

**K237FA**  
**Pocatello, ID**  
Proposed Minor Modification  
of Licensed Translator Facility

**Application Overview:**

The Applicant proposes to amend pending application BLFT-20121120ADU using the following parameters:

**Tech Box:**

Channel:	237
Antenna Coordinates:	N42-52-26, W112-30-48 (NAD 27)
ASRN:	N/A
Tower Site Base AMSL:	1771 m
Overall Tower Height AGL:	45 m
COR AGL:	12 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 – KWIK(AM) Pocatello, ID. It should also be noted that the proposed protected contour for the translator does not extend beyond a 30 kilometer circle contour centered at the KWIK(AM) antenna site.

**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:

- KPKY(FM) (BMLH-20061221AAH) on its Second adjacent channel
- K239BR (BNPFT-20130325AJJ) on its Second 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 KPKY(FM) at the proposed site is calculated to be 159.7 dBu. As such, the interfering contour of the proposed facility is its F(50,10) 199.7 dBu contour which will

not reach the ground at any location. Therefore, due to the absence of “potential listeners” within the interference contour, no interference is expected to occur towards KPKY(FM).

The signal strength of K239BR at the proposed site is calculated to be 120.8 dBu. As such, the interfering contour of the proposed facility is its F(50,10) 160.8 dBu contour which will not reach the ground at any location. Therefore, due to the absence of “potential listeners” within the interference contour, no interference is expected to occur towards K239BR.

**No Other Co-Located Emitters Lower on Tower:**

No other emitters are authorized to use the proposed tower beneath the proposed facility. A shared non-directional antenna used by KPKY(FM), KEGE(FM), and KLLP(FM) is located above the proposed facility.

**Downward Radiation Study (Measure Upon Construction)**

Due to the fact that several existing and proposed emitters are located at or near the site, the applicant agrees to conduct a Radiofrequency Electromagnetic Field survey at the site upon construction of the proposed facility to ensure that any areas at ground level that exceed the Commission’s exposure guideline values are appropriately marked and fenced. The results of the survey will be provided with the application for license.

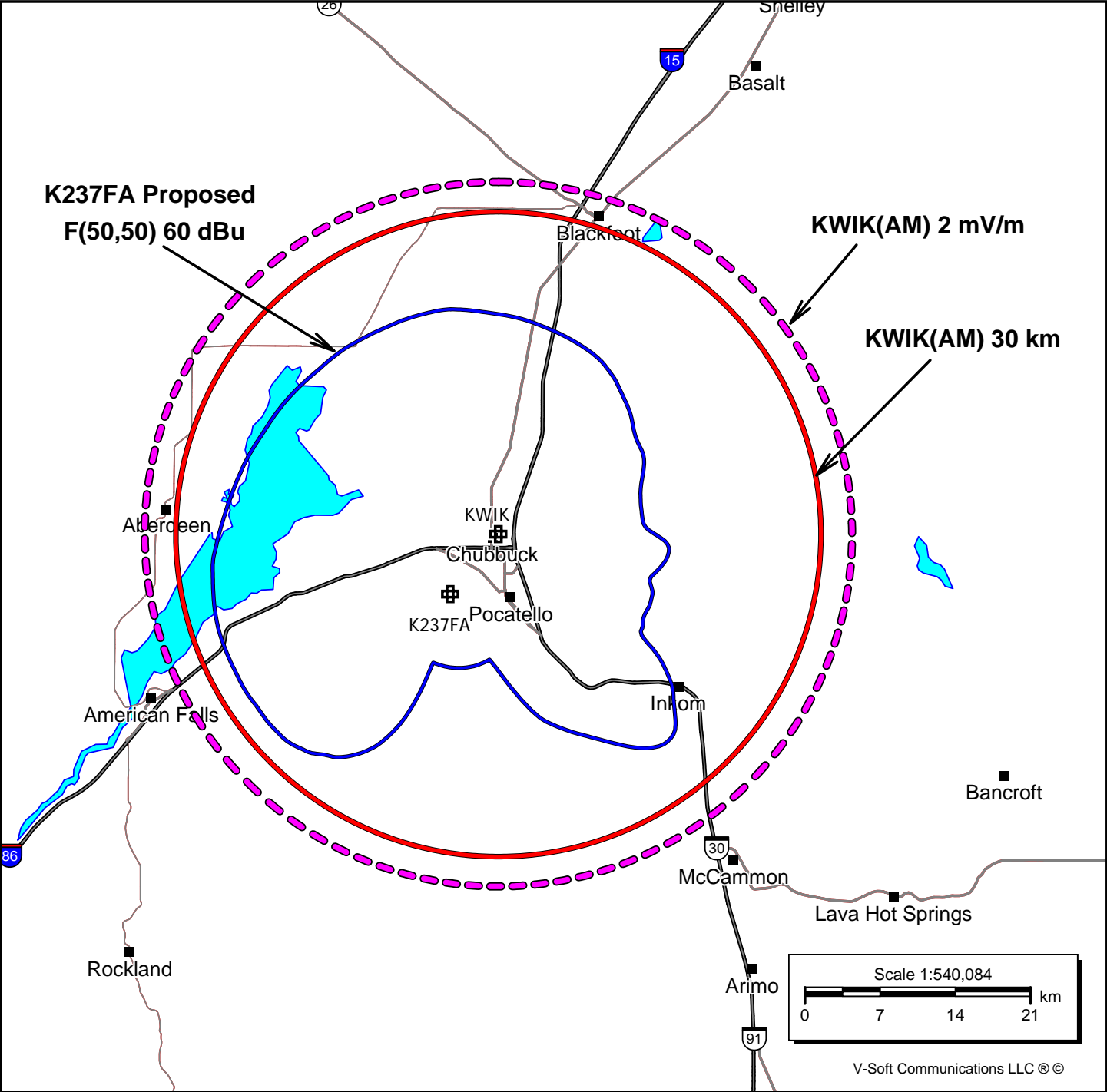
Even though the site will fully comply with the Uncontrolled Site Standards, access to the transmitting site will be restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, 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 already exists.

# **Exhibit 1**

**Primary Station Protected Contour  
vs.  
Proposed Translator Protected Contour**



**K237FA**

BLFT20121120ADU  
Channel: 237D  
Frequency: 95.3 MHz  
Latitude: 42-52-26 N  
Longitude: 112-30-48 W  
COR AGL Height: 12.0 m  
COR AMSL Height: 1783.0 m  
Base Elevation: 1771.0 m  
COR HAAT: 0.0 m  
ERP: 0.25 kW  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: None

**KWIK (AM)**

Type: AM  
Channel: 1240  
Latitude: 42-55-27 N  
Longitude: 112-27-31 W

## **Exhibit 2**

### **Section 74.1204 Interference Tabulations**

K237FA Pocatello, ID											
Section 74.1204 Contour Overlap Study											
CH# 237D - 95.3 MHz, Pwr= 0.25 kW DA, HAAT= 0.0 M, COR= 1783 M											
Average Protected F(50-50)= 7.09 km											
Standard Directional											
DISPLAY DATES											
DATA 06-22-13											
SEARCH 06-25-13											
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)	
235C	KPKY	LIC_CX		0.0	0.00	42 52 26.0	100.000	12.3	84.7	-38.8*	-92.2*
Pocatello		ID		0.0	BMLH20120314ADQ	112 30 48.0	306	1808	Rich Broadcasting	Idaho Ls	
237D	K237FA	LIC_DC		0.0	0.00	42 52 26.0	0.060	12.5	2.2	-39.0*	-82.3*
Pocatello		ID		0.0	BLFT20121120ADU	112 30 48.0		1783	Carl Watkins		
237C	KZJH	LIC_CN		64.8	157.35	43 27 40.0	100.000	189.3	85.5	-51.8*	10.7
Jackson		WY		246.0	BLH19890714KA	110 45 09.0	322	2474	Rp Broadcasting	Ls, Lic	
239D	K239BR	CP_C		90.0	0.02	42 52 26.0	0.013	0.3	12.6	-19.2*	-18.4*
Pocatello		ID		270.0	BNPFT20130325AJJ	112 30 47.0		1794	Citicasters	Licenses, L.p.	
239D	K239BN	CP_C		37.5	67.14	43 21 06.0	0.102	0.7	17.7	41.2	42.1
Idaho Falls		ID		217.8	BNPFT20130304AAK	112 00 29.0		1752	Radio Assist	Ministry, Inc	

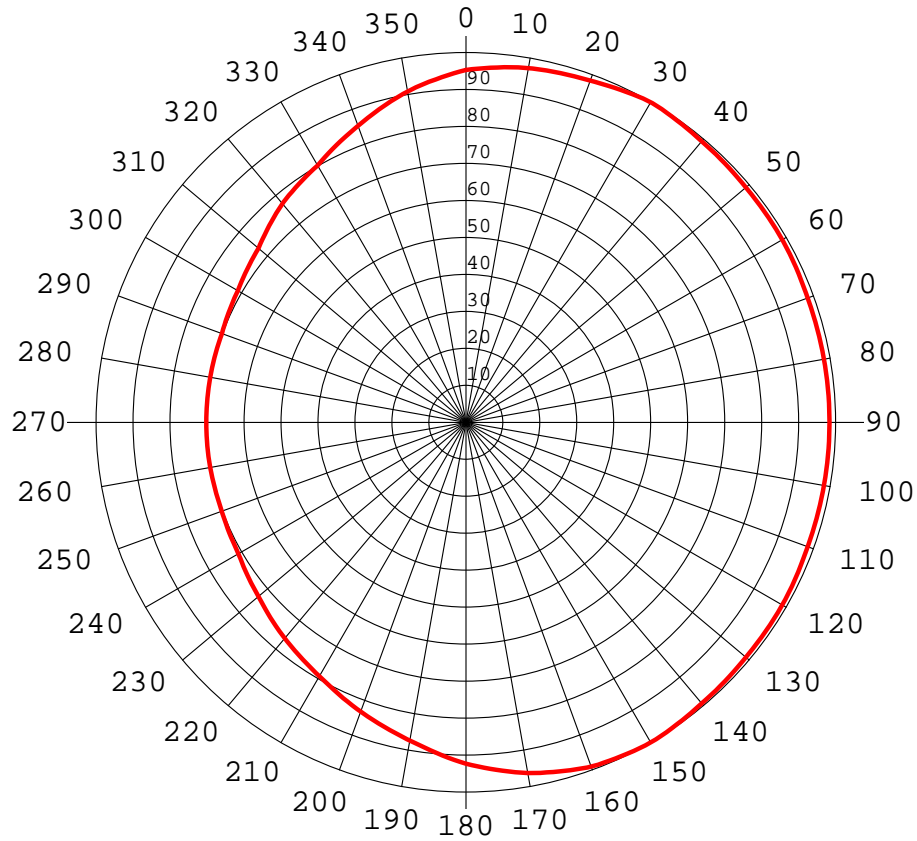
Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
 Contour distances are on direct line to and from reference station. Reference zone= , Co to 3rd adjacent.  
 All separation margins (if shown) include rounding  
 Ant Column: (D= DA Standard, 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 protected contour.



## **Exhibit 4**

### **Antenna Azimuth Pattern**

# Nicom BKG-77 Pattern - Pointed 90 deg



Azi	Rel	dBk	kW	dB	Azi	Rel	dBk	kW	dB
0	0.983	-6.17	0.242	-0.15	180	0.702	-9.09	0.123	-3.07
10	0.983	-6.17	0.242	-0.15	190	0.702	-9.09	0.123	-3.07
20	0.983	-6.17	0.242	-0.15	200	0.702	-9.09	0.123	-3.07
30	0.988	-6.13	0.244	-0.10	210	0.712	-8.97	0.127	-2.95
40	0.988	-6.13	0.244	-0.10	220	0.732	-8.73	0.134	-2.71
50	0.992	-6.09	0.246	-0.07	230	0.772	-8.27	0.149	-2.25
60	1.000	-6.02	0.250	0.00	240	0.802	-7.94	0.161	-1.92
70	0.991	-6.10	0.246	-0.08	250	0.853	-7.40	0.182	-1.38
80	0.963	-6.35	0.232	-0.33	260	0.909	-6.85	0.207	-0.83
90	0.923	-6.72	0.213	-0.70	270	0.953	-6.44	0.227	-0.42
100	0.873	-7.20	0.191	-1.18	280	0.973	-6.26	0.237	-0.24
110	0.832	-7.62	0.173	-1.60	290	0.983	-6.17	0.242	-0.15
120	0.792	-8.05	0.157	-2.03	300	1.000	-6.02	0.250	0.00
130	0.762	-8.38	0.145	-2.36	310	0.992	-6.09	0.246	-0.07
140	0.732	-8.73	0.134	-2.71	320	0.988	-6.13	0.244	-0.10
150	0.710	-9.00	0.126	-2.97	330	0.988	-6.13	0.244	-0.10
160	0.702	-9.09	0.123	-3.07	340	0.983	-6.17	0.242	-0.15
170	0.702	-9.09	0.123	-3.07	350	0.983	-6.17	0.242	-0.15

Rotation Angle = 90