

Non-Interference Compliance

Regarding Facility id 147624

Channel 236

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.

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
256040	BLH19971024KA	WKML	80.2	80.2
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				80.2

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 **80.2 dBμ**, this makes the proposed translator's worst-case interfering contour **120.2 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **108.4 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.

Antenna Manufacturer:	FMD
Antenna Model:	GP-FM
CORAGL:	9 m
Maximum ERP:	0.25 kW
Interfering Contour:	120.2 dBμ
Max Int. Contour Distance:	108.4 m

Adjacent Channel Study **For Station W237BP, Facility_id: 147624**

Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
256040	37252	BLH	19971024KA	WKML	EASTERN NC LIC. LTD. PARTNERSHIP	C0	LUMBERTON	NC	LIC	100	368	239	3	31.9	1.4918
682564	147622	BNPFT	20030827ADQ	W237BQ	EDGEWATER BROADCASTING, INC.	D	FAIRMONT	NC	CP	0.019	124	237	1	37	0
1081312	145202	BMPFT	20050829ACV	W237CM	EDUCATIONAL INFORMATION CORPORATION	D	FAYETTEVILLE	NC	CP MOD	0.01	253	237	1	56.4	0
683895	147999	BNPFT	20030829AYU	W237BK	EDGEWATER BROADCASTING, INC.	D	MARION	SC	CP	0.019	113	237	1	63.7	0
194632	3117	BLFT	19940203TD	W237AS	ROOT COMMUNICATIONS LICENSE COMPANY, L.	D	FLORENCE	SC	LIC	0.08	75	237	1	69.5	0
682561	147628	BNPFT	20030827ADL	W237BO	EDGEWATER BROADCASTING, INC.	D	TABOR CITY	NC	CP	0.013	110	237	1	81.8	0
616975	131603	BLL	20021021ADG	WHEZ-LP	LIGHTHOUSE GOSPEL NETWORK	L1	HARTSVILLE	SC	LIC	0	116	237	1	83.2	0
667549	57036	BLH	20021016AAD	WVCO	GEO BROADCASTING GROUP	C3	LORIS	SC	LIC	11	160	235	1	100.5	0
876316	29140	BLH	20040112ADC	WICI-FM	MILLER COMMUNICATIONS, INC.	C3	SUMTER	SC	LIC	8.1	222	234	2	107.7	0
159206	9076	BLH	19910411KB	WQDR	CAROLINA MEDIA GROUP, INC.	C	RALEIGH	NC	LIC	95	603	234	2	129.9	0
113682	5164	BLH	19880606KB	WHPE-FM	BIBLE BROADCASTING NETWORK, INC.	C1	HIGH POINT	NC	LIC	100	399	238	2	143.4	0

Intermediate Frequencies (53 and 54 channels difference):

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
1125585	60881	BPH	20060411AAL	WGQR	CHRISTIAN LISTENING NETWORK, INC.	C3	ELIZABETHTOWN	NC	CP	7.7	211.8	289	53	54.9	42.9
1099775	60881	BLH	20051222ABM	WGQR	SOUND BUSINESS OF ELIZABETHTOWN, INC.	A	ELIZABETHTOWN	NC	LIC	4.3	146	289	53	71.2	61.2

