

DISCUSSION

Applicant seeks a Minor Modification to move the FM Translator K226CM antenna to a higher location on its tower, with a change in the CORAMSL and ERP, operating as a “Fill-in” for primary station KAZZ(AM), Parowan, UT, Facility ID # 129732.

LACK OF CONTOUR OVERLAP

The following study (**Figure 1**) reveals the lack of any contour overlap with authorized 1st, 2nd, 3rd adjacent and I.F. related facilities, excepting FM Translator K223CN, Cedar City, UT, FID # 40851 for which a 3rd adjacent waiver is being sought.

K226CM Modification Canyon Media Group, L.L.C.											
REFERENCE		CH# 226D - 93.1 MHz, Pwr= 0.11 kw DA, HAAT= 375.9 M, COR= 2609 M						DISPLAY DATES			
37 38 21.9 N.		Average Protected F(50-50)= 20.6 km						DATA 09-14-20			
113 01 59.8 W.		Standard Directional						SEARCH 09-15-20			
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)	
226D	K226CM!	LIC	DH	0.0	0.00	37 38 21.90	0.250		---	Reference---	
Cedar City		UT		0.0	0000114384	113 01 59.80		2531	Canyon Media Group, L.L.C.		
223D	K223CN	LIC		280.7	5.32	37 38 53.90	0.250	1.1	7.1	-23.0*	-2.3*
Cedar City		UT		100.7	BLFT20190304AAC	113 05 33.80		1903	Jeffery M. Jennings		
226D	K226BQ	LIC		216.9	79.91	37 03 48.90	0.099	25.1	8.7	34.0	10.1
St. George		UT		36.6	BLFT20180423AAW	113 34 27.80		980	Canyon Media Group, LLC		
225L1	KOUO-LP	LIC		138.5	53.66	37 16 37.80	0.080			36.2	40.3
Orderville		UT		318.7	BLL20150123AGR	112 37 52.80	-96	1735	Kane County Sheriffs Offic		
228C	KADD	LIC		221.2	147.58	36 38 06.90	93.000	15.8	97.9	108.3	48.8
Logandale		NV		40.5	BLH20080201BGH	114 07 20.80	637	1755	Radio Activo 2 LLC		
227C2	KXAZ	LIC		119.9	138.53	37 00 36.90	12.500	69.6	46.2	54.6	82.4
Page		AZ		300.7	BLH20170111AAK	111 40 50.50	288	1748	Lake Powell Communications		
223D	K223DC	CP	D	217.0	79.96	37 03 48.90	0.099	0.7	6.7	56.5	69.8
St. George		UT		36.7	BNPFT20180507AAO	113 34 31.80		953	Ccr-St. George IV, LLC		
226C	KYMT	LIC		230.5	287.90	35 57 54.90	23.500	204.6	95.7	58.9	116.2
Las Vegas		NV		49.0	BLH20190722AAS	115 30 03.10	1183	2632	Citicasters Licenses, Inc.		
226C	KYMT	LIC		230.5	287.87	35 58 01.80	24.000	204.1	95.6	59.3	116.4
Las Vegas		NV		49.0	BLH19941228KD	115 30 09.00	1141	2606	Citicasters Licenses, Inc.		
224D	K224ES	LIC		19.7	96.58	38 27 23.30	0.250	1.1	29.2	67.7	65.9
Beaver		UT		200.0	BLFT20170203ACB	112 39 30.90		2403	Air-Free Wireless, Inc.		
224C	KRRN	LIC		230.5	179.63	36 36 03.90	100.000	14.0	93.0	141.2	86.1
Moapa Valley		NV		49.5	BMLH20140619ABW	114 35 09.00	587	1173	Entravision Holdings, LLC		

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. Call signs with exclamation marks need not be protected. Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtlt(Y,N,X) "*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

3rd adjacent waiver requested

Figure 1

Waiver Request of Section 74.1204 and Showing of Compliance

With respect to FM Translator K223CN:

The proposed FM translator is located within the protected 60 dBu F(50,50) contour of 3rd adjacent channel K223CN, Cedar City, UT, FID # 40851 (see **Figure 1**). The predicted F(50,50) field strength of K223CN at the proposed translator site is 64.9 dBu (free space equation).

Using the Undesired-to-Desired method for calculating proposed interference, the proposed interfering contour with respect to K223CN is 104.9 (64.9 + 40) (free space method employed). Considering the directional antenna pattern, the 104.9 dBu F(50,10) interference area would extend 416.4 meters in the major lobe and 313.1 meters in the minima. The closest regularly occupied structures are in the direction of the minima and are identified in **Figure 3**. To support this waiver request, an interference area represented by a circle having a radius of 314 meters from the proposed translator site has been plotted on a section of the Cedar City, UT 7.5 min USGS Topographical Map (see **Figure 2**). In addition the 104.9 dBu F(50,10) contour of the directional antenna has be overlaid on a recent aerial photograph of the area. Any structures within the contour are communications facilities with no regular human occupancy (see **Figure 3**).

Since no population inhabits the interference area, the Applicant respectfully requests waiver of the FM translator contour overlap requirements with respect to 3rd adjacent FM Translator K223CN as permitted in CFR Section 74.1204



Figure 2

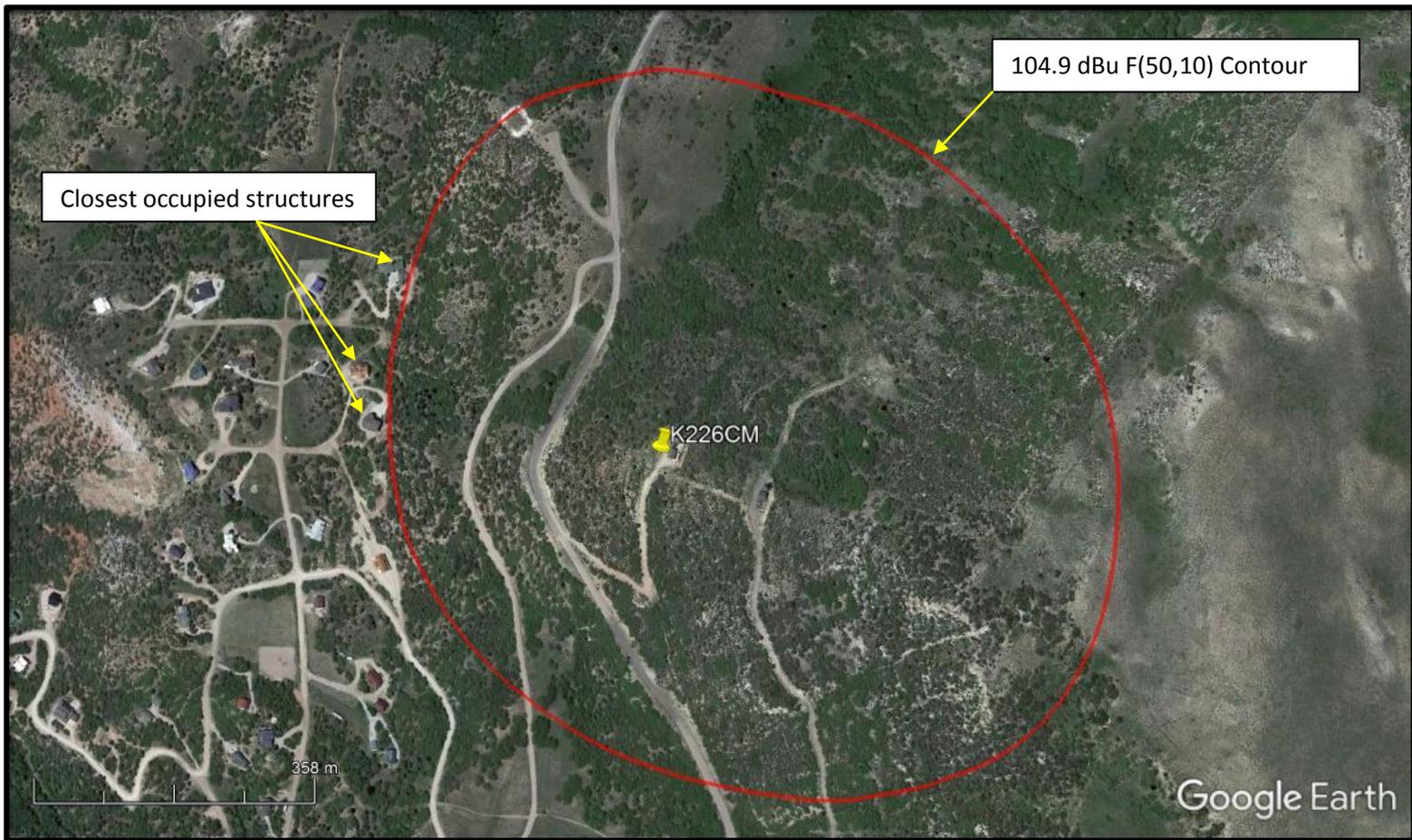


Figure 3

“FILL-IN QUALIFICATION”

Figure 4 below illustrates the fact that the proposed fill-in FM translator’s 60 dBu contour lies completely within the 2.0 mV/m daytime contour of the transmitter site of the primary station KAZZ(AM), Parowan, UT, FID # 129732.

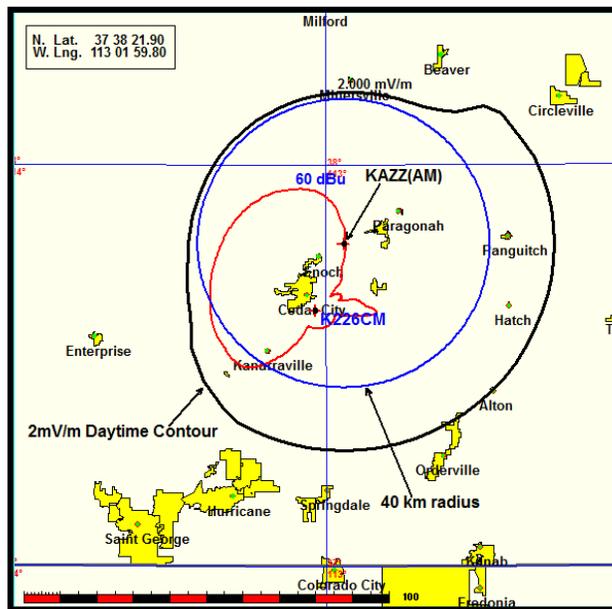


Figure 4

OVERLAPPING 60 dBu CONTOUR MINOR MODIFICATION QUALIFICATION

Figure 5 below demonstrates the overlapping 60 dBu contours of the permitted and proposed facilities.

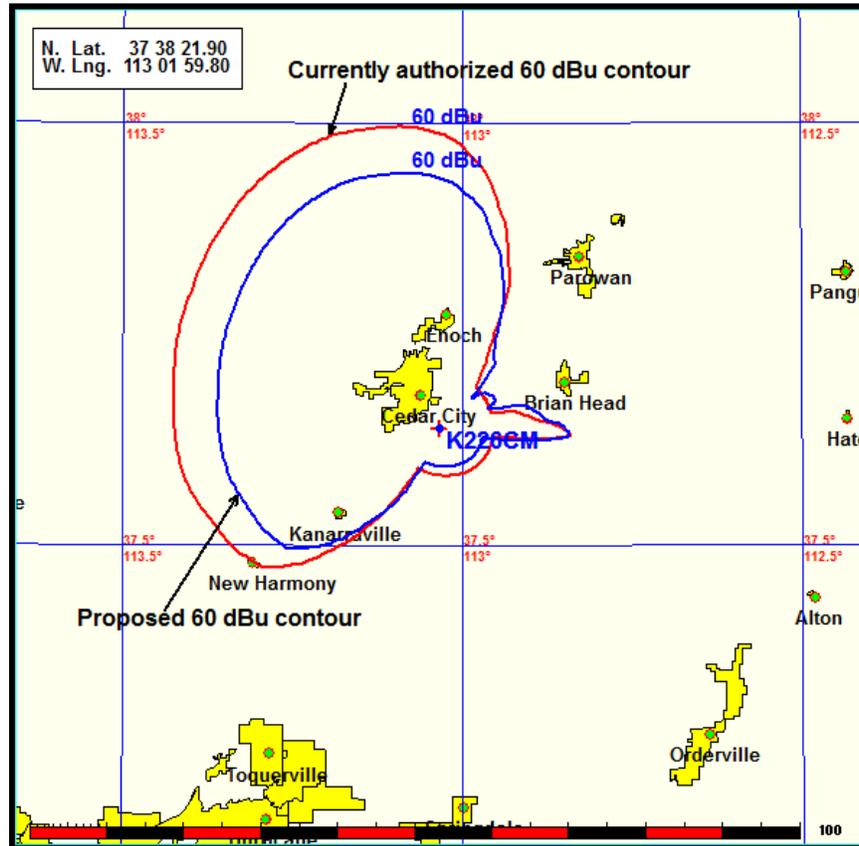


Figure 5

ENVIRONMENTAL COMPLIANCE:

The proposed facility (antenna) will be installed on an existing tower at the Cedar Mountain communications site. There will be no significant environmental impact as outlined in 47 CFR 1.1307.

The single bay Nicom BKG-77 EPA Type 2: Opposed V Dipole would generate a maximum downward radiation of $2.247\text{uW}/\text{cm}^2$ at a distance of 30.6 meters from the base of the tower. This is well below the maximum permissible levels for both controlled and uncontrolled access.

Even though the site will fully comply with the Uncontrolled Site Standards, access to the transmitting site will be restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines.