

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

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. 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), Beamtilt(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

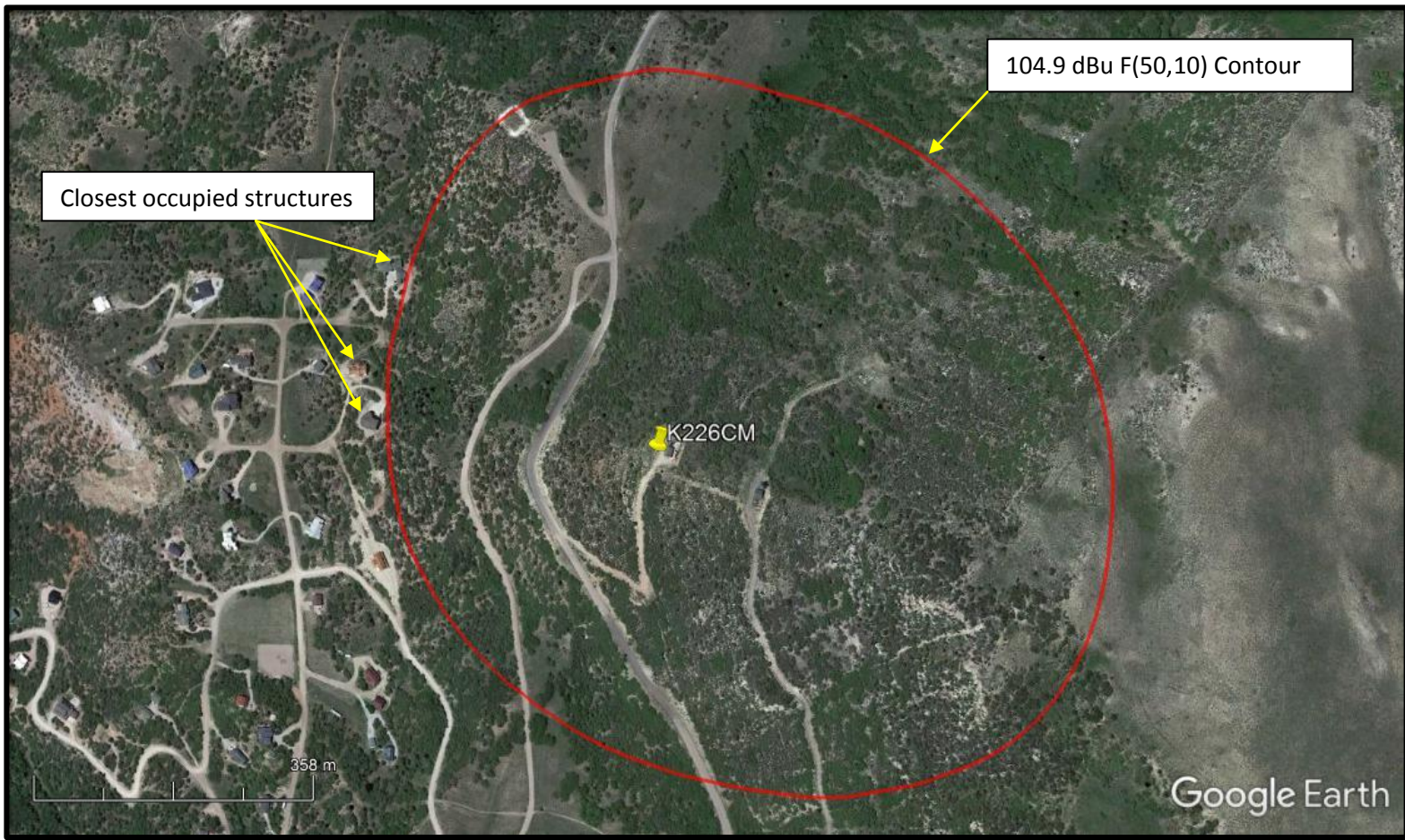


Figure 3

“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.

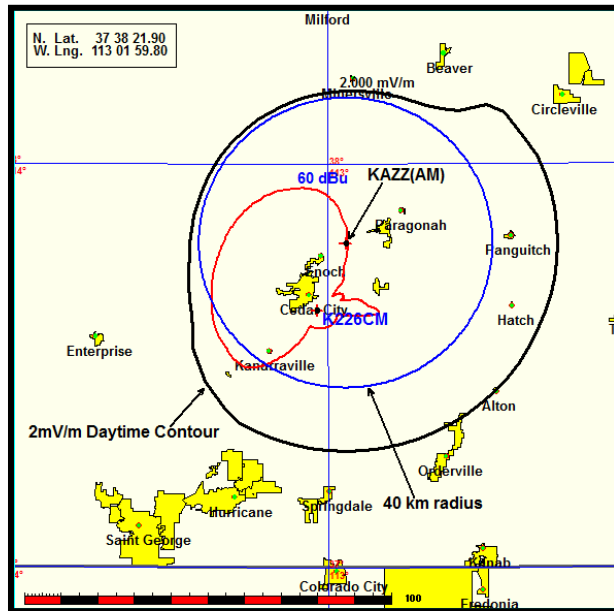


Figure 4

OVERLAPPING 60 dBu CONTOUR MINOR MODIFICATION QUALIFICATION

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

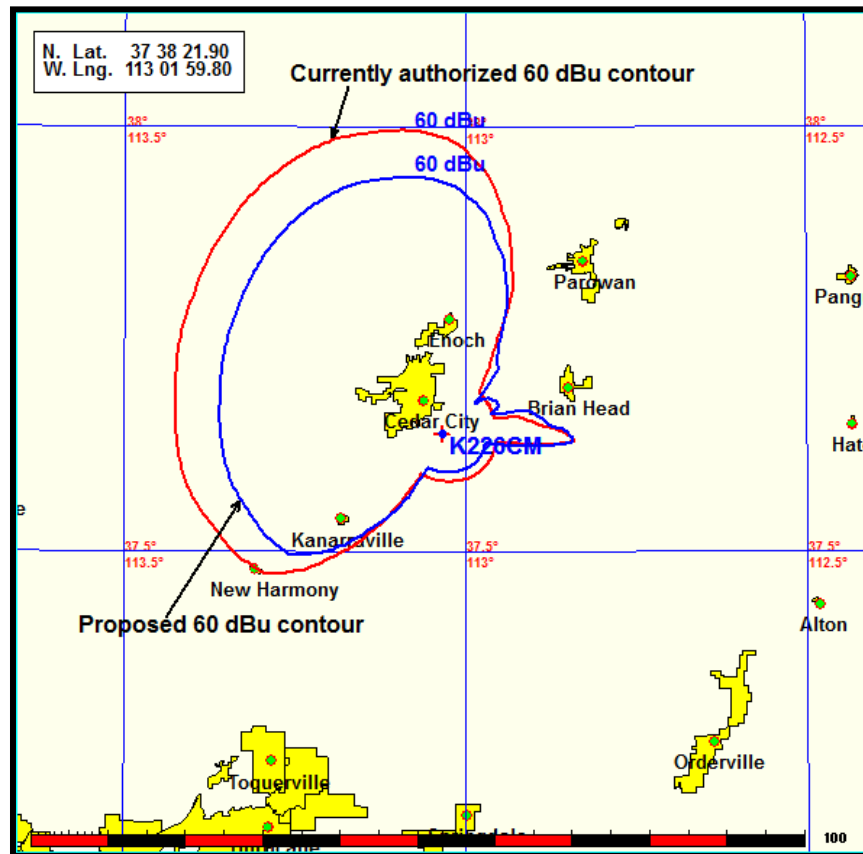


Figure 5

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 uW/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.