

COMPREHENSIVE TECHNICAL EXHIBIT

K257AZ, Richfield, UT

DISCUSSION

Applicant seeks a Minor Modification to relocate FM Translator K257AZ, Richfield, UT with a change in ERP and CORAMSL.

Applicant seeks waiver of section 74.1204 with regard to 2nd adjacent FM Translator K255AD.

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 K255AD, Rural Garfield, Etc., UT, FID # 23184 for which a 2nd adjacent waiver is being sought

Minor Modification to move K257AZ to new site Airfree Wireless, Inc.											
REFERENCE 38 38 00.9 N. 112 03 37.7 W.		CH# 257D - 99.3 MHz, Pwr= 0.01 kW, HAAT= 456.2 M, COR= 2696 M Average Protected F(50-50)= 12.2 km Omni-directional						DISPLAY DATES DATA 07-28-20 SEARCH 07-28-20			
CH CITY	CALL	TYPE STATE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
257D Richfield	K257AZ!	LIC D	UT	19.2 199.3	12.13 BLFT19820413II	38 44 11.80 112 00 51.70	0.076 15	2008	---Reference--- Airfree Wireless, Inc.		
255D Rural Garfield, Etc	K255AD	LIC	UT	186.0 6.0	10.83 BLFT19920902TB	38 32 11.90 112 04 24.70	0.010 967	0.2 3430	18.0 Garfield County	3.0	-7.4*
256C1 Nephi	KMGR	CP N	UT	4.7 184.7	122.62 BPH20161121AAE	39 43 58.00 111 56 37.40	100.000 297	97.9 2039	66.2 Sanpete County	7.9	26.7
257D Teasdale-Torrey	K257AC	LIC D	UT	129.0 309.3	61.68 BLFT178	38 16 59.90 111 30 39.60	0.036 50	49.6 2522	13.0 Wayne County	11.2	37.1
259D Fillmore, Etc.	K259AR	LIC D	UT	327.8 147.7	30.49 BLFT20050225ABM	38 51 55.80 112 14 53.70	0.076 905	0.1 3128	11.3 Airfree Wireless, Inc.	13.7	18.9
257D Panguitch	K257AG	LIC D	UT	207.6 27.4	79.46 BLFT273	37 59 58.90 112 28 52.70	0.078 266	10.2 2496	3.1 Garfield County	54.3	32.4
254D Gunnison	K254CT	LIC D	UT	18.1 198.2	80.46 BLFT20161118ACC	39 19 16.80 111 46 13.70	0.250	1.1 2598	37.6 Sanpete County	62.7	42.5
256A Nephi	KMGR	LIC	UT	4.7 184.7	122.61 BLH20160831AAJ	39 43 57.80 111 56 37.80	0.640 308	38.2 2050	25.1 Sanpete County	67.6	64.7
260A Fountain Green	KPVO	CP N	UT	22.1 202.4	109.58 BPH20190807AAT	39 32 44.90 111 34 45.70	2.300 -54	2.4 1848	28.9 valleydale Broadcasting, L	90.7	79.4
258D Parowan	K258AA	LIC	UT	222.4 41.8	118.54 BLFT19940310TC	37 50 31.90 112 58 12.80	0.019 208	16.8 2067	11.7 Parowan City Corporation	85.6	81.7
254D Milford	K254BX	LIC	UT	263.5 82.7	107.20 BLFT20140714ABM	38 31 04.80 113 17 05.80	0.010 1195	0.2 2956	17.3 Iron County	90.1	89.6
258C Bountiful	KJMY	LIC	UT	357.8 177.7	219.68 BLH19880311KC	40 36 28.80 112 09 35.70	40.000 900	115.6 2611	74.5 Citicasters Licenses, Inc.	89.9	111.2
260A Fountain Green	KPVO	LIC	UT	17.6 197.9	115.97 BLH20150820CNF	39 37 36.80 111 38 59.70	0.100 -234	0.7 1835	5.6 valleydale Broadcasting, L	98.6	106.0

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.

2nd adjacent waiver requested

Figure 1

Waiver Request of Section 74.1204 and Showing of Compliance

With respect to K255AD:

The proposed FM translator is located within the protected 60 dBu F(50,50) contour of 2nd adjacent channel FM Translator K255AD (see **Figure 1**), for which a 2nd adjacent waiver is requested.

The predicted F(50,50) field strength of K255AD at the proposed translator site is 65.14 dBu (free space equation). Using the Undesired-to-Desired method for calculating proposed interference, the proposed interfering contour with respect to K255AD is 105.14 dBu (65.14 + 40) (free space method employed). This interfering signal would, in the worst case, extend 123.04 meters from the proposed antenna.

The interference area described above is located at a remote mountaintop location. Any structures in the immediate area house communications equipment only, and have no regular human occupancy.

To further support this waiver request, an interference area represented by a circle having a radius of 125 meters from the proposed translator site has been plotted on a section of the Beaver, UT 7.5 min USGS Topographical Map (see **Figure 2**). In addition a plot of the interfering contour (105.14dBu F(50,10)) of the facility has been overlaid on a recent aerial photo, to account for any newer development in the area (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 2nd adjacent FM Translator K255AD as permitted in CFR Section 74.1204.

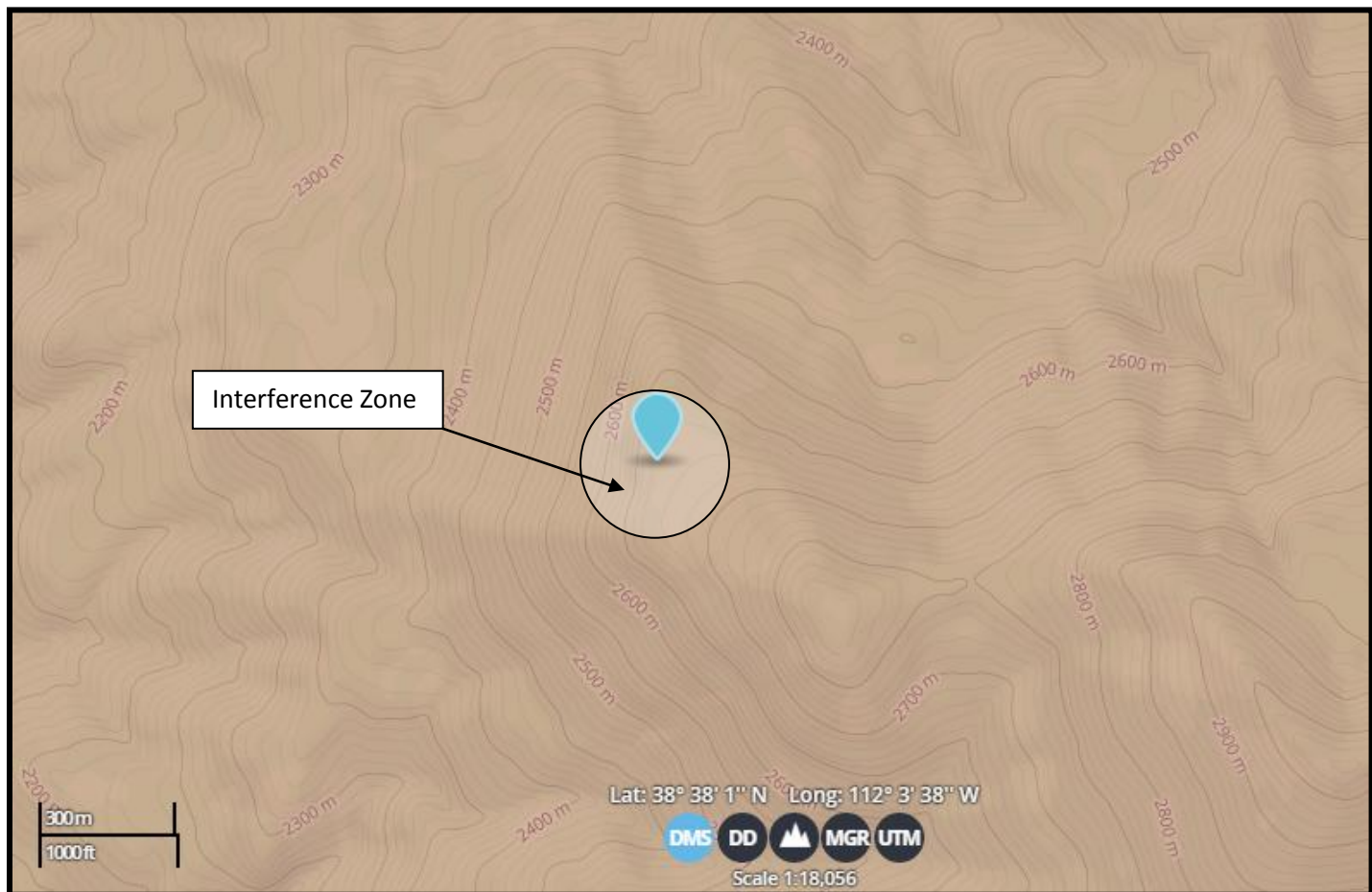


Figure 2



Figure 3

OVERLAPPING 60 dBu CONTOUR MINOR MODIFICATION QUALIFICATION

Figure 4 below demonstrates the overlapping 60 dBu contours of the licensed and proposed facilities.

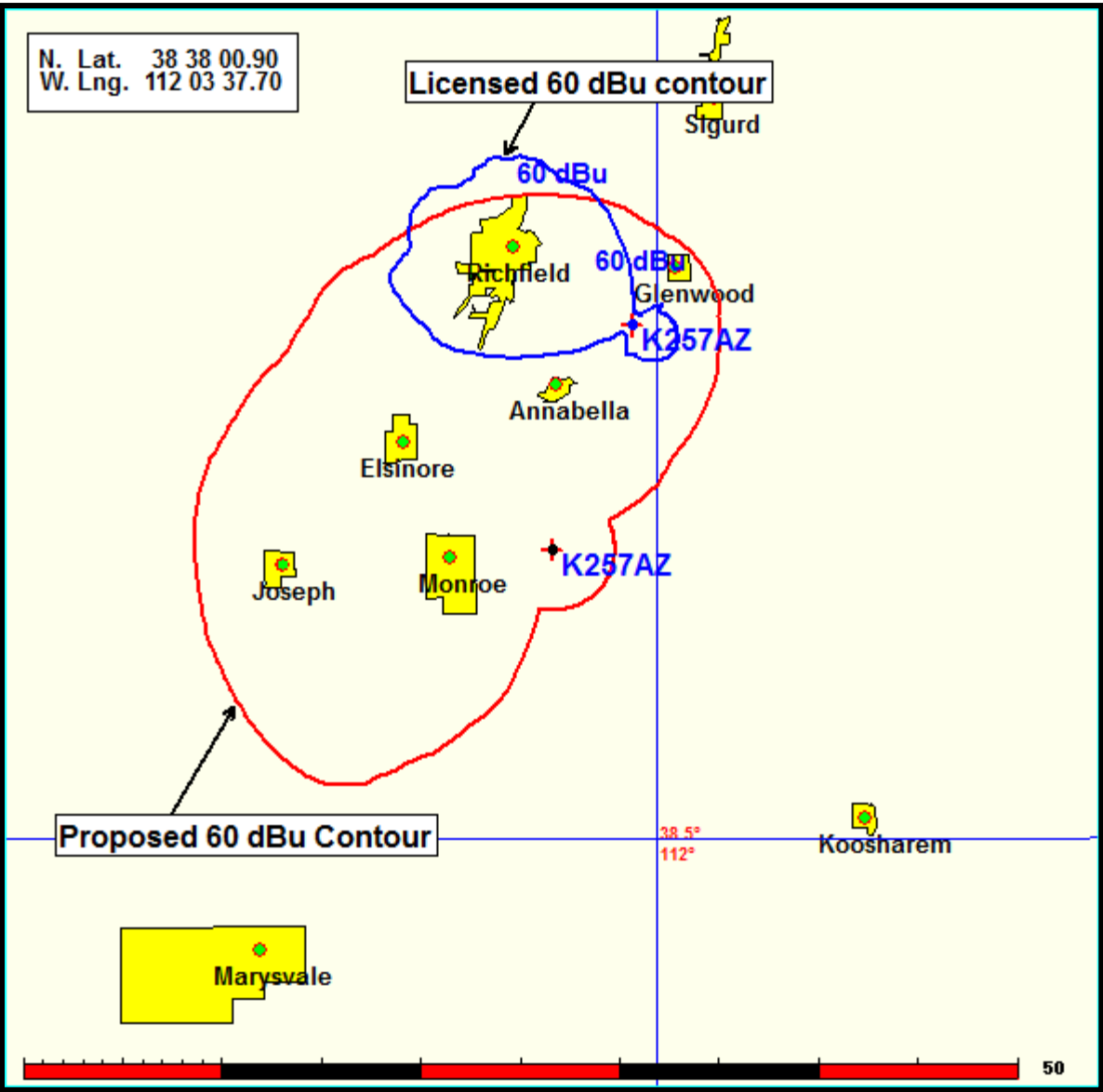


Figure 4

ENVIRONMENTAL COMPLIANCE:

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

The proposed facility will operate with an ERP of less than 100 watts, and is thus categorically excluded from further Environmental Assessment (47 CFR [1.1307(b)(1)]).