

Non-Interference Compliance K239AC, Garden City, ID FAC# 81218

Description of Exhibit Contents

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204.

Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

[A]n 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 such other factors as may be applicable.

Page 3 of this exhibit contains the adjacent channel study created with FM Commander which shows all co-channel, 1st adjacent, 2nd adjacent and 3rd adjacent to the proposal.

Page 4 of this exhibit is a contour map demonstrating contour non-interference to 2nd adjacent K237HA.

Page 5 of this exhibit is a Google Earth aerial photo of the vicinity surrounding the proposed translator's tower site with the plotted zone of predicted interference.

Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

File Number	Call Sign	Contour at Tower
BLH-20061130AAV	KSRV-FM	87.9
Minimum F(50,50) Contour of Adjacent Station Within Proposed Translator's Interfering Contour		87.9

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **87.9 dBμ**, this makes the proposed translator's worst-case interfering contour **127.9 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **33.57m** from the transmit antenna.

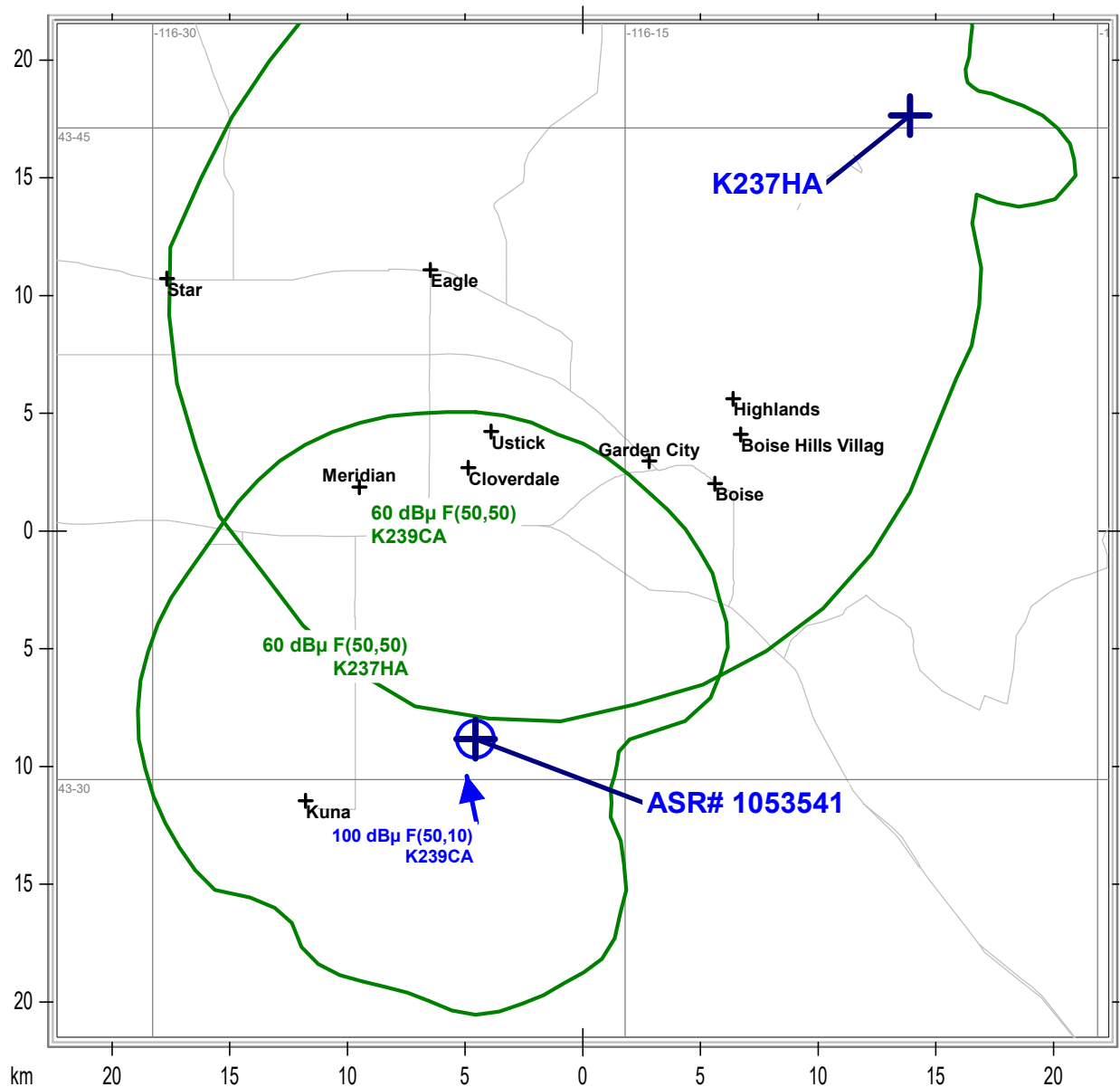
Note: There are no structures within the zone of predicted interference , so in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

Antenna Manufacturer:	BEXT
Antenna Model:	TFC2K
CORAGL:	110 m
Maximum ERP:	0.140 kW
Interfering Contour:	127.9 dBμ
Max Int. Contour Distance:	33.57 m

Adjacent Channel Study											
REFERENCE		CH#	239D	-	95.7	K239AC, Garden City, ID FAC# 81218			COR= 945.2 M		DISPLAY DATES
43 30 56.00 N.					MHZ	Pwr= 0.14 kW DA, HAAT= 89.0 M,					DATA 08-24-23
116 19 45.00 W.						Average Protected F(50-50)= 10.59 km					SEARCH 08-29-23
Standard Directional											
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)
241C	KSRV-FM	LIC ZCN		34.8	32.44	43 45 17.60	49.000	12.8	98.0	7.9	-66.4*
Ontario		OR		215.0	BLH20061130AAV	116 05 54.40	815	2203	Iliad Media Group Holdings		
239D	K239AC	LIC _CN		58.0	17.35	43 35 53.60	0.028		---Reference---		
Garden City		ID		238.1	BMLFT20071010ACO	116 08 47.40	308	1125	CSN International		
237D	K237HA	LIC DCN		34.7	32.39	43 45 17.10	0.099	0.6	31.3	20.1	0.1
Nampa		ID		214.9	0000162997	116 05 57.30		2192	Radio License Holding cbc,		
239C1	KEZJ-FM	LIC _CN		118.7	178.35	42 43 41.70	100.000	163.9	65.4	6.8	92.5
Twin Falls		ID		300.0	BLH20081203AEH	114 24 51.10	198	1370	Townsquare License, LLC		
292C	KDBI-FM	LIC NCN		279.7	72.16	43 37 14.50	100.000	0.0	0.0	28.5R	43.7M
Homedale		ID		99.0	BMLH20161114ACM	117 12 38.50	313	1300	Radio Rancho, LLC		

Terrain database is FCC 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.
 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.
 « = Station meets FCC minimum distance spacing for its class.
 Reference station has protected zone issue: AM tower

K237HA Contour Non-Interference Map



ASR# 1053541, 110m, 140W, channel 239, TFC2K, KAWZ

State Borders Highways Lat/Lon Grid

Map Scale: 1:290560 1 cm = 2.91 km V|H Size: 43.09 x 44.71 km

CSN Scott Spencer

**Aerial Photo Zone Of Predicted Interference
K239AC, Garden City, ID FAC# 81218
August 29, 2023**

