

Non-Interference Compliance

Regarding Facility id 147617

Channel 237

Description of Exhibit 13 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 tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dBμ F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Page 4 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using the free space equation and 120 radials.

Page 5 of this exhibit is an aerial photo of the vicinity surrounding the proposed translator's tower site.

Note: The only structures within the zone of predicted interference are unoccupied communications buildings so 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.

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.

Application_id	File Number	Callsign	Contour at Tower	Min. Contour
1148045	BLH20060912ABJ	KYSS-FM	92.3	92.3
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				92.3

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 **92.3 dBμ**, this makes the proposed translator's worst-case interfering contour **132.3 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **16.9 m** from the transmit antenna.

The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population").

Note: The only structures within the zone of predicted interference are unoccupied communications buildings so 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:	PSI
Antenna Model:	FML-2(.75)-DA
CORAGL:	15 m
Maximum ERP:	0.099 kW
Interfering Contour:	132.3 dBμ
Max Int. Contour Distance:	16.9 m

Adjacent Channel Study
For Station K237DZ, Facility_id: 147617

Co-channel through third adjacent:

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Char	Adj	Dist	Overlap
1148045	71759	BLH-20060912ABJ	KYSS-FM	TOWNSQUARE MEDIA MISSOULA	C	MISSOULA	MT	LIC	63	2312	235	2	25.6	0.3032
1190916	142915	BLFT-20070621AQN	K239AP	CCR-MISSOULA IV, LLC	D	MISSOULA	MT	LIC	0.25	1118	239	2	8.9	0
1679883	141961	BLFT-20150605AAK	K240EM	THE MONTANA RADIO COMPANY	D	HELENA	MT	LIC	0.25	2251	240	3	125.2	0
37452	139	BLFT-19811222IF	K240AP	NELLY BROADCASTING IDAHO, L	D	PIERCE	ID	LIC	0.045	991	240	3	143.1	0
1757710	145977	BLFT-20170525AMR	K234AT	CCR-BUTTE IV, LLC	D	MCQUEEN	MT	LIC	0.25	2524	234	3	146.9	0
17168	63875	BLH-19800128AE	KMBR	CCR-BUTTE IV, LLC	C	BUTTE	MT	LIC	50	2544	238	1	146.9	0
1147919	9890	BLH-20060908ABH	KLER-FM	CENTRAL IDAHO BROADCASTING	C3	OROFINO	ID	LIC	2.3	925	236	1	179.9	0
273832	22255	BLH-19980911KI	KHNK	BEE BROADCASTING, INC.	C	COLUMBIA FALLS	MT	LIC	55	1995	240	3	192.4	0
1759144	5992	BPH-20170620AAY	KPND	BLUE SKY BROADCASTING, INC.	C	DEER PARK	WA	APP	100	1372	237	0	244.4	0

