

## **Non-Interference Compliance**

Regarding Facility id 150999

Channel 244

### **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 an aerial photo of the vicinity surrounding the proposed translator's tower site.

**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 354.8m from the proposed transmit site. The nearest building is a barn 357m to the northeast, 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
1311860	BLH20090512AAA	WWMG	81.5	79.8
169274	BLH19920130KA	WQKS-FM	69.9	69.9
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>69.9</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 **69.9 dBμ**, this makes the proposed translator's worst-case interfering contour **109.9 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **354.8 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 354.8m from the proposed transmit site. The nearest building is a barn 357m to the northeast, 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.**

Antenna Manufacturer: ALC  
Antenna Model: GP-FM(5/8)  
CORAGL: 9 m  
Maximum ERP: 0.25 kW  
Interfering Contour: 109.9 dBμ  
Max Int. Contour Distance: 354.8 m

# **Adjacent Channel Study** **For Station W244CN, Facility\_id: 150999**

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

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCMSL	Channel	Adj	Dist	Overlap
1311860	8662	BLH	20090512AAA	WWMG	CAPSTAR TX LLC	C3	MILLBROOK	AL	LIC	5.4	273	246	2	11.7	1.4918
169274	43628	BLH	19920130KA	WQKS-FM	BLUEWATER BROADCASTING COMPANY LLC	A	MONTGOMERY	AL	LIC	0.9	306	241	3	15.8	1.4918
639259	146669	BNPFT	20030317BXL	NEW	RADIO ASSIST MINISTRY, INC.	D	TROY	AL	APP	0.01	298	243	1	55.1	0
643973	150905	BNPFT	20030317BWL	NEW	RADIO ASSIST MINISTRY, INC.	D	LUVERNE	AL	APP	0.01	223.7	247	3	58.7	0
638741	146167	BNPFT	20030317CSI	NEW	RADIO ASSIST MINISTRY, INC.	D	LUVERNE	AL	APP	0.01	242.3	242	2	63.2	0
1340395	150072	BLFT	20091030AAB	W242BW	ALEXANDER BROADCASTING COMPANY, LLC	D	SELMA	AL	LIC	0.21	143	242	2	75.4	0
1182079	150897	BLFT	20070418ABB	W245AU	FAITH BROADCASTING, INC.	D	THORSBY	AL	LIC	0.019	264	245	1	84.9	0
1250887	146140	BLFT	20080617ACT	W242AX	LAYTON ENVIRONMENTAL ENGINEERING	D	AUBURN	AL	LIC	0.013	249	242	2	86.1	0
260293	22877	BLH	19980112KC	WMXA	QANTUM OF AUBURN LICENSE COMPANY, LLC	A	OPELIKA	AL	LIC	3.5	316	244	0	95.3	0
1127658	76747	BLH	20060414AAT	WKXK	AUTAGAVILLE RADIO, INC.	C2	PINE HILL	AL	LIC	41	218	244	0	122.4	0
624912	2111	BMLH	20030207AAL	WMJJ	CAPSTAR TX LLC	C0	BIRMINGHAM	AL	LIC	100	494	243	1	145.2	0
1065233	2111	BXLH	20050527BJG	WMJJ	CAPSTAR TX LLC	C0	BIRMINGHAM	AL	LIC	32	419	243	1	145.2	0
1144806	25575	BLH	20060912ABV	WDJR	GULF SOUTH COMMUNICATIONS, INC.	C0	ENTERPRISE	AL	LIC	100	353.9	245	1	154.9	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
1354411	150877	BLFT	20100125AAD	W298BC	ALLAN G. STROH	D	MONTGOMERY	AL	LIC	0.25	180	298	54	15.8	5.8

STATE OF ALABAMA  
GEOLOGICAL SURVEY OF ALABAMA





