

TECHNICAL STATEMENT  
K201CQ PRESCOTT, ARIZONA 254D  
CEDAR COVE BROADCASTING, INC.  
FCC FORM 349  
JUNE 2016

This Technical Statement is in support of FCC form 349 filed by Cedar Cove Broadcasting, Inc. for a minor change in the licensed facility of K201CQ, facility ID 21071. It is proposing to remain at its existing tower site located at N.  $34^{\circ}-41'-40''$ , W.  $112^{\circ}-07'-35''$ , NAD 27, with a decreased in Effective Radiated Power to 4 Watts (0.004 KW) and utilizing a new directional Nicom model BKG-1, one bay dipole with vertical only polarization. The antenna will be mounted at the 10 meter level on a 15 meter overall tower, with a Center of Radiation at 2370 Above Mean Sea Level. K201CQ also seeks to “one step” channel change from 201D to 254D (its I.F. spaced channel).

Figure 1 shows a channel interference study conducted from the proposed site for K201CQ. It shows that the proposed operation of K201CQ on channel 254D, will not cause any prohibited outgoing interference to any licensed or proposed FM services, with the exception of 2<sup>nd</sup> adjacent channel station KKFR(FM) Mayer, Arizona operating on channel 252C, facility ID 41462 and KTMG(FM) Prescott, Arizona operating on channel 256A, facility ID 52001.

The proposed operation of K201CQ on 254D is located within the protected 60 dB $\mu$  contour of 2<sup>nd</sup> adjacent channel stations KKFR(FM) and KTMG(FM).

Figure 2 shows the coverage area for the worse case 100 dB $\mu$  interference contour F(50-10) and shows that there is no population in the area of interference. The applicant, Cedar Cove Broadcasting, Inc., 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 has private access located at a remote mountain tower site known as "Mingus Mountain". The transmitter building is uninhabited and does not have indoor plumbing. Should any unforeseen actual interference be caused, the licensee will immediately cease broadcasting with K201CQ until such interference can be eliminated.

Figure 3 is a tabulation of the proposed directional antenna system parameters to be used by K201CQ on channel 254D.

The current and proposed 60 dB $\mu$  contours of K201CQ with overlap with one another, as required since the translator will remain at the same transmitter site as it is currently licensed.

It was concluded that the new proposed operation of K201CQ Prescott, Arizona on channel 254D will not cause any harmful interference to any existing stations, and will be in full compliance with the commission's rules.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE STUDY

K201CQ PRESCOTT, AZ, CH. 254D											
REFERENCE		CH#	254D - 98.7 MHz, Pwr= 0.004 kW DA, HAAT= 771.0 M, COR= 2370 M						DISPLAY DATES		
34 41 40.0 N.			Average Protected F(50-50)= 10.94 km						DATA 06-01-16		
112 07 35.0 W.			Standard Directional						SEARCH 06-01-16		
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)	
254C	KMVP-FM	LIC _C_		177.8	151.14	33 19 58.0	100.000	195.1	90.2	-48.4*	47.0
Phoenix		AZ		357.8	BMLH20040707ABN	112 03 48.0	545	911	Bonneville International C		
254D	K254CB	CP DC_		238.7	43.66	34 29 24.0	0.250	85.6	26.1	-43.4*	0.6
Prescott		AZ		58.5	BPFT20151229ARC	112 31 59.0		2179	Advance Ministries, Inc D/		
254D	K254CB	LIC DC_		238.8	44.07	34 29 20.0	0.250	82.3	24.8	-39.7*	2.3
Prescott		AZ		58.6	BLFT20150923AAF	112 32 15.0		2137	Advance Ministries, Inc D/		
252C	KKFR	LIC NCX		203.4	55.63	34 14 03.0	41.000	11.2	90.4	41.9	-34.8*
Mayer		AZ		23.2	BLH20060831AAC	112 22 01.0	852	2385	Riviera Broadcasting, Lic		
256A	KTMG	LIC _CN		247.7	34.96	34 34 29.0	6.000	3.6	37.8	28.4	-2.8*
Prescott		AZ		67.5	BLH19930510KC	112 28 45.0	61	1759	Flagstaff Radio, Inc		
255C2	KZXX	CP _CX		38.3	77.48	35 14 25.0	0.560	64.4	42.9	1.1	12.1
Doney Park		AZ		218.6	BPH20140528AHK	111 35 49.0	610	2844	Cochise Broadcasting Lic		
255C3	KZXX	LIC _CX		38.3	77.48	35 14 26.0	0.235	53.6	34.9	11.8	20.0
Doney Park		AZ		218.6	BLH20121214AAP	111 35 51.0	610	2844	Cochise Broadcasting Lic		
257C2	KEMP	CP ZCX		127.9	91.94	34 11 04.0	50.000	5.7	53.4	77.4	34.3
Payson		AZ		308.3	BPH20100430ACE	111 20 16.0	140	1468	Kemp Communications, Inc.		
253L1	KXGC-LP	CP _		38.8	72.58	35 12 08.7	0.100			49.8	41.8
Flagstaff		AZ		219.1	BNPL20131115ACB	111 37 32.2	17	2169	San Francisco De Asis Roma		
257C3	KEMP	LIC _CX		127.9	91.94	34 11 04.0	17.000	4.1	42.4	79.1	44.2
Payson		AZ		308.3	BLH20070813ABX	111 20 16.0	123	1457	Kemp Communications, Inc.		
257D	K257FI	LIC _V_		38.3	77.48	35 14 25.0	0.132	0.8	29.9	64.6	47.5
Flagstaff		AZ		218.6	BLFT20160418AAI	111 35 49.0	589	2837	Donald F. Hendren		
255L1	KPIH-LP	LIC _		123.0	89.47	34 15 13.0	0.004			74.0	70.0
Payson		AZ		303.5	BLL20151005AAR	111 18 39.0	147	1613	Rim Catholic Evangelizatio		
253L1	KCMA-LP	LIC _		124.9	89.05	34 14 01.0	0.003			76.7	70.1
Payson		AZ		305.4	BLL20050803ABB	111 19 58.0	167	1531	Payson Classical Musi c Ass		

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 cause to second adjacent stations KKFR(FM) and KTMG(FM) since the worse case 100 dBu interference contour will not cover any population. See the Technical Statement for more details.

FIGURE 2 - PREDICTED 100 DBU INTERFERENCE CONTOUR  
K201CQ PRESCOTT, AZ, CH. 254D

Coverage Study - NGDC 30 SEC  
06-01-2016

K201CQ CH254 D , 0.004 kW, 771.0m HAAT, 2370.0m COR AMSL  
Interference Contour = 100 dBu. Population = 0

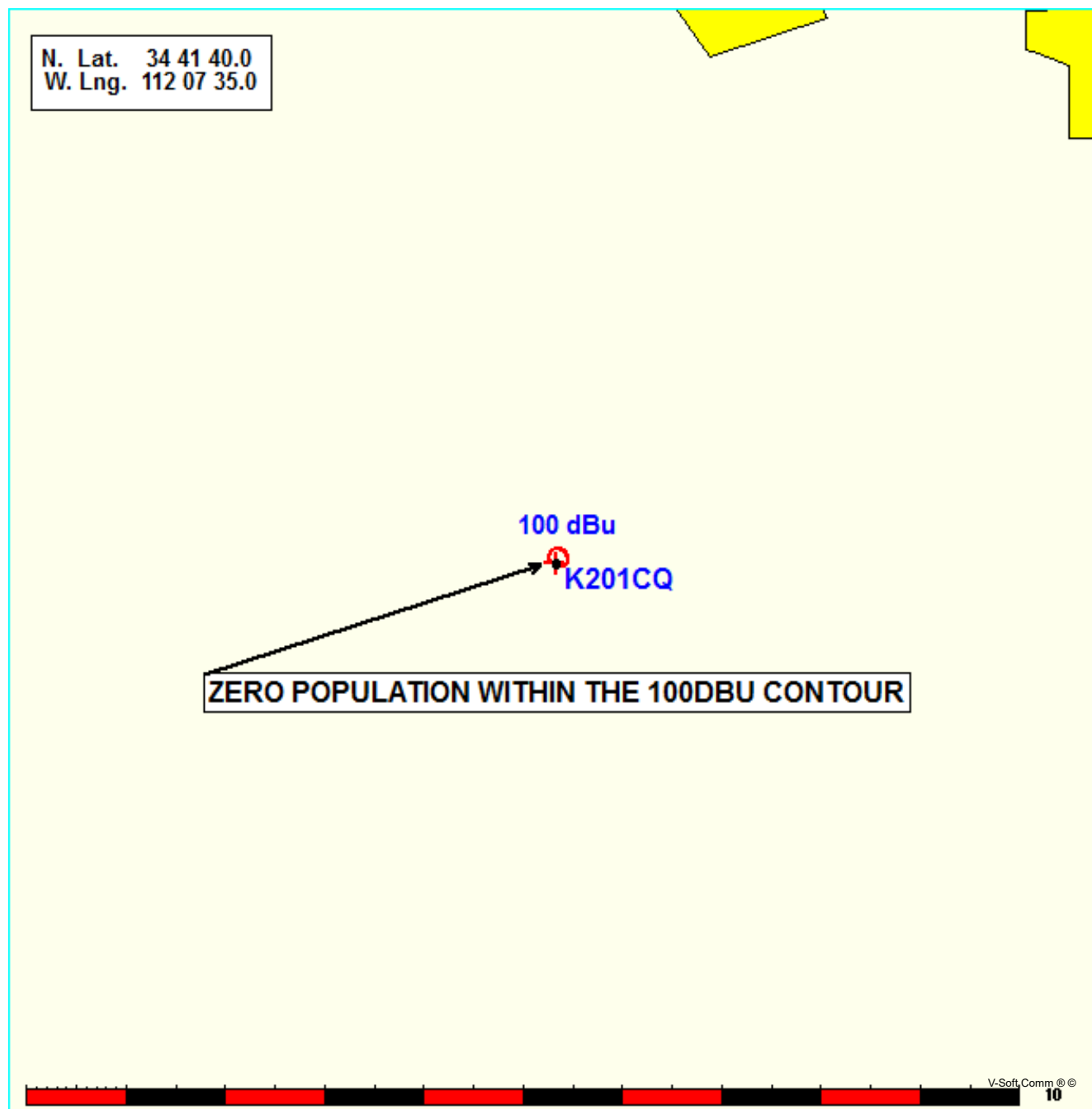


FIGURE 3 - DIRECTIONAL ANTENNA DATA

K201CQ

06-01-2016

RMS(V) = .64

Graph is Relative Field

Azi	Field	dBk	kW
000	0.927	-24.638	0.003
010	0.956	-24.370	0.004
020	0.978	-24.173	0.004
030	0.990	-24.067	0.004
040	1.000	-23.979	0.004
050	0.990	-24.067	0.004
060	0.978	-24.173	0.004
070	0.956	-24.370	0.004
080	0.927	-24.638	0.003
090	0.882	-25.070	0.003
100	0.808	-25.831	0.003
110	0.733	-26.677	0.002
120	0.646	-27.775	0.002
130	0.543	-29.283	0.001
140	0.430	-31.310	0.001
150	0.324	-33.768	0.000
160	0.240	-36.375	0.000
170	0.183	-38.730	0.000
180	0.158	-40.006	0.000
190	0.163	-39.736	0.000
200	0.157	-40.061	0.000
210	0.165	-39.630	0.000
220	0.161	-39.843	0.000
230	0.165	-39.630	0.000
240	0.157	-40.061	0.000
250	0.163	-39.736	0.000
260	0.158	-40.006	0.000
270	0.183	-38.730	0.000
280	0.240	-36.375	0.000
290	0.324	-33.768	0.000
300	0.430	-31.310	0.001
310	0.543	-29.283	0.001
320	0.646	-27.775	0.002
330	0.733	-26.677	0.002
340	0.808	-25.831	0.003
350	0.882	-25.070	0.003

NICOM BKG-1  
DIPOLE