

## **Non-Interference Compliance**

Regarding Facility id 149547

Channel 261

### **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.

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 which extends 447.4m from the proposed transmit site. It is apparent that these are not major roads, e.g. interstate highways, as described in the Living Way decision. The nearest buildings are 775m away and are outside the zone of interference 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**

### 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
1268931	BMLH20081014AAT	WXST	68.4	68.1
1279967	BPH20081125APC	WALC	63.25	63.25
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>63.25</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 **63.25 dBμ**, this makes the proposed translator's worst-case interfering contour **103.25 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **447.4 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.

**Note: The quadrangle and aerial photo indicate the presence of county roads in the area of interference which extends 447.4m from the proposed transmit site. It is apparent that these are not major roads, e.g. interstate highways, as described in the Living Way decision. The nearest buildings are 775m away and are outside the zone of interference 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

Antenna Manufacturer: TEL  
Antenna Model: ANT90D  
CORAGL: 21 m  
Maximum ERP: 0.085 kW  
Interfering Contour: 103.2 dBμ  
Max Int. Contour Distance: 447.4 m

# **Adjacent Channel Study** **For Station W261AJ, Facility\_id: 149547**

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

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCMSL	Channel	Adj	Dist	Overlap
1279967	72377	BPH	20081125APC	WALC	RADIO TRAINING NETWORK, INC.	C3	CHARLESTON	SC	CP	25	84.4	263	2	28.4	0.5072
1268931	3969	BMLH	20081014AAT	WXST	APEX BROADCASTING, INC.	C1	HOLLYWOOD	SC	LIC	70	239	259	2	45.9	0.5072
1289731	72377	BMLD	20090128ACF	WALC	RADIO TRAINING NETWORK, INC.	C3	CHARLESTON	SC	LIC	13.5	137.2	263	2	45.9	0
661050	131441	BLL	20030513ABC	WSCM-LP	FIRST BAPTIST CHURCH	L1	MONCKS CORNER	SC	LIC	0	39	261	0	61.2	0
179879	11643	BLH	19921214KB	WORG	GARRIS COMMUNICATIONS, INC	C3	ELLOREE	SC	LIC	25	140	262	1	80.7	0
1136047	54805	BPH	20060403BJT	WSSJ	TAMA RADIO LICENSES OF SAVANNAH, GA, INC	C1	RINCON	GA	CP	100	143.3	261	0	88.6	0
1126171	54805	BLH	20060419AAG	WSSJ	TAMA RADIO LICENSES OF SAVANNAH, GA, INC	C2	RINCON	GA	LIC	50	157	261	0	95.7	0





