

TECHNICAL STATEMENT
K201CQ MESA, ARIZONA
CEDAR COVE BROADCASTING, INC.
FCC FORM 349
JULY 2016

This Technical Statement is made in support of a minor change application for FM translator station K201CQ at Prescott, Arizona, facility ID 21071. K201CQ seeks to relocate its current authorization by less than 250 miles and become a fill-in translator for KFNN(AM) Mesa, Arizona, facility ID 14382. This proposal which is normally a major change move is in response to the Commissions AM Revitalization Order DA-1491 released 12/23/2015. The following will show that the new proposed operation of K201CQ will meet all of the Commissions technical requirements for an FM translator station. It should be noted that K201CQ is currently “authorized” to operate in the commercial band on channel 254D with Construction Permit number BPFT-20160601AGR. Thus, this application qualifies this translator to utilize this filing window.

The proposed operation of K201CQ specifies an Effective Radiated Power of 0.25 kilowatts. It will operate with a Scala CA-2-CP with circular polarization. The antenna will be mounted on an existing non-registered tower, with an overall height of 10 meters above the ground. The antenna will be mounted with a Center of Radiation of 10 meters above the ground, and 664 meters Above Mean Sea Level. The coordinates of this tower are located at N 33° 35' 17", W 111° 45' 39", NAD 27.

Figure 1 is a detailed interference study conducted on channel 286D with these new proposed facilities. It shows that the new operation of K201CQ will not cause any

interference to any existing or proposed FM stations on any of the pertinent same channel or adjacent channels to channel 286, with the exception of 2nd adjacent channel station KZZP Mesa, Arizona operating on channel 284C, facility ID 47742.

The proposed operation of K201CQ on 286D is located within the protected 60 dB μ contour of 2nd adjacent KZZP. The predicted F(50-50) field strength of KZZP at the proposed K201CQ transmitter site is 78.9 dB μ , see figure 2. Therefore, the respective predicted interfering contour F(50-10) generated by the proposed K201CQ on channel 286D is an additional 40 dB μ or 118.9 dB μ .

Figure 3 shows the predicted 118.9 dB μ interference contour. 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 is a privately owned with private access. 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.

The proposed operation of K201CQ Denver will be considered a "Fill-In" operation for Class D AM station KFNN Mesa, Arizona, facility ID 14382. KFNN(AM) operates with 22 kilowatts daytime with a directional antenna system on 1510 kHz. Figure 5 shows that the proposed 60 dB μ contour for the proposed K201CQ will not extend beyond the daytime 2.0 mV/m contour of KFNN. It will also not extend beyond a 25 miles radius from the KFNN tower site. Since this is a "Fill-In" translator, the

maximum ERP will not exceed the maximum permissible ERP of 250 watts in any azimuth.

Figure 4 is a tabulation of the directional antenna pattern.

It was found that the new proposed operation of K201CQ Mesa, Arizona on channel 286D, will satisfy all of the required commission rules and regulations for an FM translator station.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE STUDY

K201CQ MESA, AZ, CH. 286D

REFERENCE
33 35 17.0 N.
111 45 39.0 W.

CH# 286D - 105.1 MHz, Pwr= 0.25 kW DA, HAAT= 144.4 M, COR= 664 M
Average Protected F(50-50)= 15.53 km
Standard Directional

DISPLAY DATES
DATA 07-28-16
SEARCH 07-28-16

CH CITY	CALL	TYPE ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
286C1 Wickenburg	KHOV-FM	CP _CX AZ	306.5 126.0	113.68 BMPH20160520AAQ	34 11 32.0 112 45 13.0	46.000 410	177.2 1616	77.9 Uni vi si on Radi o Li cense Co	-71.3*	6.7
284C Mesa	R12304	DEL ____ AZ	238.2 58.0	39.88	33 23 56.0 112 07 33.0	100.000 600	13.9 954	92.4 Lakeshore Medi a, LI c	7.5	-53.4*
284C Mesa	KZZP	LIC _CN AZ	224.6 44.4	39.53 BLH6100	33 20 04.0 112 03 35.0	100.000 472	12.0 829	82.5 Citi casters Li censes, Inc.	8.0	-43.9*
284C0 Mesa	R12304	ADD ____ AZ	224.6 44.4	39.53	33 20 04.0 112 03 35.0	100.000 450	11.9 819	81.8 Lakeshore Medi a, LI c	8.1	-43.2*
286D Mi ami	K286BS	CP _V_ AZ	110.8 291.3	92.77 BPFT20140710ADJ	33 17 20.0 110 49 45.0	0.250	105.9 2341	37.6 Rocket Radi o Corproation	-23.1*	31.6
233C Phoeni x	KOOL-FM	LIC _CY AZ	224.7 44.6	39.70 BMLH20021018AAD	33 20 02.0 112 03 42.0	100.000 504	0.0 871	0.0	28.5R	11.2M
288C2 Mari copa	KLVA	LIC NCX AZ	197.6 17.5	67.97 BLED20160407AAC	33 00 14.0 111 58 54.0	50.000 150	6.5 541	55.4 Educational Medi a Foundati	40.9	11.6
287C2 Wickenburg	KHOV-FM	LIC _CN AZ	306.5 126.0	113.68 BLH19910830KD	34 11 32.0 112 45 13.0	6.000 416	89.1 1623	56.7 Uni vi si on Radi o Li cense Co	17.0	50.1
286C2 Kachina Village	KBTk	LIC _C_ AZ	8.5 188.7	154.86 BLH19991202ABY	34 58 06.0 111 30 29.0	5.000 444	119.2 2622	48.3 Grenax Broadcasting II, LI	28.4	92.3
287D Constellation	KHOV-FM1	LIC DCN AZ	301.9 121.5	77.74 BLFTB19960920TI	33 57 17.0 112 28 34.0	0.420 257	36.8 1132	20.0 Uni vi si on Radi o Li cense Co	32.6	50.3
286D Mi ami	K286BS	LIC _C_ AZ	102.6 283.1	91.07 BLFT20140707ADT	33 24 23.0 110 48 18.0	0.250	23.8 1226	7.1 Rocket Radi o Corproation	58.4	68.3
287C3 Casas Adobes	KZLZ	LIC DCX AZ	157.8 338.2	160.29 BLH20110322ABK	32 14 56.0 111 06 58.0	0.580 581	58.5 1350	37.6 Kzl z, LI c	83.7	97.6
285C3 Davis-monthan Afb	R12304	ADD ____ AZ	152.2 332.7	173.60	32 12 06.0 110 53 57.0	25.000 100	70.6 898	47.2 Lakeshore Medi a, LI c	85.6	102.1

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 interferenc will be caused to second adjacent channel KZZP Mesa, AZ since the 100 dbu contour will not cover any population. See the Technical statement for more details.

FIGURE 2 - KZZP PREDICTED 78.9 DBU CONTOUR AT SITE
K201CQ MESA, AZ, CH. 286D

Coverage Study - NGDC 30 SEC
07-28-2016

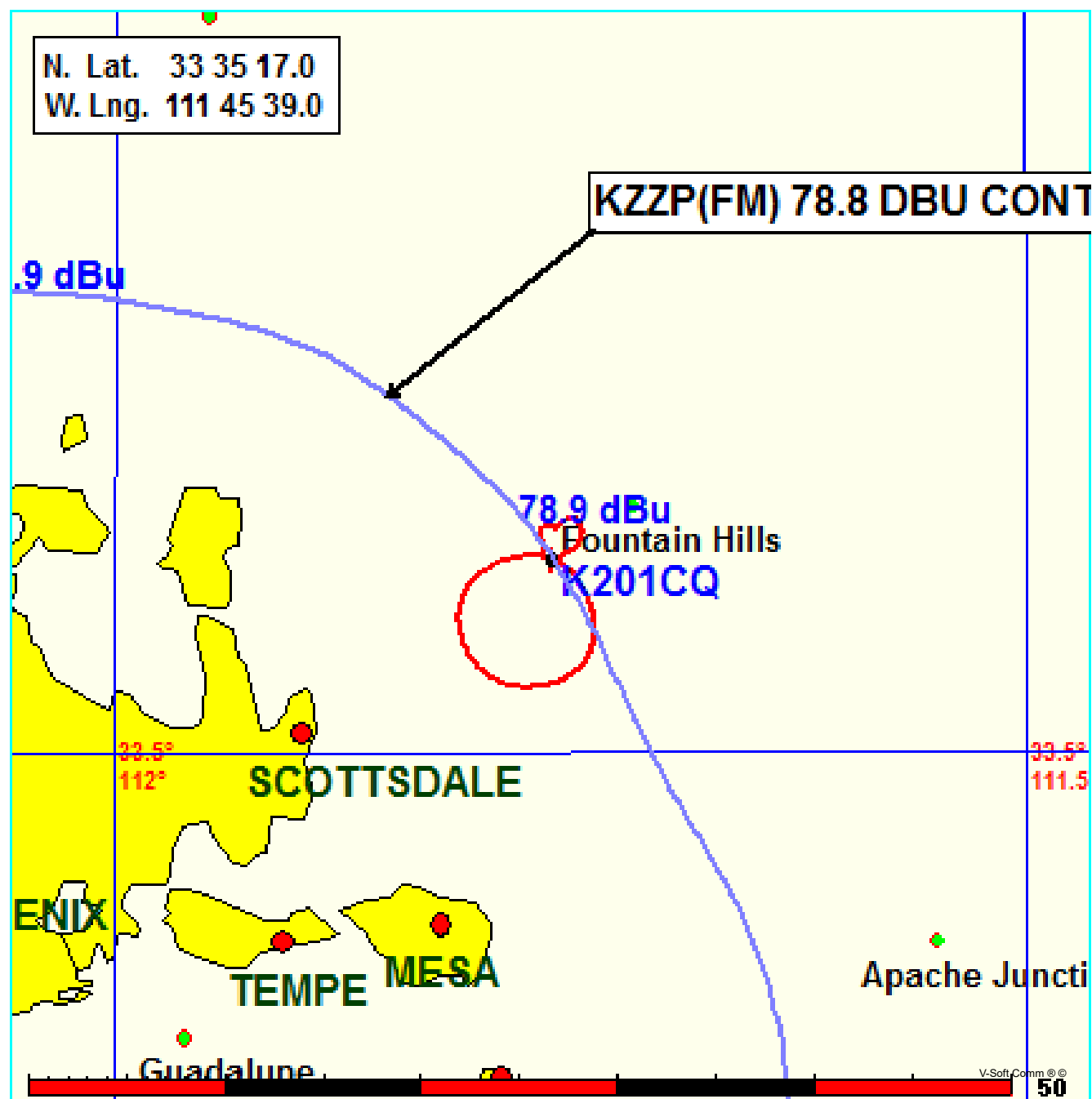


FIGURE 3 - PREDICTED 118.9 DBU INTERFERENCE
CONTOUR K201CQ MESA, AZ, CH. 286D

Coverage Study - NGDC 30 SEC
07-28-2016

K201CQ CH286 D , 0.25 kW, 144.4M HAAT, 664.0M COR
AMSL Interference Contour = 119 dBu. Population = 0

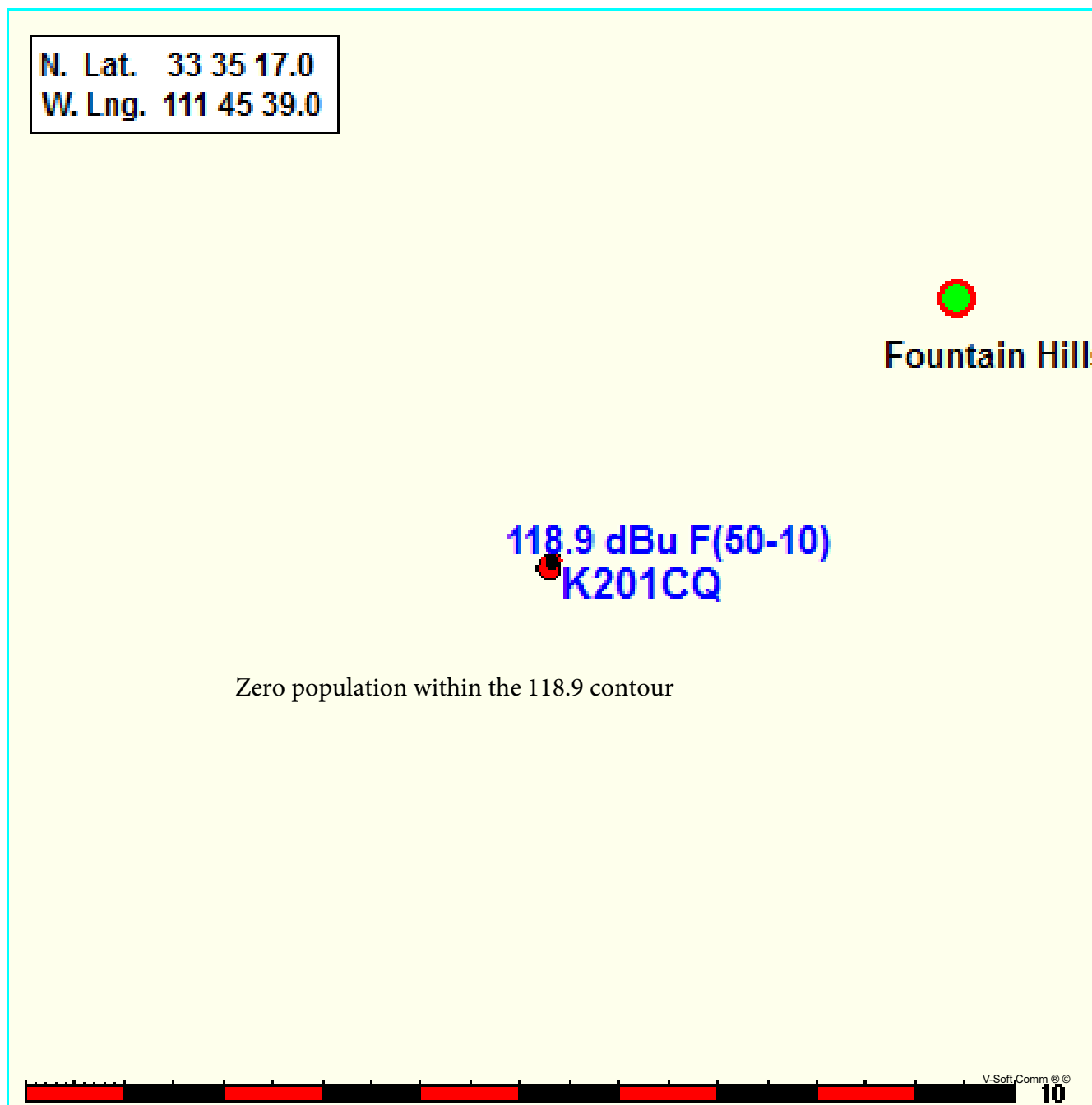


FIGURE 4 - DIRECTIONAL ANTENNA DATA

K201CQ. C

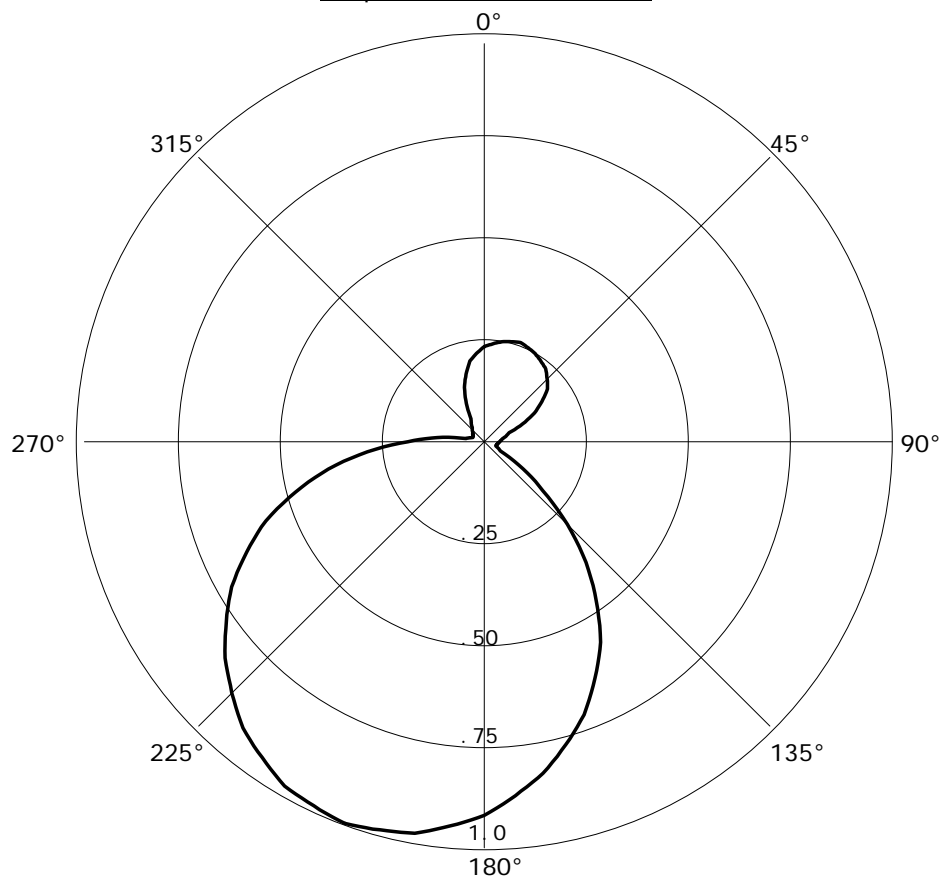
07-28-2016

RMS(V) = .484

SCALA CA-2-CP

Graph is Relative Field

Azi	Field	dBk	kW
000	0.234	-18.636	0.014
010	0.250	-18.062	0.016
020	0.260	-17.721	0.017
030	0.250	-18.062	0.016
040	0.234	-18.636	0.014
050	0.202	-19.914	0.010
060	0.142	-22.975	0.005
070	0.065	-29.762	0.001
080	0.046	-32.765	0.001
090	0.037	-34.657	0.000
100	0.032	-35.918	0.000
110	0.030	-36.478	0.000
120	0.045	-32.956	0.001
130	0.187	-20.584	0.009
140	0.388	-14.244	0.038
150	0.570	-10.903	0.081
160	0.715	-08.934	0.128
170	0.829	-07.650	0.172
180	0.920	-06.745	0.212
190	0.979	-06.205	0.240
200	1.000	-06.021	0.250
210	0.979	-06.205	0.240
220	0.920	-06.745	0.212
230	0.829	-07.650	0.172
240	0.715	-08.934	0.128
250	0.570	-10.903	0.081
260	0.388	-14.244	0.038
270	0.187	-20.584	0.009
280	0.045	-32.956	0.001
290	0.030	-36.478	0.000
300	0.032	-35.918	0.000
310	0.037	-34.657	0.000
320	0.046	-32.765	0.001
330	0.065	-29.762	0.001
340	0.142	-22.975	0.005
350	0.202	-19.914	0.010



K201CQ.C

BPFT20160601AGR
Latitude: 33-35-17 N
Longitude: 111-45-39 W
ERP: 0.25 kW
Channel: 286
Frequency: 105.1 MHz
AMSL Height: 664.0 m
Elevation: 658.954 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

**FIGURE 5 - FILL IN MAP
KFNN(AM) AND PROPOSED
K201CQ MESA, AZ CH. 286D**

