

## **Non-Interference Compliance**

Regarding Facility id 89775

Channel 205

### **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.

### 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
1251850	BLED20080715ADJ	KNKX	84.1	84.1
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>84.1</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 **84.1 dBμ**, this makes the proposed translator's worst-case interfering contour **124.1 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **13.8 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: There are no occupied buildings or major roads 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:	PSI
Antenna Model:	FML-1-DA
CORAGL:	18 m
Maximum ERP:	0.01 kW
Interfering Contour:	124.1 dBμ
Max Int. Contour Distance:	13.8 m

# Adjacent Channel Study

## For Station K205DF, Facility\_id: 89775

Co-channel through third adjacent:

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Char	Adj	Dist	Overlap
1251850	51199	BLED-20080715ADJ	KNKX	PACIFIC PUBLIC MEDIA	C	TACOMA	WA	LIC	64	940	203	2	33.2	0.0494
1755026	25171	BLFT-20170411ABX	K207AP	GREEN RIVER COMMUNITY COLI	D	SUMNER & LAKE	WA	LIC	0.07	138	207	2	33.3	0
1641883	91156	BLFT-20140623ABA	K206CJ	SPIRIT COMMUNICATIONS, INC.	D	ISSAQUAH	WA	LIC	0.009	896	206	1	33.3	0
606531	59526	BLED-20020402AAC	KNHC	SEATTLE PUBLIC SCHOOLS	C1	SEATTLE	WA	LIC	8.5	498	208	3	41.2	0
1284494	41205	BLED-20081014AFI	KMIH	MERCER ISLAND SCHOOL DISTF	D	MERCER ISLAND	WA	LIC	0.03	131	205	0	48.4	0
564158	52166	BLFT-20010507ABF	K207AZ	PENINSULA SCHOOL DISTRICT N	D	GIG HARBOR	WA	LIC	0.0325	50	207	2	58.9	0
1732166	87314	BLFT-20160628AAK	K206DM	CALVARY CHAPEL OF TWIN FALI	D	BREMERTON	WA	LIC	0.013	536	206	1	79.7	0
1324567	83463	BLED-20090723ADF	KSBC	GUTIERREZ COMMUNICATIONS	A	NILE	WA	LIC	0.2	690	202	3	80.9	0
585368	81756	BLED-20011026AAA	KCSH	LIFETALK RADIO, INC.	A	ELLENSBURG	WA	LIC	0.38	1013	205	0	81.7	0
591052	65611	BLED-20011228AAV	KAOS	THE EVERGREEN STATE COLLE	A	OLYMPIA	WA	LIC	1.25	149	207	2	84.3	0
1757332	92481	BPFT-20170516AAU	K206DL	CALVARY CHAPEL OF TWIN FALI	D	GRANITE FALLS/E	WA	CP	0.01	737	205	0	92.5	0
1050936	92481	BLFT-20050314AAS	K206DL	CALVARY CHAPEL OF TWIN FALI	D	GRANITE FALLS/E	WA	LIC	0.005	775	206	1	92.6	0
1319281	143119	BLFT-20090624ADS	K203EN	EDUCATIONAL MEDIA FOUNDAT	D	ELLENSBURG	WA	LIC	0.066	1026	203	2	112.3	0
1681450	86506	BLFT-20150225ABZ	K208EY	CALVARY CHAPEL OF TWIN FALI	D	WENATCHEE	WA	LIC	0.25	399	208	3	115	0
1372666	81162	BLED-20100618AWV	KSWs	WASHINGTON STATE UNIVERSIT	C3	CHEHALIS	WA	LIC	1	475	205	0	118.3	0
171700	10023	BLED-19920318KA	KSOH	LIFETALK RADIO, INC.	C2	WAPATO	WA	LIC	9.5	655	208	3	126.4	0
1796393	74320	BPED-20190111AAB	KYVT	YAKIMA SCHOOL DISTRICT NO. 7	A	YAKIMA	WA	CP	0.65	619	203	2	126.7	0
1585864	74320	BLED-20131107ABE	KYVT	YAKIMA SCHOOL DISTRICT NO. 7	A	YAKIMA	WA	LIC	0.135	619	203	2	126.7	0







