0.5 -55 272	4.9 Advance Ministries,	25.4 Inc. D	43.0
243D K243BP Casa Grande	LIC _C_ AZ	157.9 338.1	92.49 BLFT20160418AAL	32 49 18.0 111 42 42.0	0.060 47.3 675	14.1 Mountain Community	30.3 Transla	40.6
296C3 KVVA-FM Apache Junction	LIC _CX AZ	110.9 291.2	46.11 BLH20130315ABB	33 26 44.0 111 37 19.0	17.000 12.8 124 651	58.8 Entravision Holdings,	11.5R Llc	34.6M
242A 1759589 Star Valley	RSV-A ___ AZ	45.9 226.4	105.97	34 15 16.0 111 15 26.0	6.000 54.3 100 1614	37.2 Kona Coast Radio,	35.9 Llc	45.6
240C0 KKLD Cottonwood	LIC NCX AZ	358.6 178.6	121.21 BMLH20100428AEO	34 41 12.0 112 07 02.0	21.000 8.2 799 2388	78.1 Yavapai Broadcasting	94.0 Corpo	42.1
244C2 KWMX Williams	LIC _CN AZ	358.5 178.5	170.54 BLH19970609KA	35 07 52.0 112 08 03.0	10.500 85.4 325 2390	55.8 Grenax Broadcasting	66.9 Ii, Ll	84.5
297C2 KAZV Aguila	CP ZCX AZ	298.0 117.6	83.27 BNPH20070403ACO	33 56 36.0 112 52 53.0	50.000 12.8 150 929	58.8 Matinee Media	14.5R Corporation	68.8M
242A 1759499 Star Valley	APP _CX AZ	46.1 226.5	106.70 BNPH20170621ABC	34 15 26.0 111 14 58.0	0.750 16.5 -33 1489	11.0 Kona Coast Radio,	76.2 Llc	69.0
242L1 KRIM-LP Payson	LIC ___ AZ	44.1 224.5	102.37 BLL20150623ABI	34 15 13.0 111 18 39.0	0.004 146 1612		75.3 Payson Council For The	72.2 Mus
297C2 KAZV Aguila	APP _CX AZ	292.6 112.1	88.80 BMPH20151022AFO	33 53 49.6 112 58 21.6	50.000 12.8 150 904	58.8 Matinee Media	14.5R Corporation	74.3M
243C NEW-FM Sonoita	___ SO	207.8 27.2	233.73	31 43 44.0 113 14 15.0	0.000 0.0 181	92.0	211.9	76.1
241C KLPX Tucson	LIC _CY AZ	148.6 329.1	174.57 BLH19900503KD	32 14 56.0 111 06 59.0	100.000 13.1 595 1360	90.1 Arizona Lotus Corp.	147.8	84.3

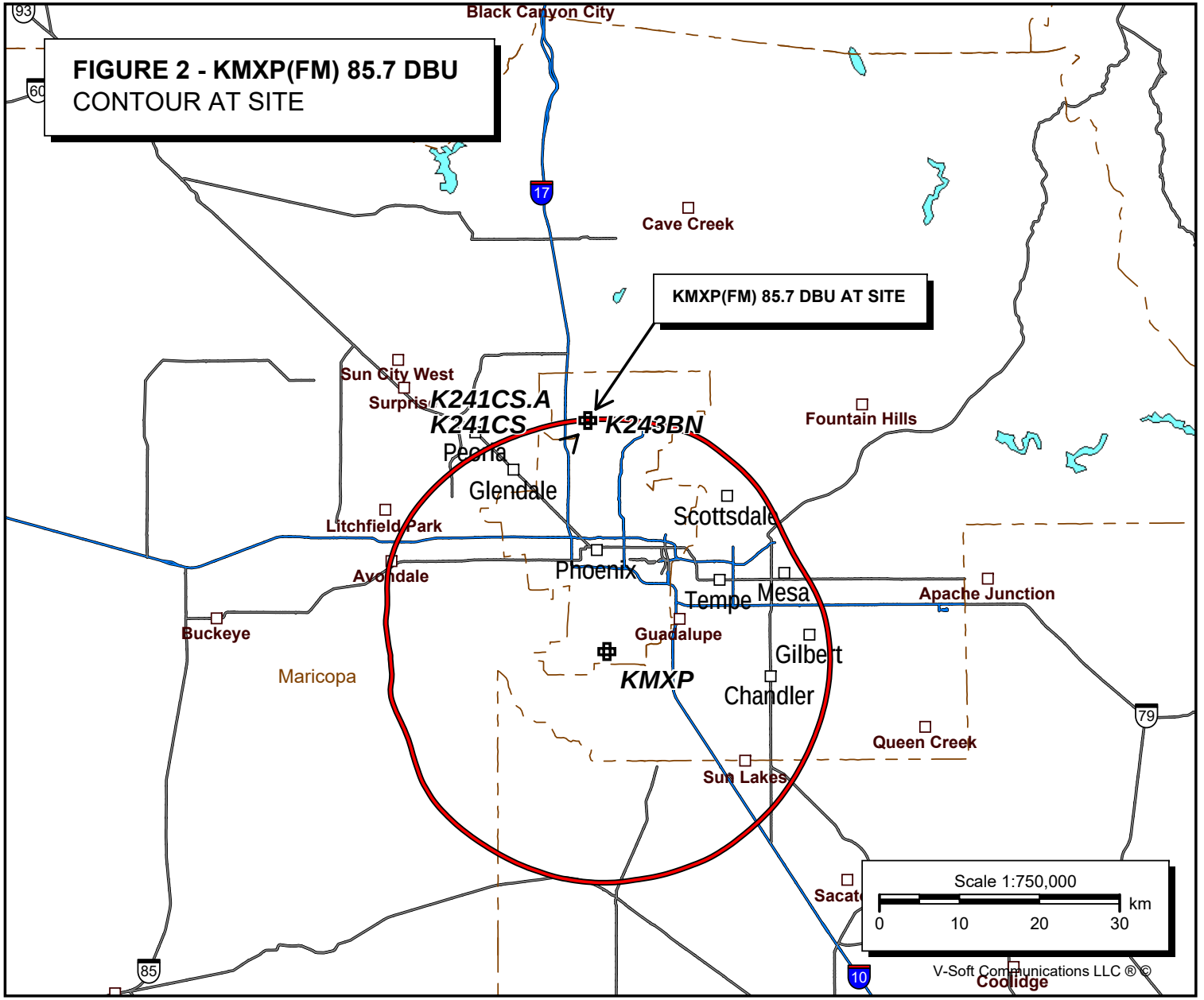
CH CALL	TYPE ANT	AZI	DIST	LAT	PWR(kW)	INT(km)	PRO(km)	*IN*	*OUT*
CITY	STATE	<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
242D K242BZ	LIC DV_	358.6	121.21	34 41 12.0	0.093	3.7	2.0	98.5	85.2
Cottonwood	AZ	178.6	BLFT20101213AHP	112 07 02.0	802	2379	Yavapai Broadcasting Corpo		
246D K246AA	LIC DCN	337.4	107.65	34 29 20.0	0.011	0.0	3.2	87.4	103.3
Prescott	AZ	157.2	BLFT19931115TE	112 32 15.0	505	2173	Prescott Sound Investments		
243A AL2673	RSV-A ___	273.4	199.47	33 40 58.0	6.000	78.6	22.2	98.4	109.0
Quartzsite	AZ	92.2	RMinv-41	114 13 59.0	100	429			
246C2 AL9582	RSV-A ___	19.0	161.43	34 58 06.0	50.000	5.8	50.6	137.7	105.8
Kachina Village	AZ	199.3	RM11518	111 30 29.0	150	2327			
246C2 KBTK	LIC _C_	19.0	161.43	34 58 06.0	5.000	4.3	51.5	139.2	107.6
Kachina Village	AZ	199.3	BLH20161021ABF	111 30 29.0	444	2622	Grenax Broadcasting Ii, Ll		
244D KWMX-FM2	LIC DC_	11.1	142.38	34 51 11.0	0.099	9.2	6.5	114.8	108.1
Sedona	AZ	191.3	BLFTB20010821AAT	111 47 01.0		1475	Grenax Broadcasting Ii, Ll		
243A KBUX	LIC _CX	273.5	199.45	33 41 02.0	3.000	53.3	13.2	123.6	118.3
Quartzsite	AZ	92.3	BLH20170508AAJ	114 13 58.0	-47	281	Marvin Vosper		
244D KWMX-FM1	LIC DCN	13.6	188.10	35 14 27.0	0.100	38.4	24.4	131.6	135.7
Flagstaff	AZ	193.9	BLFTB19971126TB	111 35 48.0	601	2835	Grenax Broadcasting Ii, Ll		
244C3 KRCY-FM	LIC _CX	299.3	221.68	34 33 06.0	0.260	53.2	34.0	146.6	153.5
Lake Havasu City	AZ	118.1	BLH20080731ACG	114 11 37.0	825	1451	Rick L. Murphy		
246C3 KYWD	CP ZCX	145.4	213.79	32 00 10.7	25.000	5.7	51.3	195.0	162.3
Green Valley	AZ	326.1	BPH20141014ABL	110 47 48.7	100	1063	Capstar Tx, Llc		
246A KYWD	LIC _CX	152.6	201.67	31 58 37.0	1.750	2.6	36.2	184.8	165.1
Green Valley	AZ	333.2	BLH20030424AAM	111 06 04.0	187	1227	Capstar Tx, Llc		
244B XHNGSFM	USE ___	156.7	273.49	31 19 49.0	50.000	90.3	65.0	168.0	186.5
Nogales	SO	337.3		110 56 42.0	150	1424			
243A R17613	VAC ___	248.2	278.56	32 38 00.0	3.000	75.2	24.0	180.3	185.3
Cd. Morelos	BN	66.7		114 50 54.0	100	142			
244B XHNGSFM	OPE _HN	157.0	274.05	31 19 10.0	38.400	72.0	65.0	186.8	187.0
Nogales	SO	337.6		110 57 36.0	37	1323			
240C3 KUKY	LIC _CX	244.6	233.57	32 40 22.0	1.600	2.6	41.5	207.9	190.7
Wellton	AZ	63.3	BLH20120803AAD	114 20 11.2	385	534	Hispanic Target Media Inc.		
243A AL1171	VAC ___	246.4	289.61	32 31 05.0	3.000	75.3	24.0	191.3	196.2
Lagunitas	BN	64.8		114 54 58.0	100	127			
296A VA2384	VAC __N	110.8	233.29	32 49 46.0	6.000	12.8	58.8	9.5R	223.8M
Pima	AZ	292.0		109 45 16.0	100	1116			
245A AL8864	VAC ___	248.9	266.37	32 42 09.0	3.000	2.3	24.0	241.0	241.3
Algodones	BN	67.4		114 44 30.0	100	166			
296C1 KNKK	LIC _CX	308.0	263.66	35 01 58.0	16.500	12.8	58.8	21.5R	242.2M
Needles	CA	126.7	BLH20020708AAZ	114 21 57.0	582	1368	Cameron Broadcasting, Inc.		
242C KKLZ	LIC _CX	316.0	378.29	36 00 29.0	100.000	112.8	76.6	244.0	270.1
Las Vegas	NV	134.4	BMLH20111201LCE	115 00 20.0	358	1056	Beasley Media Group, Llc		
245C1 6891	___	247.4	327.06	32 25 20.0	0.000	0.0	72.0	304.0	254.0
Mexicali	BN	65.7		115 18 12.0		69			
243A KDAP-FM	LIC _CN	135.6	344.08	31 21 18.0	3.000	64.5	17.5	268.1	293.3
Douglas	AZ	317.0	BLH19901121KB	109 33 06.0	9	1271	Donna Henderson, Personal		
296B AL8716	VAC ___	248.2	279.15	32 38 00.0	50.000	12.8	58.8	10.0R	269.2M
Ciudad Morelos	BN	66.7		114 51 00.0	150	192			
296A R17547	VAC ___	156.8	274.15	31 19 07.0	3.000	12.8	58.8	5.0R	269.2M
Nogales	SO	337.4		110 56 45.0	100	1383			
242A KSSB	LIC _CX	261.5	323.22	33 07 13.0	6.000	23.5	15.8	276.9	273.4
Calipatria	CA	79.7	BLH20140623AAK	115 30 43.0	25	-16	Lazer Licenses, Llc		
242A AL0480	VAC ___	181.2	322.15	30 41 50.0	3.000	27.7	24.0	275.5	273.5
Caborca	SO	1.2		112 09 29.0	100	400			
242AA R17224	VAC ___	164.7	351.57	30 32 23.0	6.000	46.4	28.0	288.6	305.8
Santa Ana	SO	345.2		111 07 10.0	100	836			
241C1 KWRK	LIC _CY	50.4	349.54	35 33 36.0	100.000	5.8	50.8	328.2	294.1
Window Rock	AZ	232.1	BLH19960911KD	109 06 30.0	178	2321	The Navajo Nation		

CH CALL / CITY	TYPE ANT / STATE	AZI <--	DIST / FILE #	LAT / LNG	PWR(kW) / HAAT(M)	INT(km) / COR(M)	PRO(km) / LICENSEE	*IN* (Overlap in km)	*OUT*
245A AL8589 Caborca	VAC ___ SO	181.2 1.2	322.15	30 41 50.0 112 09 29.0	3.000 100	1.9 400	24.0	301.3	297.6
296B AL9098 Caborca	VAC ___ SO	181.2 1.2	321.30	30 41 50.0 112 09 29.0	50.000 150	12.8 450	58.8	10.0R	311.3M
297A R17613 Cananea	VAC ___ SO	149.5 330.5	334.93	30 58 55.0 110 18 02.0	3.000 100	12.8 1670	58.8	5.0R	329.9M
241A AL0055 Nacozari De Garcia	VAC ___ SO	189.2 8.9	362.59	30 22 25.0 112 41 30.0	3.000 100	2.6 214	24.0	340.0	337.9
245A AL9054 Puerto Lobos	VAC ___ SO	190.9 10.5	376.49	30 16 00.0 112 49 35.0	3.000 100	2.2 158	24.0	354.1	351.8
297C2 KFXR-FM Chinle	LIC _CN AZ	33.2 214.5	368.72 BLH19950908KE	36 21 07.0 109 49 54.0	3.600 497	12.8 2507	58.8 Cc Licenses, Llc	14.5R	354.2M

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.
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.
Reference station has protected zone issue: Mexico

* No actual interference will be caused to either KMXP and K241CS since the worse case 125.7 DBU interference contour will not cover any population. See the Technical Statement for more details.

K243BN
BLFT20170721ABB
Latitude: 33-35-39.10 N
Longitude: 112-05-08 W
ERP: 0.25 kW
Channel: 243
Frequency: 96.5 MHz
AMSL Height: 662.0 m
Elevation: 645.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model:



K243BN
BLFT20170721ABB
Latitude: 33-35-39.10 N
Longitude: 112-05-08 W
ERP: 0.25 kW
Channel: 243
Frequency: 96.5 MHz
AMSL Height: 662.0 m
Elevation: 645.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model:

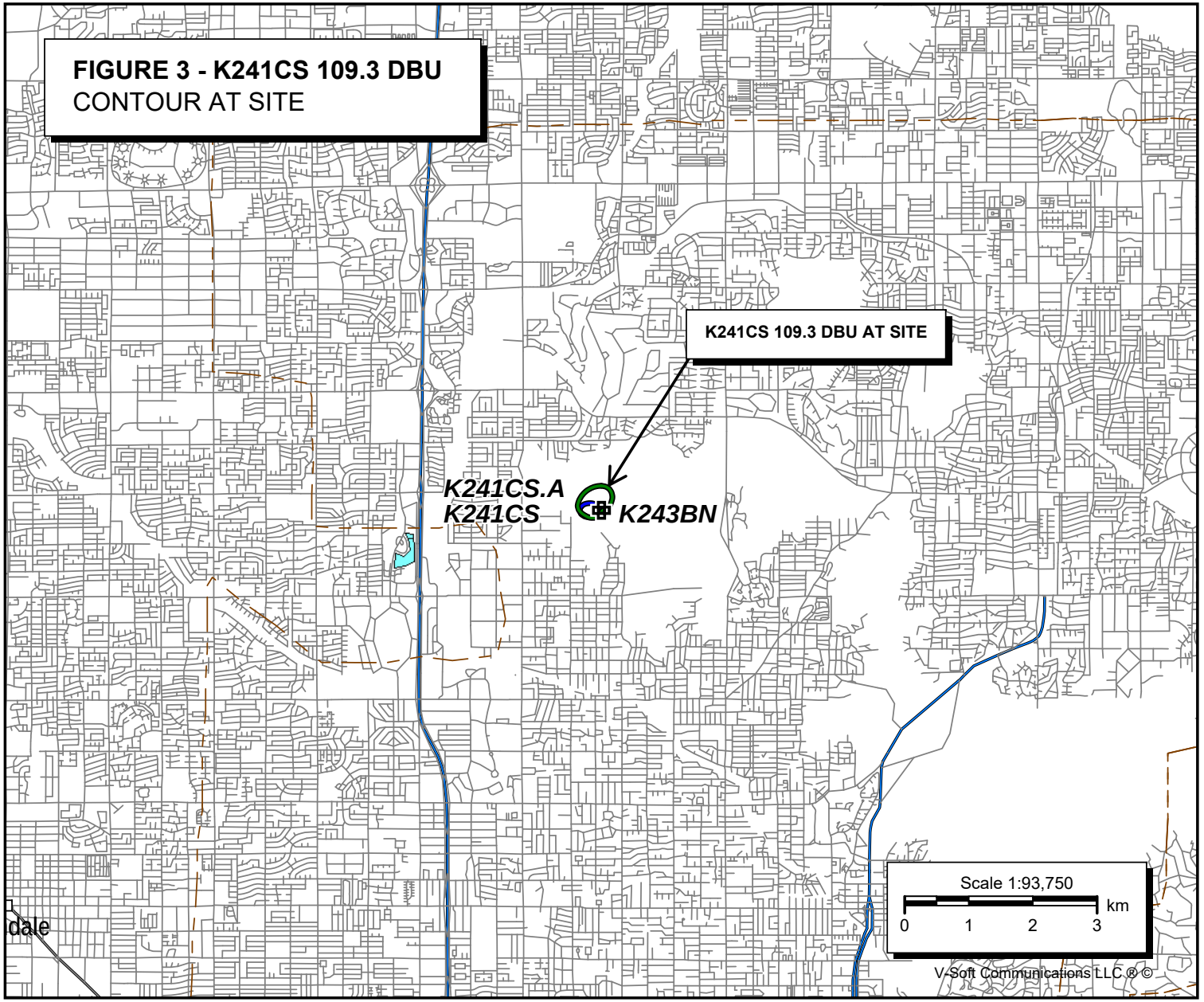


FIGURE 4 - PREDICTED 125.7 DBU INTERFERENCE CONTOUR
K243BN LAVEEN, AZ, CH 243D

Coverage Study - NGDC 30 SEC
11-30-2017

K243BN CH243 D , 0.25 kW, 0.0m HAAT, 669.0m COR AMSL
Interference Contour = 125.7 dBu. Population = 0

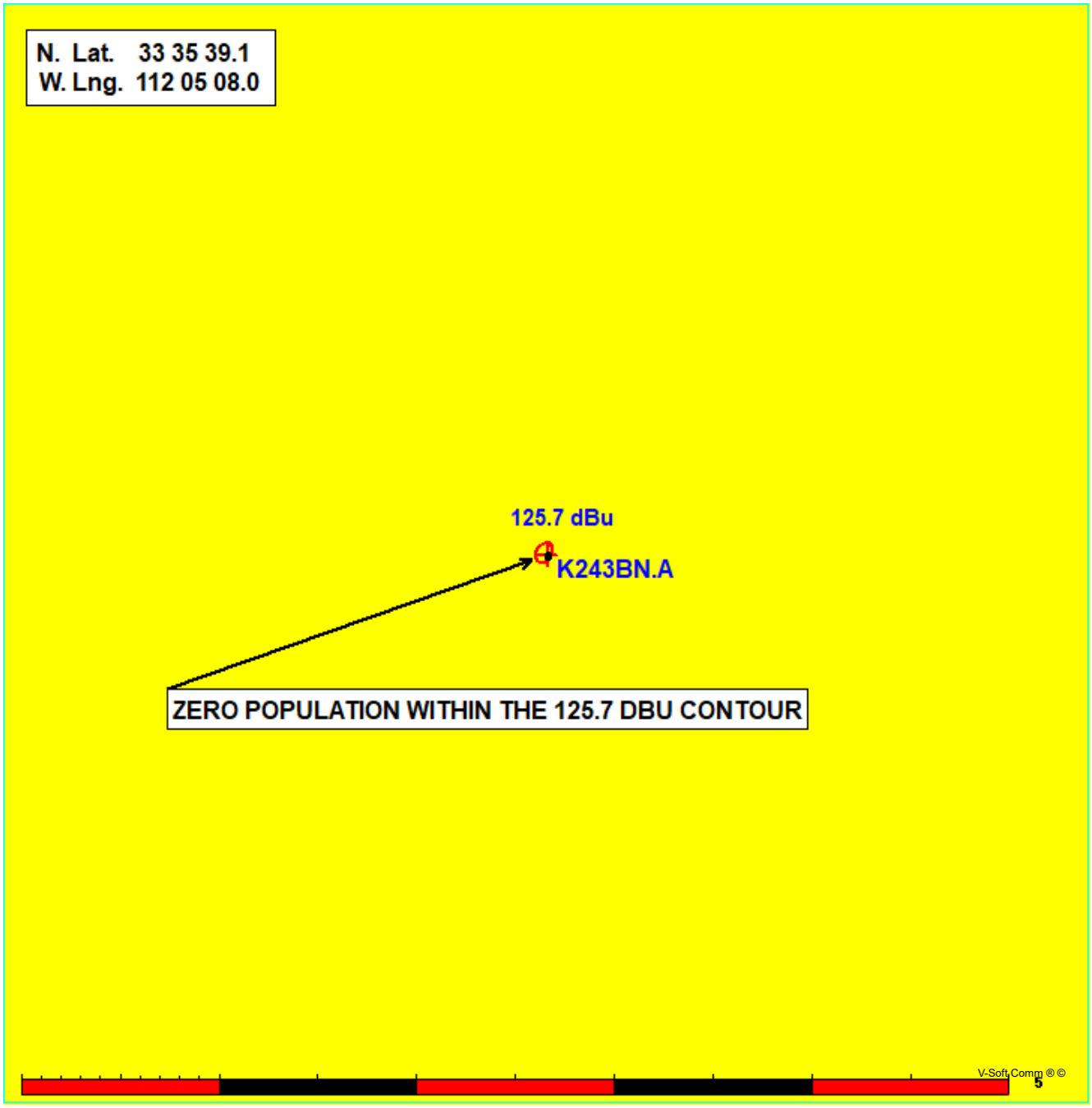


FIGURE 5 - PRESENT AND PROPOSED 60 DBU
K243BN LAVEEN, AZ, CH 243D

Coverage Study - NGDC 30 SEC
11-30-2017

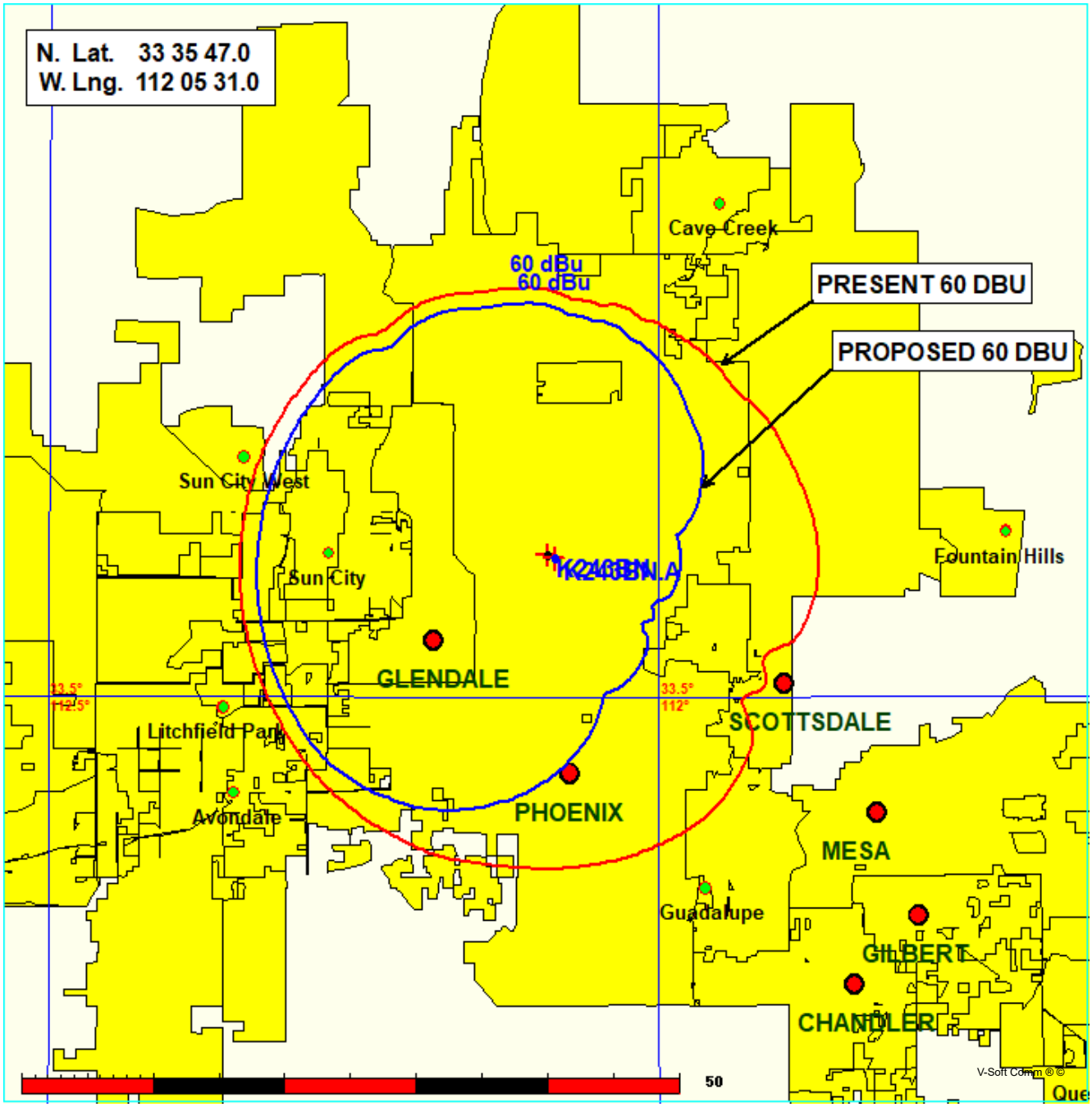


FIGURE 6 DIRECTIONAL ANTENNA DATA

K243BN.A 11-30-2017 RMS(V)= .764

BEXT TFC2K-D

Azi	Field	dBk	kW
000	0.990	-06.108	0.245
010	0.970	-06.285	0.235
020	0.910	-06.840	0.207
030	0.840	-07.535	0.176
040	0.740	-08.636	0.137
050	0.630	-10.034	0.099
060	0.500	-12.041	0.063
070	0.370	-14.657	0.034
080	0.230	-18.786	0.013
090	0.230	-18.786	0.013
100	0.230	-18.786	0.013
110	0.230	-18.786	0.013
120	0.230	-18.786	0.013
130	0.230	-18.786	0.013
140	0.230	-18.786	0.013
150	0.230	-18.786	0.013
160	0.230	-18.786	0.013
170	0.370	-14.657	0.034
180	0.500	-12.041	0.063
190	0.630	-10.034	0.099
200	0.740	-08.636	0.137
210	0.840	-07.535	0.176
220	0.910	-06.840	0.207
230	0.970	-06.285	0.235
240	0.990	-06.108	0.245
250	1.000	-06.021	0.250
260	1.000	-06.021	0.250
270	1.000	-06.021	0.250
280	1.000	-06.021	0.250
290	1.000	-06.021	0.250
300	1.000	-06.021	0.250
310	1.000	-06.021	0.250
320	1.000	-06.021	0.250
330	1.000	-06.021	0.250
340	1.000	-06.021	0.250
350	1.000	-06.021	0.250

Graph is Relative Field

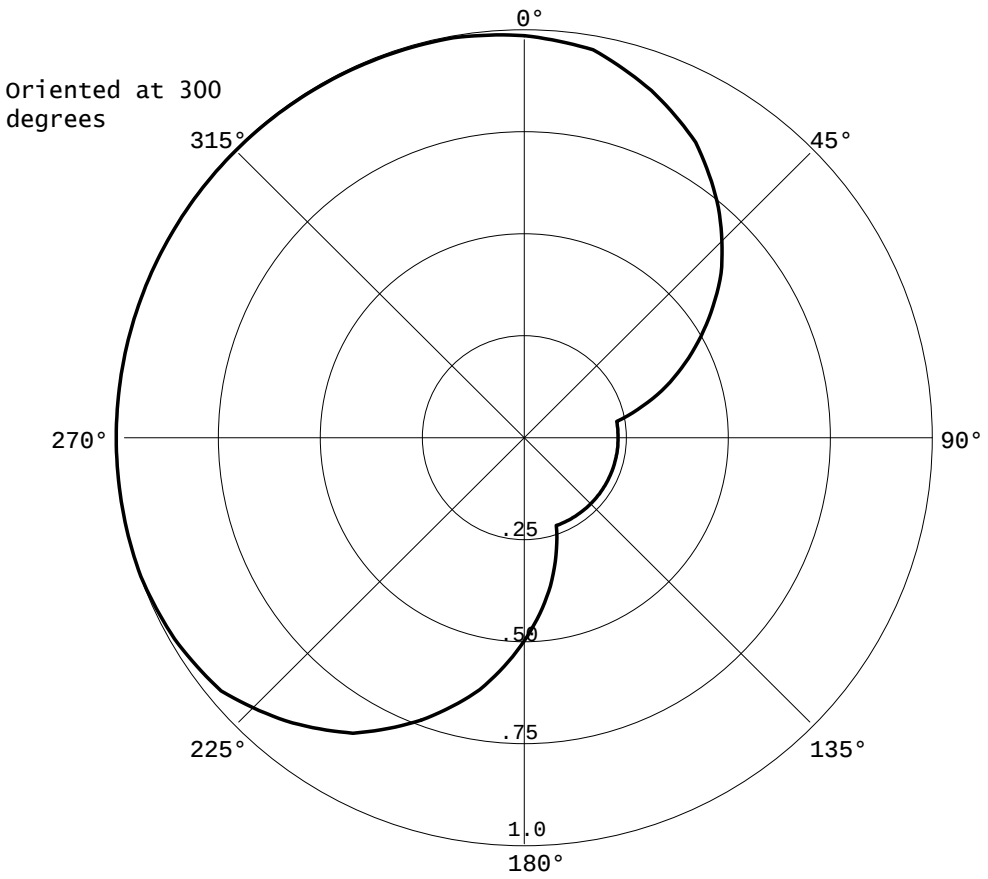


FIGURE 7 - FILL-IN MAP WITH KLVK(FM)
K243BN LAVEEN, AZ, CH. 243D

Coverage Study - NGDC 30 SEC
11-30-2017