

## **Non-Interference Compliance**

Regarding Facility id 150026

Channel 261

### **Description of Exhibit 12 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.

Since the proposed translator is within 320 km of the Canadian border, 47 C.F.R. § 74.1235(d) has been taken into account and this applicant certifies that in no direction does the 34 dBμ F(50,10) extend beyond 60 km, and this application is therefore in full compliance with 47 C.F.R. § 74.1235(d)(3), which states that "the distance to the 34 dBμ interfering contour may not exceed 60 km in any direction," and hence complies with 47 C.F.R. § 74.1204(h).

### 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
1144294	BLH20060810AFK	WSHH	62.8	62.8
120458	BLH19881118KB	WYJK-FM	64.9	64.9
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>62.8</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 **62.8 dBμ**, this makes the proposed translator's worst-case interfering contour **102.8 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **71.9 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"). Hence, 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.

<b>Antenna Manufacturer:</b>	<b>WRL</b>
<b>Antenna Model:</b>	<b>FMPV1</b>
<b>CORAGL:</b>	<b>4 m</b>
<b>Maximum ERP:</b>	<b>0.002 kW</b>
<b>Interfering Contour:</b>	<b>102.8 dBμ</b>
<b>Max Int. Contour Distance:</b>	<b>71.9 m</b>

**Adjacent Channel Study**  
**For Station W261AX, Facility\_id: 150026**

**Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
120458	3039	BLH	19881118KB	WYJK-FM	THE ASSOCIATED GROUP, INC.	B	BELLAIRE	OH	LIC	48	470	263	2	45.5	0.0475
1144294	55709	BLH	20060810AFK	WSHH	RENDA BROADCASTING CORP OF NEVADA	B	PITTSBURGH	PA	LIC	15.5	584	259	2	46.2	0.0475
641259	148440	BNPFT	20030317EKB	NEW	EDUCATIONAL MEDIA FOUNDATION	D	HEIDELBERG	PA	APP	0.004	428	261	0	37.9	0
491596	20351	BLH	20000204ABI	WZPT	EZ PITTSBURGH, INC.	B	NEW KENSINGTON	PA	LIC	14.5	592	264	3	46.8	0
538318	20351	BXLH	20010322AAF	WZPT	INFINITY RADIO OF PITTSBURGH LICENSE INC.	B	NEW KENSINGTON	PA	LIC	12.5	474	264	3	47.2	0
641683	148849	BNPFT	20030317LOC	NEW	KENT STATE UNIVERSITY	D	CANFIELD	OH	APP	0.013	395	259	2	69.4	0
503295	74144	BLH	20000612AAQ	WTUZ	WTUZ RADIO, INC.	A	UHRICHSVILLE	OH	LIC	5.3	412	260	1	75.3	0
418560	74144	BXLH	19991020ABH	WTUZ	WTUZ RADIO, INC.	A	UHRICHSVILLE	OH	LIC	0.41	377	260	1	75.3	0
631252	140047	BNPFT	20030314BPX	NEW	CITICASTERS LICENSES, L.P.	D	YOUNGSTOWN	OH	APP	0.25	399	260	1	75.7	0
607184	79304	BLH	20020725AAE	WYMJ	DAILEY CORPORATION	A	NEW MARTINSVILLE	WV	LIC	2.7	452	258	3	89.6	0



