

## **Non-Interference Compliance**

Regarding Facility id 148961

Channel 223

### **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.

Page 5 of this exhibit is a high resolution aerial photo of the vicinity surrounding the proposed translator's tower site provided by the U.S. Geological Survey's National Aerial Photography Program. It has been included to provide clarification of the nature of the buildings in the vicinity.

**Note: The quadrangle and aerial photo indicate the presence of county roads in the area of interference. It is apparent that these are not major roads, e.g. interstate highways, as described in the Living Way decision. The zone of predicted interference extends 81.4m from the proposed transmit site. The nearest buildings are 98m away to the south east on Sweetsprings Drive, so 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.**

## 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
1236158	BMLH20080226ABQ	WZGC	79.5	79.5
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>79.5</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 **79.5 dBμ**, this makes the proposed translator's worst-case interfering contour **119.5 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **81.4 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").

**Note: The quadrangle and aerial photo indicate the presence of county roads in the area of interference. It is apparent that these are not major roads, e.g. interstate highways, as described in the Living Way decision. The zone of predicted interference extends 81.4m from the proposed transmit site. The nearest buildings are 98m away to the south east on Sweetsprings Drive, so 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>SHI</b>
<b>Antenna Model:</b>	<b>6812B</b>
<b>CORAGL:</b>	<b>37 m</b>
<b>Maximum ERP:</b>	<b>0.12 kW</b>
<b>Interfering Contour:</b>	<b>119.5 dBμ</b>
<b>Max Int. Contour Distance:</b>	<b>81.4 m</b>

# Adjacent Channel Study For Station W221CG, Facility\_id: 148961

## Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCMSL	Channel	Adj	Dist	Overlap
1236158	13805	BMLH	20080226ABQ	WZGC	CBS RADIO INC. OF ATLANTA	C1	ATLANTA	GA	LIC	64	612.3	225	2	31.5	0.7161
1139558	13805	BXLH	20060711ABN	WZGC	CBS RADIO INC. OF ATLANTA	C1	ATLANTA	GA	LIC	39	528.9	225	2	32.7	0.7161
249477	83640	BLFT	19970707TI	W222AF	IMMANUEL BROADCASTING NETWORK	D	MARIETTA	GA	LIC	0.01	433	222	1	20.8	0
572425	11675	BLER	20010712ACT	WCLK	CLARK ATLANTA UNIVERSITY	A	ATLANTA	GA	LIC	6	372	220	3	26.5	0
1283014	11675	BPED	20081024ABB	WCLK	CLARK ATLANTA UNIVERSITY	A	ATLANTA	GA	CP	2.5	372	220	3	26.5	0
93837	9118	BLH	19861029KC	WBTR-FM	WYAI, INC.	A	CARROLLTON	GA	LIC	0.58	498	221	2	42.3	0
212335	67214	BLFT	19950802TO	W221AZ	TOCCOA FALLS COLLEGE	D	LILBURN	GA	LIC	0.027	372	221	2	47.1	0
1058536	28335	BLFT	20050420ABJ	W221AW	IMMANUEL BROADCASTING NETWORK	D	NORTH CANTON	GA	LIC	0.01	602	221	2	52.2	0
606623	122281	BNPFT	20000119ABC	NEW	FAITH PLEASES GOD CHURCH CORP.	D	HELSTON	GA	APP	0.013	336	220	3	55.5	0
1140087	61617	BLH	20060714AAC	WEKS	LEGACY MEDIA - SOUTH ATLANTA, LLC	C3	ZEBULON	GA	LIC	12	380	223	0	77.3	0
93836	18179	BLH	19861029KB	WJGA-FM	EARNHART BROADCASTING CO., INC.	A	JACKSON	GA	LIC	2.15	304	221	2	89.7	0
620636	4300	BLER	20021209AAG	WLJS-FM	BOARD OF TRUSTEES, JACKSONVILLE STATE	A	JACKSONVILLE	AL	LIC	0.61	572	220	3	97.3	0
1223071	6479	BLH	20071022BXC	WMOQ	BOSTWICK BROADCASTING GROUP, INC.	A	BOSTWICK	GA	LIC	3	324	222	1	104.2	0
1082375	57827	BMLH	20050831ADG	WDEF-FM	JACKSON TELECASTERS, INC.	C0	CHATTANOOGA	TN	LIC	97	743	222	1	157.5	0

## Intermediate Frequencies (53 and 54 channels difference):

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCMSL	Channel	Adj	Dist	Clr
1235804	63776	BMLH	20080222ADZ	WVEE	CBS RADIO EAST INC.	C0	ATLANTA	GA	LIC	100	594	277	54	32.7	7.7
1163684	63776	BXMLH	20061207AAR	WVEE	CBS RADIO EAST INC.	C0	ATLANTA	GA	LIC	95	524	277	54	32.7	7.7
641708	148874	BNPFT	20030314CKD	NEW	ALABAMA CHRISTIAN RADIO INC	D	ATLANTA JUNCTION	GA	APP	0.25	213	276	53	65.1	55.1





