

ENVIRONMENTAL STATEMENT  
K245CD ALBUQUERQUE, NM  
PAN AMERICAN BROADCASTING, INC.  
FCC FORM 349  
NOVEMBER 2017

The applicant proposes to mount its current antenna on an existing 6.3 meter non-registered monopole. The proposed Center of Radiation will be 6.3 meters Above Ground Level. An Aldena CP log periodic style yagi directional antenna is being proposed, with a maximum Effective Radiated Power of 250 watts vertical and horizontal polarization. The proposed antenna Center of Radiation, above ground, was reduced by 2 meters to allow for the average height of a human on the ground. With the vertical pattern of the Aldena antenna calculated in, calculations predicts a peak exposure of  $190.82 \mu\text{w}/\text{cm}^2$  at any point on the ground around the base of the tower. This represents 95.4% of the allowable Maximum Permissible Exposure ("MPE") of  $200 \mu\text{w}/\text{cm}^2$  for uncontrolled environments at any point on the ground. RF power density Measurements will be made around the base of the pole to ensure compliance. The proposed directional antenna has deep vertical nulls which should produce a much lower power density at any point on the ground than these worst case predictions.

The applicant will ensure that the public access to the tower is restricted by fencing, anti-climb devices or other appropriate measures. The site will be posted with RF warning signs. If climbing of the tower by authorized personnel becomes necessary, transmitter power will be reduced to safe operating levels, or transmission even terminated, as necessary as not to exceed the RF exposure limits to tower workers. The

licensee will cooperate with other users at the site with the scheduling of such tower or antenna maintenance.

No modification of the existing tower is proposed, other than the proposed side mounting of the antenna system and addition of a transmission line. The tower was constructed prior to March 16, 2001. The National Programmatic Agreement generally allows such a collocation without consultation or review under Section 106 and Subpart B of 36 CFR §800. The applicant believes that it is in full compliance with the Agreement, and that no further study is required.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE STUDY

K245CD ALBUQUERQUE, NM, CH. 245D

CH# 245D - 96.9 MHz, Pwr= 0.25 kW DA, HAAT= 0.0 M, COR= 3235 M

Average Protected F(50-50)= 7.09 km

Standard Directional

DISPLAY DATES

DATA 11-18-17

SEARCH 11-18-17

REFERENCE  
35 12 53.0 N.  
106 27 02.0 W.

CH CITY	CALL	TYPE STATE	ANT AZI ---	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* in km)
245D Albuquerque	K245CD	LIC DV_ NM	0.0 0.0	0.00 BLFT20170227AAT	35 12 53.0 106 27 02.0	0.160 3235	8.1	0.9 Pan American Broadcasting,	-41.9*	-97.6*
242C Albuquerque	KBZU	LIC _CY NM	160.1 340.1	0.29 BLH19870210KB	35 12 44.0 106 26 58.0	20.000 1260	9.1 3278	93.5 Radio License Holding Cbc,	-11.9*	-93.3*
247C Santa Fe	KKSS	LIC _CY NM	353.8 173.8	63.15 BLH19850926KA	35 46 50.0 106 31 35.0	100.000 572	15.9 3057	98.1 Agm Nevada, Lic	8.6	-35.6*
245L1 Madrid	KMRD-LP	LIC ____ NM	52.4 232.6	33.93 BLL20141024ACI	35 24 01.6 106 09 14.6	0.035 50	1940	Madrid Cultural Projects	-9.8	1.1
245C0 Farmington	KDAG	LIC _CX NM	324.3 143.5	219.99 BLH20060309AED	36 48 52.0 107 53 32.0	100.000 303	178.4 2129	76.4 Capstar Tx, Lic	-6.1	25.2
244C3 Grants	KMYN	LIC _CX NM	272.7 92.0	104.36 BLH20121203BTF	35 15 11.0 107 35 46.0	0.265 818	54.5 3349	35.8 Royal Diversified Industri	4.6	1.0
244D Tijeras	K292FW	CP DV_ NM	153.4 333.4	20.09 BMPFT20170201ADU	35 03 10.6 106 21 05.1	0.250 2330	18.2	1.6 Telebeeper Of New Mexico	12.0*	8.9
244L1 Espanola	KSHF-LP	LIC ____ NM	22.7 203.0	93.54 BLL20150129AGD	35 59 28.0 106 02 53.0	0.100	1766	Holy Cross, A New Mexico N	51.4	58.1
244C Cloudcroft	KNMB	LIC _CX NM	162.9 343.2	210.07 BLH20021002ABF	33 24 14.0 105 46 56.0	25.000 878	124.9 3304	84.2 Mtd, Inc.	81.7	119.3
298C1 Los Alamos	KQBA	LIC _C_ NM	21.3 201.6	104.29 BLH20000410ABB	36 05 21.0 106 01 41.0	100.000 243	4.5 2140	71.8 Hutton Broadcasting, Lic	21.5R	82.8M
244C3 Las Vegas	KMDZ	LIC _CX NM	69.7 250.4	119.21 BLH20150918ABL	35 34 48.0 105 12 59.0	6.500 -68	24.0 1969	16.1 Sangre De Cristo Broadcast	83.5	96.9
298C3 Alamo Community	KABR	LIC _CX NM	227.5 46.9	130.65 BLED20120402AUZ	34 25 01.0 107 30 04.0	10.000 -41	4.5 1917	71.8 Alamo Navajo School Board,	11.5R	119.2M
244C1 Capi tan	KNMB	LIC _CX NM	162.8 343.2	210.08 BLH20160120ABM	33 24 14.0 105 46 55.0	1.000 917	77.6 3312	51.0 Mtd, Inc.	129.0	152.3
246C3 La Jara	KZBR	LIC _CX CO	7.1 187.3	240.86 BLH20080416AAD	37 22 05.0 106 06 44.0	25.000 55	38.7 2458	26.0 Wolf Creek Broadcasting, L	164.1	164.6
246C1 Roswell	KBCQ-FM	LIC _CN NM	136.1 317.2	277.15 BLH19851224KD	33 24 05.0 104 22 45.0	100.000 110	84.8 1203	55.4 Majestic Broadcasti ng, Lic	189.2	215.7
243C2 Raton	KBKZ	LIC _CX NM	41.4 222.5	265.72 BLH20040927AEI	36 59 33.0 104 28 24.0	5.400 295	4.2 2609	49.0 Phillips Broadcasti ng Comp	237.3	216.1
248C1 Shi prock	KNDN-FM	LIC _CX NM	300.9 119.4	276.09 BLH20160121AAK	36 27 39.8 109 05 43.5	1.500 729	2.6 2994	55.2 Krj g, Inc.	224.7	219.2
243C3 Del Norte	KSLV-FM	LIC NC_ CO	357.5 177.4	279.35 BLH20081024AAU	37 43 47.0 106 35 18.0	0.930 485	2.0 3343	37.9 San Lui s Valley Broadcasti	235.7	238.7
247A Lake Ci ty	NEW	CP _CX CO	346.1 165.6	318.24 BNPH20151013AIR	37 59 43.4 107 19 16.9	1.022 242	2.0 3605	29.4 Munera, Campo E	271.9	284.6
243C2 Bovina	KKNM	LIC ZC_ TX	99.4 281.4	325.22 BLH20080417AAS	34 41 17.0 102 56 53.0	50.000 140	4.6 1432	42.8 Tejas Broadcasting, LI p	317.4	281.3
248C1 Clayton	KLMX-FM	LIC _H_ NM	64.1 246.0	324.66 BLH20131223ACG	36 26 39.0 103 11 24.0	52.000 110	4.1 1629	39.4 Jimmy N. Mccoll um	305.4	284.0
247C1 Vi rden	1764198	RSV-A ____ NM	226.9 45.3	370.40	32 54 14.0 109 20 49.0	100.000 299	11.7 1584	80.5 Cochise Medi a Li censes Lic	327.1	289.6
298C1 Cl ovis	KSMX-FM	LIC _CX NM	110.5 292.3	311.91 BMLH20090810ACV	34 11 34.0 103 16 44.0	100.000 165	4.5 1397	71.8 Rooney Moon Broadcasti ng,	21.5R	290.4M
242C El Paso	KHEY-FM	LIC _CY TX	180.4 0.4	379.13 BLH7752	31 47 47.0 106 28 55.0	100.000 424	3.2 1649	53.3 Cc Li censes, Lic	365.0	306.1
248C El Paso	KBNA-FM	LIC _EN TX	180.4 0.4	379.53 BLH19890426KA	31 47 34.0 106 28 47.0	100.000 332	3.2 1547	33.0 97.5 Li censee Tx, Lic	365.5	312.7

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DI ST FI LE #	LAT LNG	PWR(kW) HAAT (M)	INT(km) COR (M)	PRO(km) LI CENSEE	Page # 2 *IN* (Overl ap in km)	*OUT*
247C1 Vi rden	1761959	APP ZCX NM		226.5 44.9	369.95 BMPH20170724AAC	32 53 22.0 109 19 23.0	1.700 682	2.8 1975	55.3 Cochi se	335.7 Medi a Li censes LIc	314.6
248C3 Poncha Springs	KWUZ	LIC NCX CO		6.0 186.2	361.43 BLH20170831BCE	38 27 11.0 106 01 02.0	0.250 834	1.1 3575	39.6 Three Eagles	321.3 Communi cation	321.1
248A Poncha Springs	KWUZ	LIC ZCX CO		6.0 186.2	361.43 BLH20080109AGB	38 27 11.0 106 01 02.0	0.029 892	0.4 3575	22.2 Three Eagles	322.0 Communi cation	338.7
298C1 Ol athe	KSYF	LIC NCX CO		343.2 162.5	368.62 BMLED20150623AAI	38 23 15.0 107 40 26.0	20.000 531	4.5 2909	71.8 Montrose	21.5R Christi an Broadca	347.1M
246L1 El Paso	NEW	CP TX		179.9 359.9	379.01 BNPL20131114BVR	31 47 50.6 106 26 35.0	0.100 -44			360.3 Sin Fronteras Organi zing P	367.3

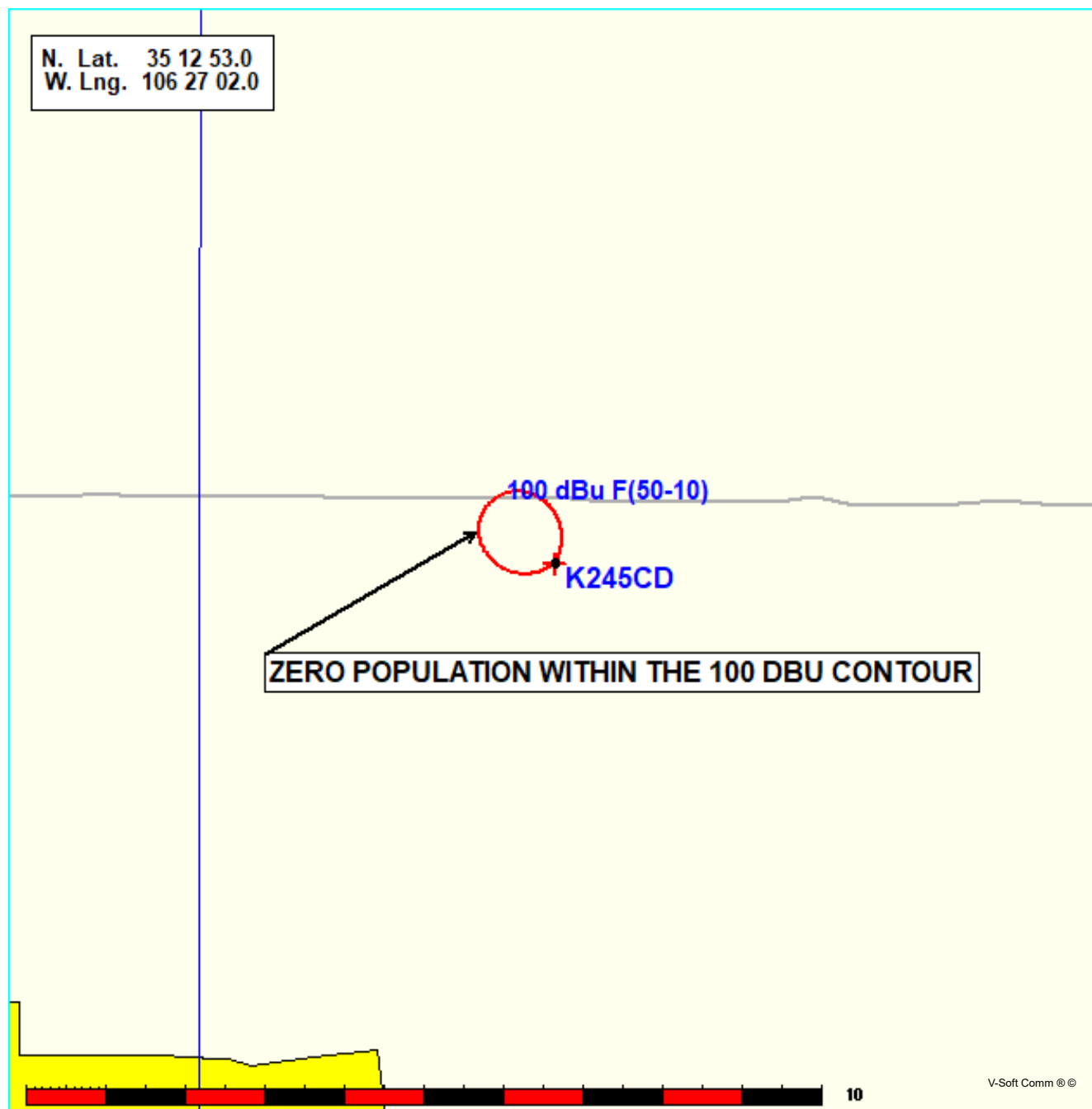
Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM. In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent. All separation margins (if shown) include rounding.  
Ant Column: (D= DA Standard, 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.

\* No actual interference will be caused to either KBZU(FM) or KKSS(FM) since the worse case 100 DBU interference contour will not cover any population. See the Technical Statement for more details.

FIGURE 2 - PROPOSED 100 DBU INTERFERENCE CONTOUR  
K245CD ALBUQUERQUE, NM, CH. 245D

Coverage Study - NGDC 30 SEC  
11-18-2017

K245CD CH245 D , 0.25 kW, 0.0m HAAT, 3235.0m COR AMSL  
Interference Contour = 100 dBu. Population = 0



**K245CD**

BLFT20170227AAT

Latitude: 35-12-52.99 N

Longitude: 106-27-01.99 W

ERP: 0.25 kW

Channel: 245

Frequency: 96.9 MHz

AMSL Height: 3235.0 m

Elevation: 3229.0 m

Horiz. Pattern: Directional

Vert. Pattern: No

Prop Model:

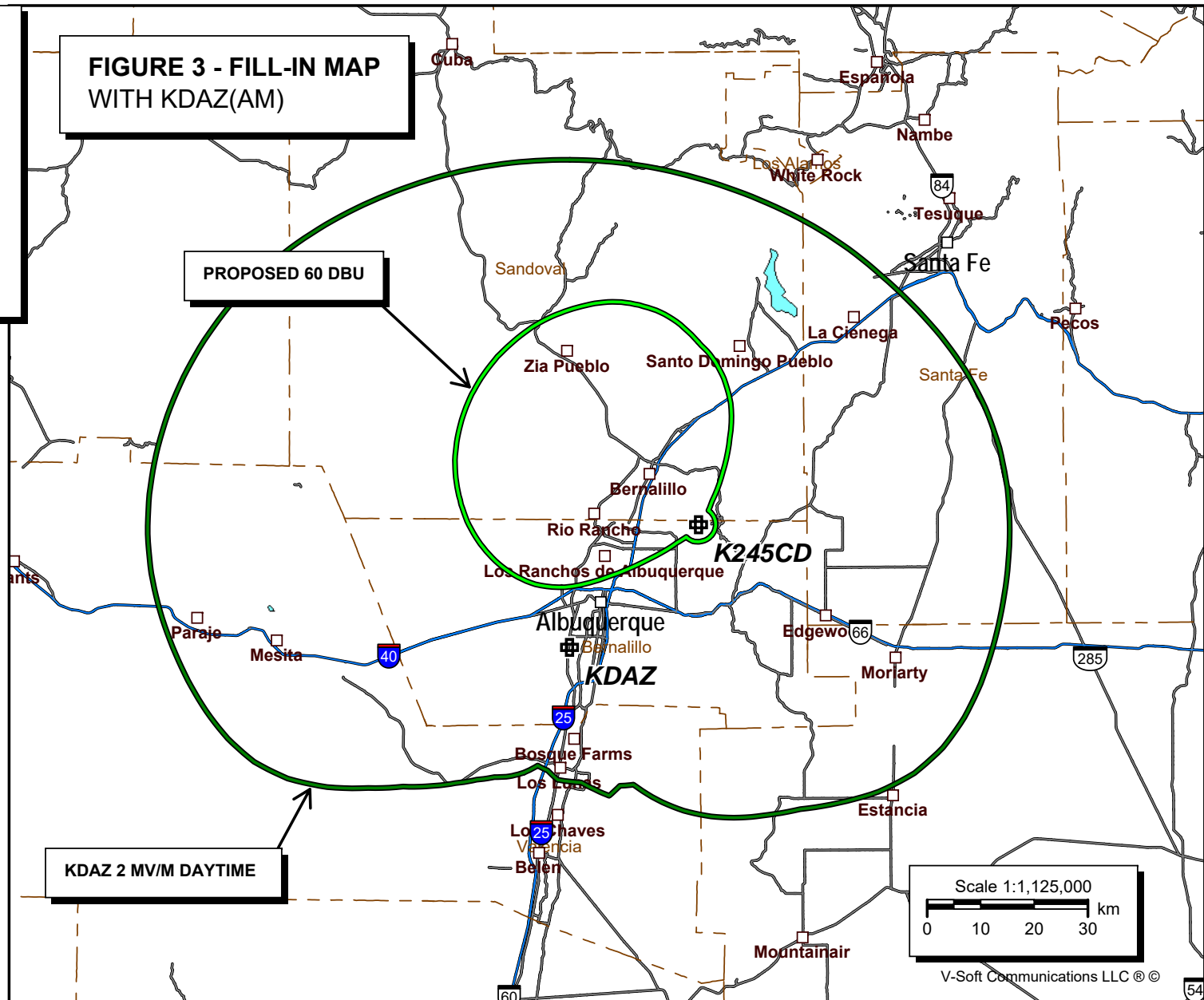
**FIGURE 3 - FILL-IN MAP  
WITH KDAZ(AM)****PROPOSED 60 DBU****KDAZ 2 MV/M DAYTIME**

FIGURE 4 - DIRECTIONAL ANTENNA DATA

K245CD

11-18-2017

RMS(V) = .467

Graph is Relative Field

Azi	Field	dBk	kW
000	0.544	-11.309	0.074
010	0.390	-14.199	0.038
020	0.190	-20.446	0.009
030	0.050	-32.041	0.001
040	0.030	-36.478	0.000
050	0.030	-36.478	0.000
060	0.030	-36.478	0.000
070	0.030	-36.478	0.000
080	0.030	-36.478	0.000
090	0.030	-36.478	0.000
100	0.030	-36.478	0.000
110	0.030	-36.478	0.000
120	0.030	-36.478	0.000
130	0.030	-36.478	0.000
140	0.030	-36.478	0.000
150	0.030	-36.478	0.000
160	0.030	-36.478	0.000
170	0.030	-36.478	0.000
180	0.030	-36.478	0.000
190	0.030	-36.478	0.000
200	0.030	-36.478	0.000
210	0.030	-36.478	0.000
220	0.030	-36.478	0.000
230	0.050	-32.041	0.001
240	0.190	-20.446	0.009
250	0.390	-14.199	0.038
260	0.544	-11.309	0.074
270	0.690	-09.244	0.119
280	0.817	-07.776	0.167
290	0.916	-06.783	0.210
300	0.980	-06.196	0.240
310	1.000	-06.021	0.250
320	0.980	-06.196	0.240
330	0.916	-06.783	0.210
340	0.817	-07.776	0.167
350	0.690	-09.244	0.119

ALDENA CP

YAGI AT 310 DEGREES

