

[Exhibit 12]

Non-Interference Compliance

Regarding FCC File Number: BNPFT-20030317DDE

Description of Exhibit 12 Contents

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all the applicable rule sections and that this application for a construction permit is in full compliance with 47 CFR 74.1204.

Page 2 of this exhibit is an explanation of the tabulated data, which is included as evidence on page 5 of this exhibit.

Pages 3 and 4 of this exhibit contain an explanation of the method used to demonstrate compliance with contour overlap and interference protection provisions based on 47 CFR 74.1204(d), which states:

"an 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."

In addition, page 4 includes a tabulation of the second and third adjacent stations which this application is required to protect and the field strengths of those stations in the vicinity of the proposed translator. The field strengths given were based on contours predicted using FCC contour algorithms and 3 arc second terrain data.

Let it be noted that should any actual real world interference occur, the applicant certifies that it will promptly suspend operation of this translator in accordance with 47 CFR 74.1203.

Page 5 of this exhibit is the tabulated data from the interference analysis, which shows all stations that this application had to consider for contour protection. These tabulated values were generated using high resolution 3 arc second terrain data for the best possible accuracy.

Page 6 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 min quadrangle at full scale with the calculated area of interference overlayed. 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 a free-space calculation (see FCC 98-117, Appendix A, pg. 41 for reference to the equation used).

Page 7 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.

Explanation of Frequency Finder Results

The interference analysis for this application was performed using the "Frequency Finder" module in RadioSoft's Comstudy, version 2.2.

Frequency Finder analyzes data taken directly from the FCC's FM database and looks for prohibited overlap with contours of adjacent stations and prohibited proximity to stations 53 or 54 channels from the proposed station (IF) using 3 arc second terrain data and the FCC's contour algorithms. The results tabulated are the stations returned from that analysis. (Note: Because Comstudy was looking at the FCC's FM database, it took into account the proposed translator when doing the analysis and returned it in the tabulated results. For the sake of simplicity, that record has been deleted from all tabulated results.)

The first several columns of the table are self-explanatory. They give various data on the stations in question. The column labeled "Clr" gives the proposed translator's "clearance" with respect to the tabulated station, either in dB or km. The values listed with no units are given in km and are for stations located on an IF to the proposed site's channel.

A negative value in the "Clr" column does NOT necessarily represent prohibited contour overlap, as explained below.

A negative value listed in the "Clr" column would indicate either overlap of interference and protected contours or prohibited proximity to an IF station except in the following situations:

- Since the proposed station's Effective Radiated Power (ERP) is 37 watts, a negative value in km (no units listed in the table) does not represent a violation of the CFR, according to 47 CFR 1204(g), which states that "FM translator stations and booster stations operating with less than 100 watts ERP will be treated as class D stations and will not be subject to intermediate frequency separation requirements."

- A second or third adjacent LP100 station cannot represent a violation of the CFR, as 47 CFR 74.1204(a)(4) requires protection of only co-channel and first adjacent LP100 stations.

- 47 CFR 74.1204(a) requires only the protection of "AUTHORIZED commercial or noncommercial educational FM broadcast stations, FM translators, ..." Any entry with a status listed as "RSV," "USE" or "APP" does not represent an authorized station and therefore is not protected under 47 CFR 74.1204. The one exception is the case of LP100 applications. The note to 47 CFR 74.1204(a)(4) states that "LPFM applications and permits that have not yet been licensed must be considered as operating with the maximum permitted facilities." Therefore, any first adjacent or co-channel LP100 station, no matter the status, is protected.

- Entries highlighted in red are those stations where there is overlap of predicted contours and lack of population has been demonstrated within the area of interference.

Compliance with 47 CFR 74.1204(d)

The proposed translator's Maximum Effective Radiated Power (ERP) is 0.037kW at 64 meters above ground level. According to 47 CFR, 74.1204(a), the desired to undesired ratio between 2nd/3rd adjacent stations is 40dB, making the proposed translator's interfering contour 103.8dBu F(50,10). (See the next page for more discussion on the determination of the signal strength of the proposed translator's area of interference.)

Using a free-space calculation (equation referenced in FCC 98-117, Appendix A, pg. 41), the proposed translator's F(50,10) interference contour was calculated and the maximum horizontal plane was plotted on the pertinent portion of a USGS quadrangle (page 6 of this exhibit). However, the field strength of the proposed translator's antenna varies with angle of depression from horizontal. The antenna relative fields are tabulated below at 5 degree increments, starting at 5 degrees below horizontal. Antenna relative field strength data was provided and certified by the manufacturer of the proposed antenna. Using a free space calculation that neglects any loss due to reflection (equation referenced in FCC 98-117, Appendix A, pg. 41), the vertical ground clearance of the proposed application's F(50,10) interference contour at each angle has been tabulated. As shown below, the area of interference clears the ground by 6.1 meters at the lowest point. The applicant has taken into account USGS quadrangles and relevant aerial photography in stating that no structures, except possibly tower support structures, puncture the proposed area of interference. Hence, in accordance with 47 CFR 74.1204(d) and the clarification provided by the FCC in the decision Re: Living Way Ministries (FCC 02-244), there is a lack of population within the proposed area of interference and therefore this application is in full compliance with 47 CFR 74.1204.

Antenna Manufacturer: SWR

Maximum ERP: 37 watts

Antenna Model Number: 3FM1-0.5

CORAGL: 64 m

F(50,10) Contour: 103.8 dBu

Depression Angle (from COR)	Antenna Relative Field	ERP (watts)	Distance to F(50,10) Interfering Contour from Antenna (m)	Horizontal Distance of F(50,10) Interfering Contour from Tower (m)	Vert. Clearance of F(50,10) Interfering Contour above TGL (m)
5	0.972	34.96	267.8	266.8	40.7
10	0.891	29.37	245.5	241.7	21.4
15	0.767	21.77	211.3	204.1	9.3
20	0.615	13.99	169.4	159.2	6.1
25	0.452	7.56	124.5	112.9	11.4
30	0.293	3.18	80.7	69.9	23.6
35	0.151	0.84	41.6	34.1	40.1
40	0.035	0.05	9.6	7.4	57.8
45	0.052	0.10	14.3	10.1	53.9
50	0.109	0.44	30.0	19.3	41.0
55	0.141	0.74	38.8	22.3	32.2
60	0.151	0.84	41.6	20.8	28.0
65	0.146	0.79	40.2	17.0	27.5
70	0.131	0.63	36.1	12.3	30.1
75	0.11	0.45	30.3	7.8	34.7
80	0.085	0.27	23.4	4.1	40.9
85	0.059	0.13	16.3	1.4	47.8
90	0.033	0.04	9.1	0.0	54.9

Minimum F(50,10) Clearance above TGL **6.1 m**

The F(50,50) signal strength of all relevant second and third adjacent stations have been examined, and are tabulated below. Column three shows the station's signal level at the proposed translator's tower site, and column four gives the minimum value within the entire proposed translator's standard F(50,10) contour (100 dBu for most classes, 94 dBu for class B's, 97 dBu for class B1's). For signal levels too great to determine, 999 was entered. The minimum F(50,50) contour within the proposed translator's standard F(50,10) contour was used to calculate the proposed translator's interference contour, thereby assuring a minimum undesired-to-desired ratio of 40dB for all relevant adjacent stations, as required in 47 CFR, 74.1204(a).

FCC File Number	Call Sign	F(50,50) Contour at Tower	Min. F(50,50) Contour
BXPH20020422AAA	WAPE-FM	64.1dBu	63.8dBu
BLH19881109KA	WEJZ	74.8dBu	74.5dBu
BXLH20020422AAC	WAPE-FM	64.1dBu	63.8dBu
Minimum F(50,50) Protected Contour of Adjacent Station Within Proposed Application's Standard F(50,10) Contour:			63.8dBu

Frequency Finder Results

Callsign	State	City	Channel	ERP_w	Licensee	ARN	Class	Status	Distance_km	Clr	Facility_id
WEJZ	FL	JACKSONVILLE	241	100000	RENDA BROADCASTING CORP. OF NEVADA	BPH20030409ABF	C	APP	40.51	-19.13 dB	55706
WEJZ	FL	JACKSONVILLE	241	100000	RENDA BROADCASTING CORP. OF NEVADA	BLH19881109KA	C	LIC	40.51	-15.24 dB	55706
WAPE-FM	FL	JACKSONVILLE	236	100000	COX RADIO, INC.	BLH19881114KA	C	LIC	40.51	-15.24 dB	70863
WAPE-FM	FL	JACKSONVILLE	236	100000	COX RADIO, INC.	BLH19960111KI	C	LIC	40.51	-13.92 dB	70863
WAPE-FM	FL	JACKSONVILLE	236	100000	COX RADIO, INC.	BXLH20020422AAC	C	LIC	49.1	-4.48 dB	70863
WAPE-FM	FL	JACKSONVILLE	236	100000	COX RADIO, INC.	BXPH20020422AAA	C	CP	49.1	-4.48 dB	70863
WAPE-FM	FL	JACKSONVILLE	236	100000	COX RADIO, INC.	BMLH19940317KC	C	LIC	49.18	-4.44 dB	70863
NEW	FL	JACKSONVILLE	239	10	RADIO ASSIST MINISTRY INC.	BNPFT20030317DED	D	APP	40.5	0.55 dB	151762
NEW	FL	JACKSONVILLE BE	239	80	RADIO ASSIST MINISTRY INC.	BNPFT20030317DEI	D	APP	44.35	7.26 dB	151770
NEW	GA	BRUNSWICK	239	250	LIGHTHOUSE CHRISTIAN BROADCASTING CORP.	BNPFT20030313AIK	D	APP	60.36	10.77 dB	141780
NEW	GA	BRUNSWICK	239	55	BIBLE BROADCASTING NETWORK, INC.	BNPFT20030317ACU	D	APP	59.91	12.96 dB	140271
NEW	FL	JACKSONVILLE	238	10	RADIO ASSIST MINISTRY INC.	BNPFT20030317DEB	D	APP	40.5	14.55 dB	151753
NEW	FL	LAKESIDE	239	13	RADIO ASSIST MINISTRY INC.	BNPFT20030317DFB	D	APP	72.21	15.97 dB	151785
WKBX	GA	KINGSLAND	292	6000	RADIO KINGS BAY, INC.	BLH19960111KA	A	LIC	27.05	17.1	54649
WKBX	GA	KINGSLAND	292	0	RADIO KINGS BAY, INC.		A	USE	27.05	17.1	54649
NEW	FL	NASSAU VILLAGE-I	238	27	RADIO ASSIST MINISTRY INC.	BNPFT20030317DGD	D	APP	38.87	19.79 dB	151793
NEW	FL	JACKSONVILLE BE	238	27	RADIO ASSIST MINISTRY INC.	BNPFT20030317DDY	D	APP	41.71	20.54 dB	151749
NEW	FL	LAKE FOREST	238	27	EDUCATIONAL MEDIA FOUNDATION	BNPFT20030314AAZ	D	APP	41.31	20.43 dB	140711
NEW	FL	JACKSONVILLE	238	19	CALVARY CHAPEL OF TWIN FALLS, INC.	BNPFT20030310BAA	D	APP	43.88	21.98 dB	139252
WIXV	GA	SAVANNAH	238	98000	CUMULUS LICENSING CORP.	BPH20020930ABB	C1	CP	156.45	25.80 dB	54799
WIXV	GA	SAVANNAH	238	100000	CUMULUS LICENSING CORP.	BLH19870414KO	C1	LIC	156.48	26.76 dB	54799
NEW	GA	BRUNSWICK	240	80	RADIO TRAINING NETWORK, INC.	BNPFT20030317AYL	D	APP	61.35	26.67 dB	152922
WQPW	GA	VALDOSTA	239	36000	RTG RADIO, LLC	BLH20020425ABP	C2	LIC	159.05	28.05 dB	41336
WHOG-FM	FL	ORMOND-BY-THE-S	239	25000	BLACK CROW RADIO, LLC	BLH19951109KE	C3	LIC	161.1	30.90 dB	24365
NEW	FL	LAKESIDE	238	10	RADIO ASSIST MINISTRY INC.	BNPFT20030317DEY	D	APP	72.21	31.10 dB	151778
WBGB	FL	PONTE VEDRA BEA	293	6000	CONCORD MEDIA GROUP, INC.	BLH19960726KA	A	LIC	42.83	32.8	28894
WAPE-FM	FL	JACKSONVILLE	236	0	COX RADIO, INC.		C	USE	40.51	32.34 dB	70863
WEJZ	FL	JACKSONVILLE	241	0	RENDA BROADCASTING CORP. OF NEVADA		C	USE	40.51	32.34 dB	55706
WERF-LP	FL	GAINESVILLE	239	100	FLORIDA EDUCATIONAL BROADCASTING, INC.	BNPL20010615APY	LP100	CP	147.69	34.49 dB	134753
WQPW	GA	VALDOSTA	239	0	RTG RADIO, LLC		C2	USE	146.09	35.37 dB	41336
WQPW	GA	VALDOSTA	239	3000	RTG RADIO, LLC	BXPH20020320ADA	C2	CP	177.65	37.40 dB	41336
NEW	GA	ST. SIMONS ISLAN	242	250	FRIENDS OF ST. SIMONS RADIO	BNPFT20030317LON	D	APP	59.87	38.78 dB	157116
870506MH	FL	PONTE VEDRA BEA	293	0	CHAMELEON BROADCASTING, INC.		A	USE	48.72	38.7	10111



ARN: BNPFT-20030317DDE F(50,10)



-81.4561

30.6508

30.6508

-81.4561

USGS