

Non-Interference Compliance

Regarding Facility id 151761

Channel 224

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.

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
1082375	BMLH20050831ADG	WDEF-FM	86.4	86
1263294	BLH20080828AAD	WSAA	71.1	70.1
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				70.1

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 **70.1 dBμ**, this makes the proposed translator's worst-case interfering contour **110.1 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **219.3 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:	TEL
Antenna Model:	ANT90D
CORAGL:	61 m
Maximum ERP:	0.1 kW
Interfering Contour:	110.1 dBμ
Max Int. Contour Distance:	219.3 m

Adjacent Channel Study **For Station W224AZ, Facility_id: 151761**

Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1263294	63493	BLH	20080828AAD	WSAA	WSAA LLC	A	BENTON	TN	LIC	3.5	390	226	2	14.2	0.5967
1082375	57827	BMLH	20050831ADG	WDEF-FM	JACKSON TELECASTERS, INC.	C0	CHATTANOOGA	TN	LIC	97	743	222	2	28.7	0.5967
1186357	77270	BLFT	20070522ABR	W227AK	J.L. BREWER BROADCASTING, L.L.C.	D	CHATTANOOGA	TN	LIC	0.13	332	227	3	27.6	0
1251510	70637	BLH	20080428ABW	WIJV	PROGRESSIVE MEDIA INC.	A	HARRIMAN	TN	LIC	2.65	450	224	0	94.4	0
1058536	28335	BLFT	20050420ABJ	W221AW	IMMANUEL BROADCASTING NETWORK	D	NORTH CANTON	GA	LIC	0.01	602	221	3	108.1	0
1193595	147653	BLFT	20070726AAQ	W223BE	MIDDLE TENNESSEE STATE UNIVERSITY	D	BLUHMTOWN	TN	LIC	0.01	641	223	1	117.4	0
155598	29741	BLH	19901218KA	WCYQ	JOURNAL BROADCAST CORPORATION	A	KARNS	TN	LIC	2.4	450	226	2	126.2	0
1226505	65223	BLH	20071228ABT	WWFF-FM	CUMULUS LICENSING LLC	C2	NEW MARKET	AL	LIC	14.5	511.5	227	3	153.3	0
1236158	13805	BMLH	20080226ABQ	WZGC	CBS RADIO INC. OF ATLANTA	C1	ATLANTA	GA	LIC	64	612.3	225	1	162.6	0
1139558	13805	BXLH	20060711ABN	WZGC	CBS RADIO INC. OF ATLANTA	C1	ATLANTA	GA	LIC	39	528.9	225	1	167.7	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
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