

[Exhibit 12]

Non-Interference Compliance

Regarding FCC File Number: BNPFT-20030317CVS

Channel: 242

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).

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 55 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 0.055kW at 116 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 103.5dBu 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 42.9 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: 55 watts

Antenna Model Number: 3FM1-0.5

CORAGL: 116 m

F(50,10) Contour: 103.5 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	51.96	337.9	336.7	86.5
10	0.891	43.66	309.8	305.1	62.2
15	0.767	32.36	266.7	257.6	47.0
20	0.615	20.80	213.8	200.9	42.9
25	0.452	11.24	157.2	142.4	49.6
30	0.293	4.72	101.9	88.2	65.1
35	0.151	1.25	52.5	43.0	85.9
40	0.035	0.07	12.2	9.3	108.2
45	0.052	0.15	18.1	12.8	103.2
50	0.109	0.65	37.9	24.4	87.0
55	0.141	1.09	49.0	28.1	75.8
60	0.151	1.25	52.5	26.2	70.5
65	0.146	1.17	50.8	21.5	70.0
70	0.131	0.94	45.5	15.6	73.2
75	0.11	0.67	38.2	9.9	79.1
80	0.085	0.40	29.6	5.1	86.9
85	0.059	0.19	20.5	1.8	95.6
90	0.033	0.06	11.5	0.0	104.5

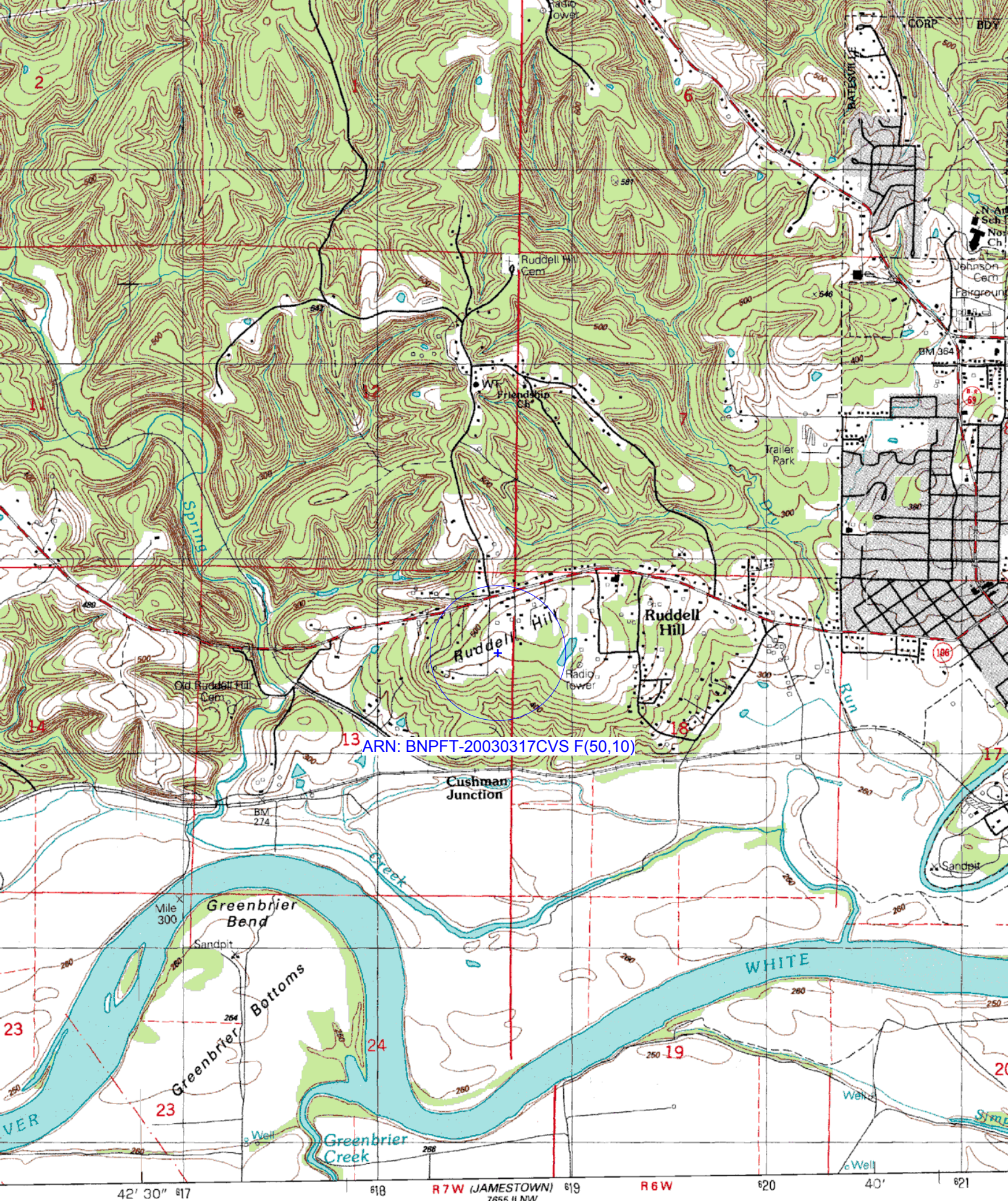
Minimum F(50,10) Clearance above TGL **42.9 m**

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
BLH19971020KD	KOKR	63.9dBu	63.5dBu
Minimum F(50,50) Protected Contour of Adjacent Station Within Proposed Translator's standard F(50,10) Contour:			63.5dBu

Frequency Finder Results

Callsign	State	City	Channel	ERP_w	Licensee	ARN	Class	Status	Distance_km	Clr	Facility_id
KOKR	AR	NEWPORT	244	40000	NEWPORT BROADCASTING COMPANY	BLH19971020KD	C2	LIC	39.07	-4.42 dB	48743
NEW	AR	SEARCY	242	62	RADIO ASSIST MINISTRY, INC	BNPFT20030317DAO	D	APP	53.6	2.16 dB	146194
KBZR	AR	HARRISBURG	240	50000	CLEAR CHANNEL BROADCASTING LICENSES, INC.	BPH20000719ABQ	C2	CP	81.13	11.91 dB	51923
KBZR	AR	HARRISBURG	240	50000	CLEAR CHANNEL BROADCASTING LICENSES, INC.	BMPH20020313ABB	C2	APP	80.91	12.16 dB	51923
KBZR	AR	HARRISBURG	240	34000	CLEAR CHANNEL BROADCASTING LICENSES, INC.	BPH20030130ADR	C2	APP	81.13	13.68 dB	51923
KBZR	AR	HARRISBURG	240	34000	CLEAR CHANNEL BROADCASTING LICENSES, INC.	BMPH20020313ABB	C2	APP	80.91	13.84 dB	51923
KSSN	AR	LITTLE ROCK	239	92000	CLEAR CHANNEL BROADCASTING LICENSES, INC.	BLH19831117BH	C	LIC	130.58	15.37 dB	61363
NEW	AR	BRINKLEY	242	250	RADIO ASSIST MINISTRY, INC	BNPFT20030317CWH	D	APP	104.56	15.80 dB	146181
NEW	AR	SALEM	241	250	RADIO 74 INTERNATIONALE	BNPFT20030317MQB	D	APP	68.48	16.19 dB	148505
KHLS	AR	BLYTHEVILLE	242	100000	SUDBURY SERVICES, INC.	BLH20020723AAB	C1	LIC	163.91	22.96 dB	63607
KCWD	AR	HARRISON	241	8000	HARRISON RADIO STATIONS, INC.	BLH19910116KA	C2	LIC	127.05	25.30 dB	26242
KBZR	AR	HARRISBURG	240	6000	CLEAR CHANNEL BROADCASTING LICENSES, INC.	BLH19990608KD	A	LIC	91.3	28.75 dB	51923
NEW	MO	THAYER	241	75	EDUCATIONAL MEDIA FOUNDATION	BNPFT20030314BLG	D	APP	90.17	28.17 dB	140025
NEW	MO	WEST PLAINS	241	250	COMMUNITY BROADCASTING, INC.	BNPFT20030312AYS	D	APP	103.16	29.97 dB	140390
KUPH	MO	MOUNTAIN VIEW	245	50000	CENTRAL OZARK RADIO NETWORK, INC.	BLH19900430KC	C2	LIC	135.39	29.30 dB	29625
KHLS	AR	BLYTHEVILLE	242	0	SUDBURY SERVICES, INC.		C1	USE	164.89	33.99 dB	63607
KTG	AR	MENA	242	47000	PEARSON BROADCASTING OF MENA INC	BLH19941216KA	C1	LIC	237.96	34.19 dB	71487
KOKR	AR	NEWPORT	244	0	NEWPORT BROADCASTING COMPANY		C2	USE	42.95	35.19 dB	48743
KHTE-FM	AR	ENGLAND	243	10500	ABG ARKANSAS, LLC	BLH19960307KB	C3	LIC	149.2	36.55 dB	40746
KHTE-FM	AR	ENGLAND	243	10500	ABG ARKANSAS, LLC	BLH19960307KB	C3	LIC	149.2	36.55 dB	40746
KSPW	MO	SPARTA	243	50000	JOURNAL BROADCAST CORPORATION	BLH19930208KE	C2	LIC	194.46	37.91 dB	10119
KWLR	AR	MAUMELLE	245	4600	FLINN BROADCASTING CORPORATION	BLH19980304KC	A	LIC	118.03	38.46 dB	23849
NEW	AR	CONWAY	243	100	ST. MICHAEL EDUCATIONAL ASSOCIATION	BNPL20010615ACL	LP100	APP	103.76	38.66 dB	135168
WYYL	MS	TUNICA	241	25000	FLINN BROADCASTING CORPORATION	BLH19980716KA	C3	LIC	181.08	39.11 dB	67247



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SCALE 1:24 000

