K240EP
Cedar Fort, UT

Proposed Minor Modification
of Permitted Translator Facility

CONTINGENT Application Overview:

The instant application proposes a minor modification permit for K240EP to utilize a two bay half-wave spaced antenna rather than a single bay antenna slightly lower on the presently permitted tower. It should be noted that the proposed facility remains filed contingently with a contemporaneously proposed minor modification for KMGR(FM) (FCC Facility #65377). Once the KMGR minor modification is granted and implemented, the proposed translator will not prohibitively overlap KMGR(FM) and comply with Section 74.1204. At its contemporaneously proposed antenna site, KMGR(FM) will operate on first adjacent Channel 239C1 at a significant enough distance from the proposed translator in order to eliminate all overlap. As such, the Applicant respectfully requests contingent processing and proposes to modify BMPFT-20160614ABR using the following parameters:

Tech Box:

Channel:	240
Antenna Coordinates:	N40-16-57, W111-56-10 (NAD 27)
ASRN:	N/A
Tower Site Base AMSL:	2331 m
Overall Tower Height AGL:	11 m
COR AGL:	8 m
ERP:	0.25 kW
Directional Antenna:	Yes - see Exhibit 4

Primary Station and Translator Protected Contour Relationship:

Exhibit 1 demonstrates that the proposed fill-in translator facility's protected contour is completely encompassed by the protected contour of the primary station being rebroadcast. Also, the map demonstrates that the facility's proposed F(50,50) 60 dBu contour overlaps the currently authorized F(50,50) 60 dBu contour thereby qualifying the minor change.

Interference Study (Adjacent Stations):

Exhibit 2 is a contour overlap study demonstrating that the proposed antenna site provides requisite contour protection towards all applications, authorizations, and permits pursuant to Section 74.1204 with the exception of the following:

- K237FG (BLFT-20141126AOM) on its Third adjacent channel

Section 74.1204(a) states that "an application for an FM translator station will not be accepted for filing if the proposed operation would involve overlap of predicted field strength contours with any other station, including commercial and noncommercial educational FM stations, FM translators and Class D (secondary) noncommercial educational FM stations." However, Section 74.1204(d) states, "the provisions of this section concerning prohibited overlap will not apply where the area of such overlap lies entirely over water. In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or other such factors as may be applicable." Using the undesired-to-desired ratio method regarding interference to a second or third adjacent frequency, interference is predicted to occur where the translator's

undesired signal exceeds the protection station's desired signal by more than 40 dB. The free space formula was used to determine the signal strength of the proposed facility, in dBu, at the antenna site of the adjacent station(s).

The signal strength of K237FG at the proposed site is calculated to be 66.5 dBu. As such, the interfering contour of the proposed facility is its F(50,10) 106.5 dBu contour which extends a maximum distance of 520 meters from the proposed tower.

Exhibit 2A includes a satellite view of the proposed translator site. There are no structures or public roads (other than the site access road to the tower) within the interference contour predicted to be created by the translator. Therefore, due to the absence of "potential listeners" within the interference contour, no interference is expected to occur.

Shared Antenna Proposed:

The proposed facilities for K240EP shall be combined into the same antenna as that which has been contemporaneously proposed for K280GJ Fairfield, UT.

Downward Radiation Study (FM Model):

The proposed FM Facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (OET Bulletin 65, Second Edition 97-01, August, 1997). The Commission's FM Model Power Density Prediction program was employed to determine the Field. Using the EPA Type 2: Opposed V Dipole antenna with 2 sections and 0.5 wavelength

spacing, and the AGL height and ERP proposed in this application as well as the ERP proposed in the K280GJ Application (a total of 450 Watts ERP), the highest predicted power density 2 meters above ground is less than 44.0% of the Uncontrolled Standard with a Power Density of 87.9 microwatts per square centimeter 11.2 meters from the base of the tower.

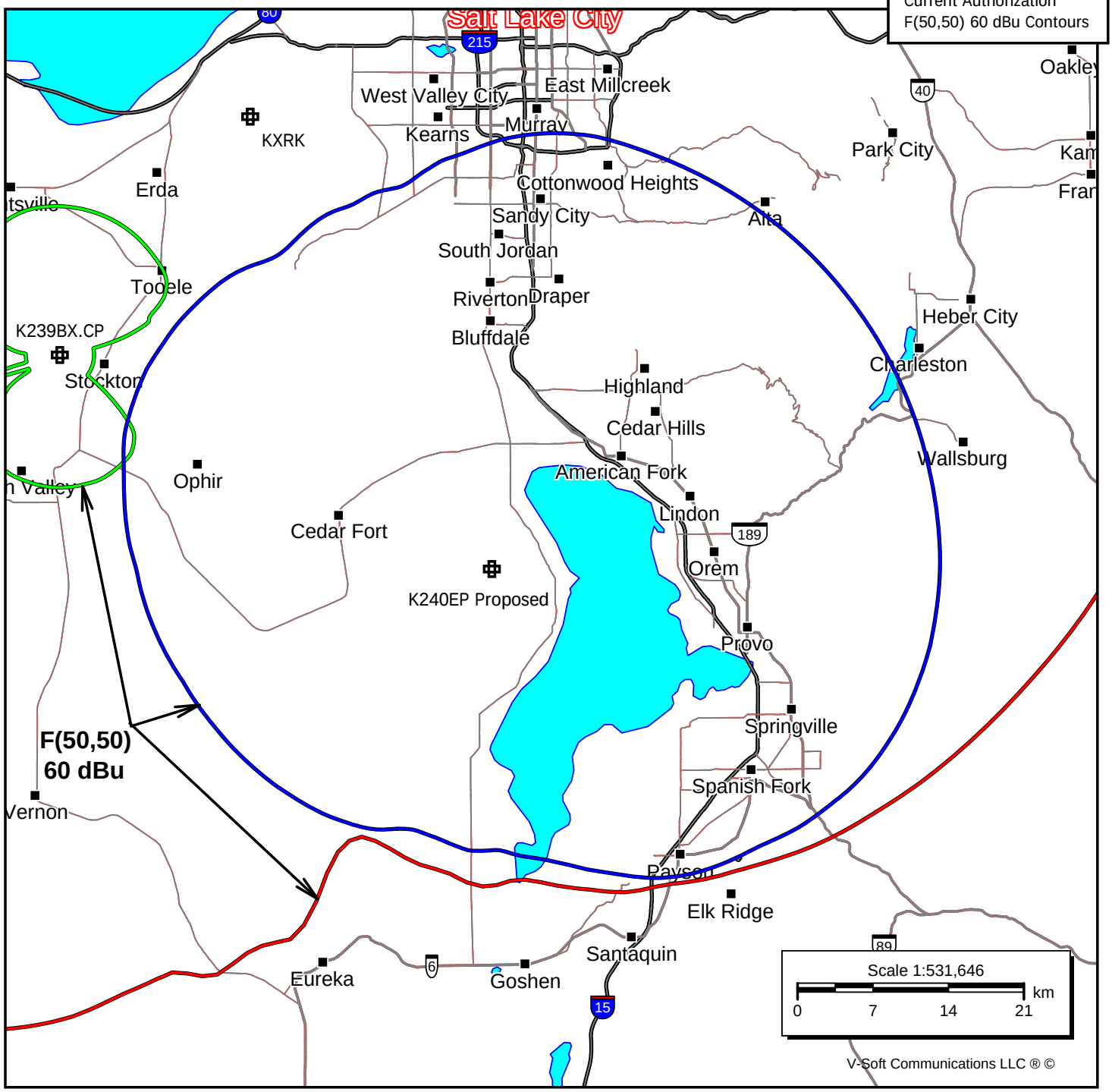
Even though the site will fully comply with the Uncontrolled Site Standards, access to the transmitting site will be restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary,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

Existing Tower:

The proposed facility is exempt from environmental processing because the facility is not located at a location specified in Section 1.1307(a)(1)-(8) of the Commission's Rules and since the tower in question already exists.

Exhibit 1

Primary Station Protected Contour
vs.
Proposed Translator Protected Contour



K240EP Proposed
Proposed
Channel: 240D
Frequency: 95.9 MHz
Latitude: 40-16-57 N
Longitude: 111-56-10 W
COR AGL Height: 8.0 m
COR AMSL Height: 2339.0 m
Base Elevation: 2331.0 m
COR HAAT: 833.19 m
ERP: 0.25 kW
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

K239BX.CP
BNPFT20130820ABN
Channel: 239D
Frequency: 95.7 MHz
Latitude: 40-27-36 N
Longitude: 112-24-31 W
COR AGL Height: 6.0 m
COR AMSL Height: 2000.0 m
Base Elevation: 1994.0 m
COR HAAT: 297.5 m
ERP: 0.01 kW
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

KXRK-HD3
BLH20160119ADW
Channel: 242C
Frequency: 96.3 MHz
Latitude: 40-39-35 N
Longitude: 112-12-05 W
COR AGL Height: 76.0 m
COR AMSL Height: 2831.0 m
Base Elevation: 2755.0 m
COR HAAT: 1243.0 m
ERP: 22.00 kW
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Exhibit 2

Section 74.1204
Interference Tabulations

K240EP Cedar Fort, UT
Section 74.1204 Overlap Tabulations

REFERENCE CH# 240D - 95.9 MHz, Pwr= 0.25 kW DA, HAAT= 833.2 M, COR= 2339 M DISPLAY DATES
40 16 57.0 N. Average Protected F(50-50)= 38.89 km DATA 11-04-16
111 56 10.0 W. Standard Directional SEARCH 11-05-16

CH CITY	CALL STATE	TYPE ANT <--	AZI	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
240C Randolph	KMGR UT	CP _HX	50.2 230.8	103.04 BPH20080409ACT	40 52 16.0 110 59 43.0	89.000 647	200.3 3330	93.7 Slc Divestiture Trust Ii (	-135.0*	-92.4
240D Cedar Fort	K240EP UT	CP DC_	0.0 0.0	0.00 BMPFT20160614ABR	40 16 57.0 111 56 10.0	0.250	104.5 2342	39.6 Radio Rancho, Llc	-133.9*	-128.1*
240C1 Delta	KMGR UT	LIC _HX	180.5 0.5	61.04 BLH20040729ANB	39 43 58.0 111 56 34.0	100.000 293	152.5 2036	56.6 Slc Divestiture Trust Ii (	-125.0*	-90.4*
242C Provo	KXRK UT	LIC _C_	331.9 151.8	47.54 BLH20160119ADW	40 39 35.0 112 12 05.0	22.000 1243	8.5 2831	80.6 Broadway Media Ls, Llc	12.5	-33.6*
237D Pleasant Grove	K237FG UT	LIC DC_	315.7 135.5	28.29 BLFT20141126AOM	40 27 51.0 112 10 11.0	0.220	1.0 2849	42.6 Educational Media Foundati	-0.6	-14.9*
238D Park City	K229CK UT	CP DC_	155.5 335.5	23.60 BPFT20160922ABR	40 05 21.0 111 49 15.0	0.050	0.1 2094	6.1 Biblical Ministries Worldw	-14.0*	16.4
240C3 Weston	KLZX ID	LIC _CX	3.4 183.5	176.80 BMLH20070117AAI	41 52 18.0 111 48 31.0	25.000 66	144.9 1750	61.6 Sun Valley Radio Inc	1.8	25.4
238D Heber City	K238AS UT	LIC DV_	51.3 231.6	49.96 BLFT20041203AEE	40 33 44.0 111 28 30.0	0.218 381	0.0 2564	2.2 Wasatch County Commission	12.0	46.9
239C1 Gunnison	KMGR UT	RSV-A ___	172.4 352.5	107.62	39 19 18.0 111 46 11.0	100.000 299	59.1 2210	31.0 Slc Divestiture Trust Ii (	14.5	24.1
239C1 Gunnison	KMGR UT	APP _CX	172.4 352.5	107.62 BMPH20160614AAI	39 19 18.0 111 46 11.0	3.000 716	58.4 2610	39.2 Slc Divestiture Trust Ii (	15.2	15.9
294C Spanish Fork	KAAZ-FM UT	LIC _CX	331.9 151.8	47.51 BLH20150812AAU	40 39 34.0 112 12 05.0	25.000 1140	16.9 2803	11.6 Citicasters Licenses, Inc.	28.5R	19.0M
293C Spanish Fork	KAAZ-FM UT	LIC _CX	331.9 151.8	47.51 BLH20021125AAT	40 39 34.0 112 12 05.0	25.000 1140	16.9 2803	11.6 Citicasters Licenses, Inc.	28.5R	19.0M
237D Park City, Etc.	K237AL UT	LIC _HN	38.0 218.3	56.62 BLFT19840307MV	40 40 59.0 111 31 22.0	0.016	0.3 2276	3.5 Radio License Holding Cbc,	21.0	52.3
240D Tremonton	KLZX-FM1 UT	LIC DC_	351.6 171.4	164.61 BLFTB20050901ACY	41 44 54.0 112 13 37.0	5.000	112.2 1760	44.1 Sun Valley Radio, Inc.	24.5	35.1
238D Salt Lake City	KYFO-FM1 UT	LIC DV_	3.8 183.9	58.49 BLFTB20080513ABV	40 48 29.0 111 53 22.0	0.007	0.2 1843	10.8 Bible Broadcasting Network	28.2	47.0
242D Park City	KXRK-FM1 UT	LIC DC_	31.0 211.3	74.39 BMLFTB20160119ADV	40 51 18.0 111 28 47.0	1.100	1.7 2851	40.9 Broadway Media Ls, Llc	38.4	32.7
238C1 Ogden	KYFO-FM UT	LIC _CN	346.9 166.7	110.35 BLED19981125KD	41 14 59.0 112 14 11.0	100.000 219	8.9 1509	66.9 Bible Broadcasting Network	74.4	42.8

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference 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.

Exhibit 2B

Satellite Picture of
F(50,10) Interfering Contour

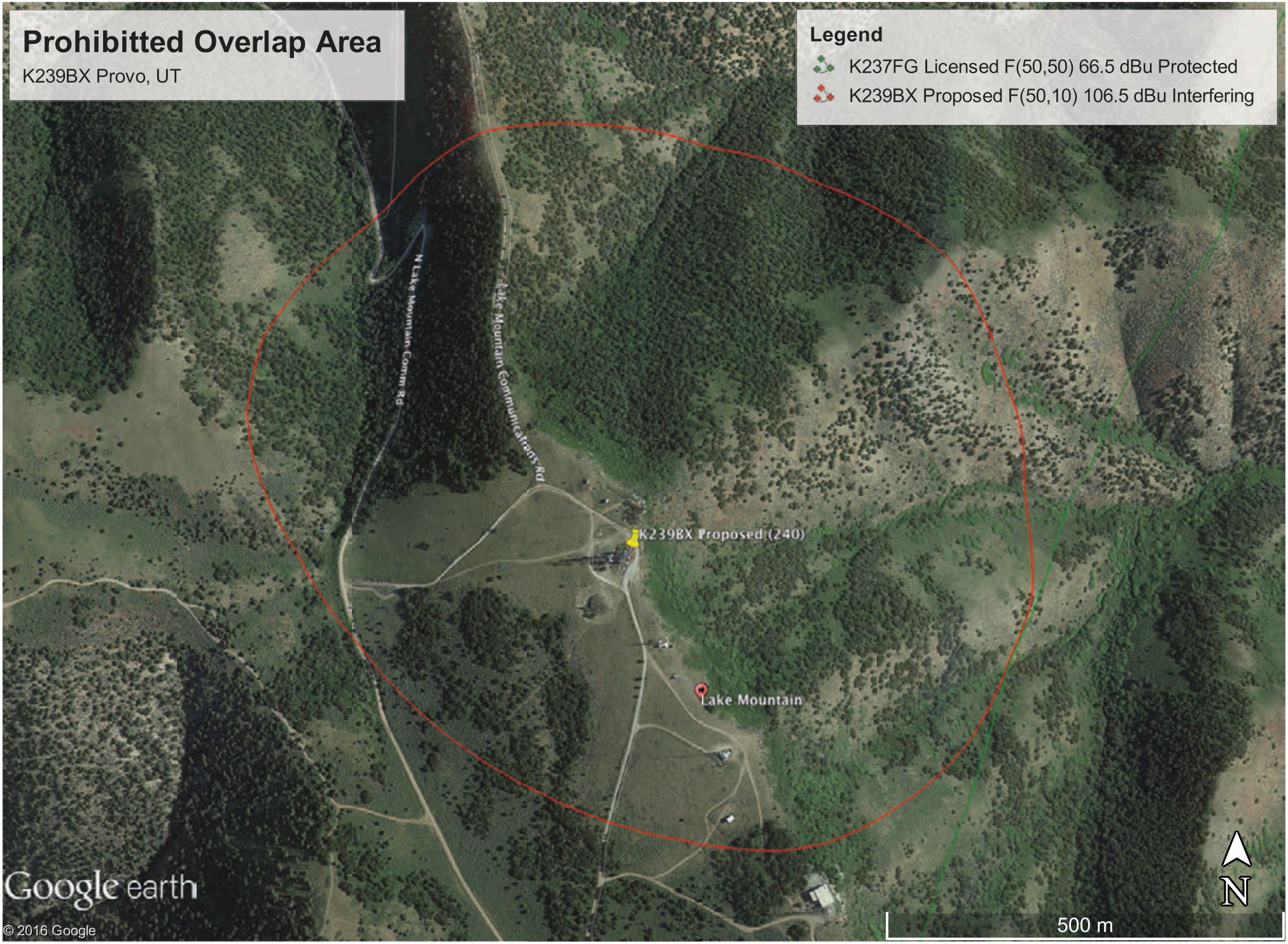
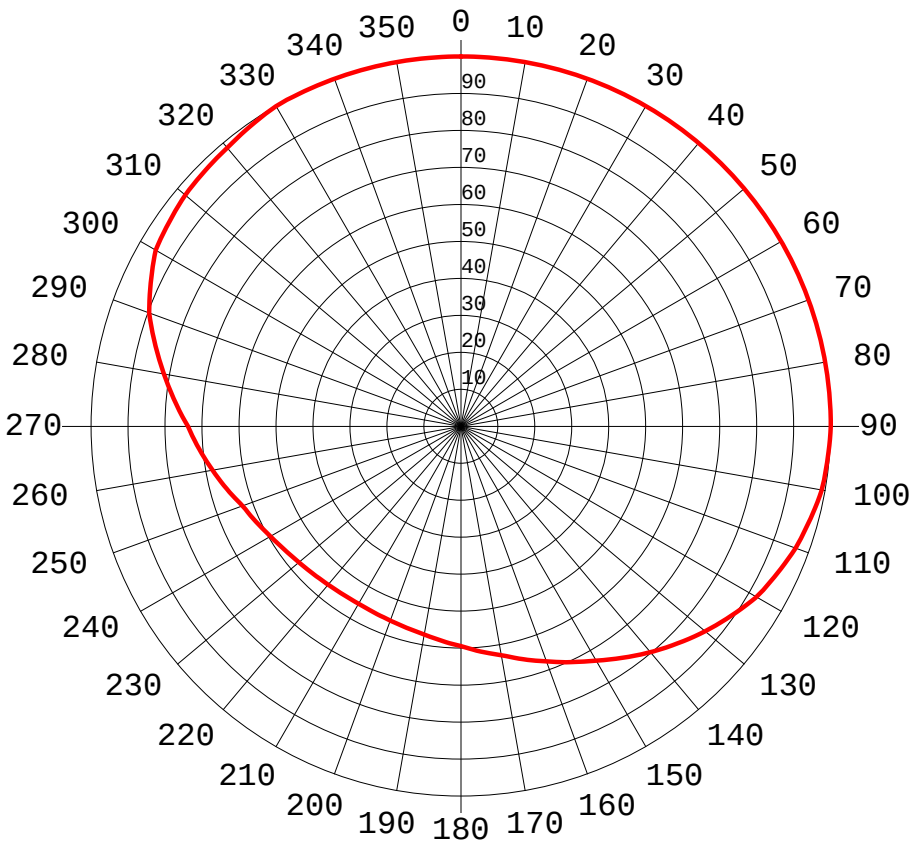

Prohibitted Overlap Area
K239BX Provo, UT
Legend
K237FG Licensed F(50,50) 66.5 dBu Protected
K239BX Proposed F(50,10) 106.5 dBu Interfering
N Lake Mountain Comm Rd
Lake Mountain Communications Rd
K239BX Proposed (240)
Lake Mountain
Google earth
© 2016 Google
N
500 m

Exhibit 4

Proposed Directional Pattern
Azimuth Tabulations

Nicom BKG-77 (Rotated 30 deg)



Azi	Rel	dBk	kW	dB
0	1.000	-6.02	0.250	0.00
10	1.000	-6.02	0.250	0.00
20	1.000	-6.02	0.250	0.00
30	1.000	-6.02	0.250	0.00
40	1.000	-6.02	0.250	0.00
50	1.000	-6.02	0.250	0.00
60	1.000	-6.02	0.250	0.00
70	0.991	-6.10	0.246	-0.08
80	0.963	-6.35	0.232	-0.33
90	0.923	-6.72	0.213	-0.70
100	0.862	-7.31	0.186	-1.29
110	0.797	-7.99	0.159	-1.97
120	0.731	-8.74	0.134	-2.72
130	0.676	-9.42	0.114	-3.40
140	0.628	-10.06	0.099	-4.04
150	0.594	-10.54	0.088	-4.52
160	0.571	-10.89	0.082	-4.87
170	0.558	-11.09	0.078	-5.07

Azi	Rel	dBk	kW	dB
180	0.553	-11.17	0.076	-5.15
190	0.558	-11.09	0.078	-5.07
200	0.571	-10.89	0.082	-4.87
210	0.594	-10.54	0.088	-4.52
220	0.628	-10.06	0.099	-4.04
230	0.682	-9.34	0.116	-3.32
240	0.738	-8.66	0.136	-2.64
250	0.815	-7.80	0.166	-1.78
260	0.897	-6.96	0.201	-0.94
270	0.953	-6.44	0.227	-0.42
280	0.973	-6.26	0.237	-0.24
290	0.983	-6.17	0.242	-0.15
300	1.000	-6.02	0.250	0.00
310	1.000	-6.02	0.250	0.00
320	1.000	-6.02	0.250	0.00
330	1.000	-6.02	0.250	0.00
340	1.000	-6.02	0.250	0.00
350	1.000	-6.02	0.250	0.00

Rotation Angle = 30