

[Exhibit 12]

## **Non-Interference Compliance**

Regarding Facility id 138625

Channel 245

### **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.

**Note: The quadrangle indicates the presence of a several highways in the area of interference. These are not interstate highways, as described in the Living Way decision and therefore "lack of population" is demonstrated.**

### 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
1001803.	BXLH20041229AAU	WFLC	78.9	78.9
1001807	BXLH20050114AED	WPOW	78.9	78.9
1047735	BLH20050224ABL	WFLC	83.8	83.8
1047869	BLH20050301ACH	WPOW	83.8	83.8

Minimum F(50,50) Contour of Adjacent Station within  
Proposed Translator's Standard Interfering Contour **78.9**

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 **78.9 dBμ**, this makes the proposed translator's worst-case interfering contour **118.9 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **71.2 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.

**Note: The quadrangle indicates the presence of a several highways in the area of interference. These are not interstate highways, as described in the Living Way decision and therefore "lack of population" is demonstrated.**

**Antenna Manufacturer:** SCA  
**Antenna Model:** GP-FM  
**CORAGL:** 37 m  
**Maximum ERP:** 0.08 kW  
**Interfering Contour:** 118.9 dBμ  
**Max Int. Contour Distance:** 71.2 m

# **Adjacent Channel Study** **For Station W245BC, Facility\_id: 138625**

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

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1047735	72984	BLH	20050224ABL	WFLC	COX RADIO, INC.	C	MIAMI	FL	LIC	98	308	247	2	25.7	0.4774
1047869	73893	BLH	20050301ACH	WPOW	WPOW LICENSE LIMITED PARTNERSHIP	C	MIAMI	FL	LIC	98	308	243	2	25.7	0.4774
1001803	72984	BXLH	20041229AAU	WFLC	COX RADIO, INC.	C	MIAMI	FL	LIC	66.54	215	247	2	25.7	0.4774
1001807	73893	BXLH	20050114AED	WPOW	WPOW LICENSE LIMITED PARTNERSHIP	C	MIAMI	FL	LIC	65.73	215	243	2	25.7	0.4774
997362	144438	BNPFT	20030829BAN	W245BF	FLORIDA INTERNATIONAL UNIVERSITY	D	NORTH MIAMI	FL	CP	0.099	25	245	0	32.6	0
874598	153406	BNPFT	20030827AOO	W245AY	R & L NON-COMM	D	PALM SPRINGS	FL	CP	0.055	63	245	0	48.5	0
651951	158336	BNPFT	20030317MXC	NEW	CIRCUITWERKES, INC.	D	WEST PALM BEACH	FL	APP	0.13	35	242	3	55.8	0
1058736	139096	BMPFT	20050422AAT	W244BK	REACH COMMUNICATIONS, INC.	D	TWENTYMILE BEND	FL	CP MOD	0.01	156	244	1	60.8	0
630817	139760	BNPFT	20030314BQP	NEW	CAPSTAR TX LIMITED PARTNERSHIP	D	JUPITER	FL	APP	0.25	33	242	3	81.6	0
629020	138531	BNPFT	20030313AIM	NEW	CALVARY CHAPEL CHURCH, INC.	D	JUPITER	FL	APP	0.17	35	242	3	81.6	0



