

## **Non-Interference Compliance**

Regarding Facility id 143146

Channel 231

### **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>
270724	BLH19980707KB	WFBQ	64.5	64.4
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>64.4</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 **64.4 dBμ**, this makes the proposed translator's worst-case interfering contour **104.4 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **184.2 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>43 m</b>
<b>Maximum ERP:</b>	<b>0.019 kW</b>
<b>Interfering Contour:</b>	<b>104.4 dBμ</b>
<b>Max Int. Contour Distance:</b>	<b>184.2 m</b>

# **Adjacent Channel Study** **For Station W285DM, Facility\_id: 143146**

## **Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1096738	59590	BXLH	20051110AGM	WFBQ	CAPSTAR TX LIMITED PARTNERSHIP	B	INDIANAPOLIS	IN	LIC	12.9	460	234	3	44.4	0.4514
586160	59590	BXLH	20011105ABK	WFBQ	CAPSTAR TX LIMITED PARTNERSHIP	B	INDIANAPOLIS	IN	LIC	36	432	234	3	54.7	0.4514
270724	59590	BLH	19980707KB	WFBQ	CAPSTAR TX LIMITED PARTNERSHIP	B	INDIANAPOLIS	IN	LIC	58	502	234	3	54.7	0.4514
1018290	157146	BNPFT	20030828BHV	W228BX	COVENANT NETWORK	D	GREENCASTLE	IN	CP	0.038	290	228	3	31.5	0
635293	143145	BNPFT	20030317FMC	NEW	RADIO ASSIST MINISTRY, INC.	D	BLOOMINGTON	IN	APP	0.01	425.7	231	0	33.8	0
632127	140717	BNPFT	20030317AXT	NEW	EDUCATIONAL MEDIA FOUNDATION	D	INDIANAPOLIS	IN	APP	0.027	296	228	3	39.5	0
294540	54600	BLH	3278	WREB		A	GREENCASTLE	IN	LIC	3	285	232	1	44.4	0
1104063	71438	BXLH	20051209AFT	WISG	INDY LICO, INC.	A	FISHERS	IN	LIC	0.5	373.5	230	1	51.3	0
631834	140489	BNPFT	20030317AWL	NEW	EDUCATIONAL MEDIA FOUNDATION	D	HOUSTON	IN	APP	0.01	347	233	2	54	0
632454	140954	BNPFT	20030314AKK	NEW	HORIZON CHRISTIAN FELLOWSHIP, INC.	D	ZIONSVILLE	IN	APP	0.027	345	228	3	56.6	0
989922	58380	BLH	20040427ABF	WQKC	S.C.I. BROADCASTING, INC.	B	SEYMOUR	IN	LIC	25	425	229	2	58.1	0
990943	71438	BLH	20040507AAE	WISG	INDY LICO, INC.	A	FISHERS	IN	LIC	2.95	393	230	1	59	0
683086	143143	BNPFT	20030828AUH	W231AT	RADIO ASSIST MINISTRY, INC.	D	BLOOMFIELD	IN	CP	0.013	287	231	0	63.3	0
637716	145173	BNPFT	20030314ANW	NEW	FRIENDS OF CHRISTIAN RADIO, INC.	D	CASTLETON	IN	APP	0.055	283	228	3	64.7	0
649259	155988	BNPFT	20030317FDV	NEW	THE TRUSTEES OF INDIANA UNIVERSITY	D	SEYMOUR	IN	APP	0.25	205	233	2	72.9	0
649023	155772	BNPFT	20030317GWB	NEW	KASPAR BROADCASTING CO, INC	D	NOBLESVILLE	IN	APP	0.25	259	232	1	76	0
605944	124827	BLL	20020612AEV	WVRG-LP	CALBARY CHAPEL OF CRAWFORDSVILLE, INC.	L1	CRAWFORDSVILLE	IN	LIC	0	272	230	1	77.2	0
637678	145145	BNPFT	20030314AOQ	NEW	FRIENDS OF CHRISTIAN RADIO, INC.	D	ARCADIA	IN	APP	0.038	325	232	1	83.6	0



