

[Exhibit 13]

## **Non-Interference Compliance**

Regarding Facility id 145194

Channel 264

### **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 dB $\mu$  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.

## 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 dB $\mu$  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.

<b>Application_id</b>	<b>File Number</b>	<b>Callsign</b>	<b>Contour at Tower</b>	<b>Min. Contour</b>
1626448	BLFT20140224AAC	K266BR	67.9	67.9
	Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour			<b>67.9</b>

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 **67.9 dB $\mu$** , this makes the proposed translator's worst-case interfering contour **107.9 dB $\mu$** . By the free-space equation, this contour is calculated to extend a maximum of **89.3 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 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:** SCA  
**Antenna Model:** HDCA-5 @ 25°  
**CORAGL:** 6 m  
**Maximum ERP:** 0.01 kW  
**Interfering Contour:** 107.9 dB $\mu$   
**Max Int. Contour Distance:** 89.3 m

**Adjacent Channel Study  
For Station K261EN, Facility\_id: 145194**

**Co-channel through third adjacent:**

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Char	Adj	Dist	Overlap
1626448	25894	BLFT-20140224AAC	K266BR	CANYON MEDIA GROUP, LLC	D	CEDAR CITY	UT	LIC	0.25	2531	266	2	11.8	0.0085
1211855	141827	BLFT-20071022BEI	K262BM	BRIGHAM YOUNG UNIVERSITY	D	CEDAR CITY	UT	LIC	0.01	2671	262	2	11.8	0
1801485	201450	BLFT-20190307AAA	K264CT	TRI-STAR MEDIA, LLC	D	SANTA CLARA	UT	LIC	0.25	1630	264	0	32.8	0
1503961	38352	BLFT-20120628AAA	K264BK	WESTERN KANE COUNTY SPECI	D	ORDERVILLE, ET	UT	LIC	0.009	1882	264	0	52.8	0
1725736	141740	BLFT-20160405ABF	K264BM	BRIGHAM YOUNG UNIVERSITY	D	IVINS	UT	LIC	0.01	2278	264	0	81.4	0
1227829	164258	BLH-20080122ADT	KMXD	SANPETE COUNTY BROADCAST	C	MONROE	UT	LIC	33	3600	263	1	114.9	0
1784599	202921	BNPFT-20180508ABI	K266CN	SANPETE COUNTY BROADCAST	D	MARYSVALE	UT	CP	0.25	3561	266	2	115	0
76634	59041	BLFT-19850304TJ	K261BP	GARFIELD COUNTY	D	RURAL PIUTE, ET	UT	LIC	0.076	3433	261	3	142.2	0



