

## **Non-Interference Compliance**

Regarding Facility id 146950

Channel 243

### **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.

**Note: The quadrangle indicates the presence of a county road in the area of interference. It is apparent that this is not a major road, e.g. interstate highway, as described in the Living Way decision and therefore "lack of population" is demonstrated.**

## 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.

<b>Application_id</b>	<b>File Number</b>	<b>Callsign</b>	<b>Contour at Tower</b>	<b>Min. Contour</b>
215243	BLH19951011KF	WCNA	60.8	60.8
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>60.8</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 **60.8 dBμ**, this makes the proposed translator's worst-case interfering contour **100.8 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **230.7 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.

**Note: The quadrangle indicates the presence of a county road in the area of interference. It is apparent that this is not a major road, e.g. interstate highway, as described in the Living Way decision and therefore "lack of population" is demonstrated.**

<b>Antenna Manufacturer:</b>	<b>ERI</b>
<b>Antenna Model:</b>	<b>100-1</b>
<b>CORAGL:</b>	<b>85 m</b>
<b>Maximum ERP:</b>	<b>0.013 kW</b>
<b>Interfering Contour:</b>	<b>100.8 dBμ</b>
<b>Max Int. Contour Distance:</b>	<b>230.7 m</b>

**Adjacent Channel Study**  
**For Station W243BB, Facility\_id: 146950**

**Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
215243	50294	BLH	19951011KF	WCNA	OLVIE E. SISK	C3	POTTS CAMP	MS	LIC	14	265	240	3	35.8	0.0835
1117141	140011	BMPFT	20060323AHP	W244BY	EDUCATIONAL MEDIA FOUNDATION	D	MEMPHIS	TN	CP MOD	0.055	130	244	1	62.7	0
1034087	154826	BMPFT	20041207ABK	W244BN	EDUCATIONAL MEDIA FOUNDATION	D	BATESVILLE	MS	CP MOD	0.12	117	244	1	66.6	0
1132605	67247	BPH	20060621AAK	WIVG	FLINN BROADCASTING CORPORATION	C3	TUNICA	MS	CP	4.1	312	241	2	69	0
1107534	67247	BLH	20060119ACX	WIVG	FLINN BROADCASTING CORPORATION	C3	TUNICA	MS	LIC	9.5	227	241	2	69	0
163422	71647	BMLH	19910730KC	WMOD	WMOD, INC.	A	BOLIVAR	TN	LIC	3	223	244	1	69.2	0
639549	146955	BNPFT	20030317JIJ	NEW	RADIO ASSIST MINISTRY, INC.	D	WATER VALLEY	MS	APP	0.115	235.5	243	0	70	0
293573	50287	BLH	3172	WSEL-FM		A	PONTOTOC	MS	LIC	3	206	244	1	73.2	0
290147	54916	BLH	5591	WHRK		C1	MEMPHIS	TN	LIC	100	238	246	3	74.5	0
646163	152952	BNPFT	20030317JGP	NEW	RADIO ASSIST MINISTRY, INC.	D	BOONEVILLE	MS	APP	0.14	264.1	245	2	78.6	0
606976	63607	BLH	20020723AAB	KHLS	SUDBURY SERVICES, INC.	C1	BLYTHEVILLE	AR	LIC	100	207	242	1	129.7	0

