

[Exhibit 12]

Non-Interference Compliance

Regarding FCC File Number: BNPFT-20030317DQE

Channel: 279

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 4 of this exhibit.

Page 3 of this exhibit is 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 3 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 4 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 5 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).

Since the proposed translator is 182.1 km from the Canadian border, 47 CFR 74.1235(d) has been taken into account and this applicant certifies that in no direction does the 34 dBu F(50,10) extend beyond 60 km, and this application is therefore in full compliance with 47 CFR 74.1235(d)(3), which states that "the distance to the 34 dBu interfering contour may not exceed 60 km in any direction," and hence in compliance with 47 CFR 74.1204(h).

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 13 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 0.013kW at 102 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 109.7dBu F(50,10).

Using a free-space calculation (equation referenced in FCC 98-117, Appendix A, pg. 41), this 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 5 of this exhibit). However, the proposed translator's area of interference extends a maximum of 82.8 meters from the transmit antenna. Since the translator's center of radiation is 102 meters above ground level, the area of interference will be at least 19.2 meters above tower ground level (TGL) 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.

CORAGL: 102m

Maximum ERP: 0.013kW

F(50,10) Interfering Contour: 109.7dBu

F(50,10) Max Distance: 82.8m

Antenna Manufacturer: SWR

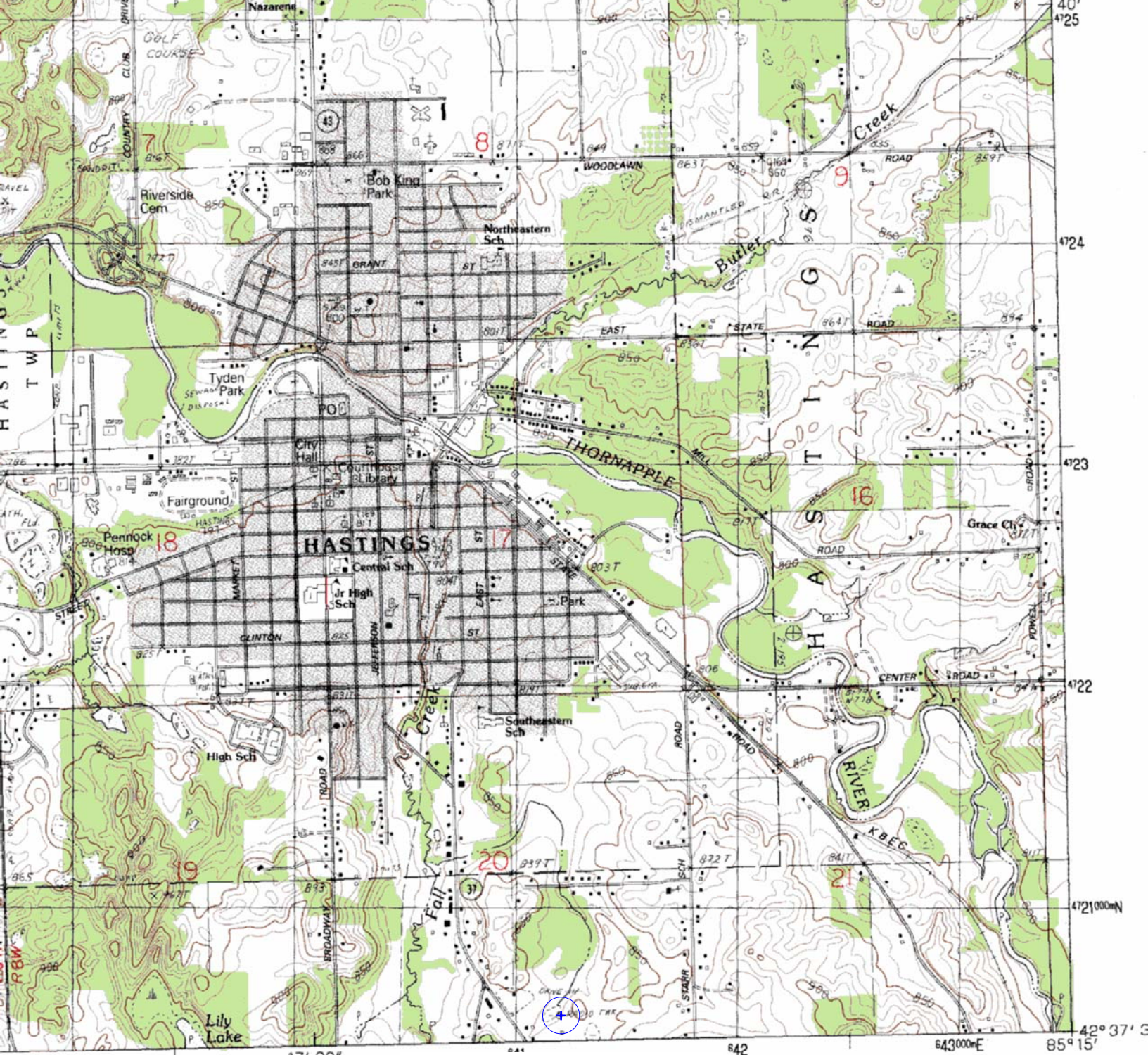
Antenna Model: FM1

F(50,10) Clearance above TGL: 19.2m

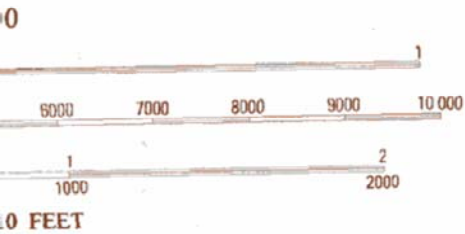
The F(50,50) signal strength of all relevant second and third adjacent stations have been examined, and are tabulated below. Column three shows the station's signal level at the proposed translator's tower site, and column four gives the minimum value within the entire proposed translator's standard 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
BLH19980730KC	WKFR-FM	70.1dBu	69.7dBu
BLH19800402AB	WVGR	84.1dBu	83.4dBu
Minimum F(50,50) Protected Contour of Adjacent Station Within Proposed Translator's standard F(50,10) Contour:			69.7dBu

Callsign	State	City	Channel	ERP_w	Licensee	ARN	Facility_id	Class	Status	Distance_km	Cir
WVGR	MI	GRAND RAPIDS	281	108000	REGENTS OF THE UNIVERSITY OF MICHIGAN	BLH19800402AB	66309	B	LIC	20.16	-30.78 dB
WVGR	MI	GRAND RAPIDS	281	108000	REGENTS OF THE UNIVERSITY OF MICHIGAN	BPED20030714AFD	66309	B	APP	20.69	-29.83 dB
WKFR-FM	MI	BATTLE CREEK	277	50000	CUMULUS LICENSING CORP.	BLH19980730KC	14658	B	LIC	30.49	-17.05 dB
NEW	MI	HASTINGS	226	100	AUTOMATED MICRO, INC.	BNPL20000901AFS	126913	LP100	APP	0.75	-6.2
NEW	MI	BATTLE CREEK	279	19	EDGEWATER BROADCASTING INC.	BNPFT20030317DPO	152312	D	APP	38.7	6.79 dB
NEW	MI	IONIA	279	10	EDGEWATER BROADCASTING INC.	BNPFT20030317DQH	152369	D	APP	47.57	10.04 dB
NEW	MI	GRAND RAPIDS	279	10	EDGEWATER BROADCASTING INC.	BNPFT20030317DQA	152358	D	APP	50.07	10.36 dB
NEW	MI	GRAND RAPIDS EAST	279	10	CALVARY CHAPEL OF TWIN FALLS, INC.	BNPFT20030310BBT	138651	D	APP	49.11	11.86 dB
WVGR	MI	GRAND RAPIDS	281	0	REGENTS OF THE UNIVERSITY OF MICHIGAN		66309	B	USE	20.16	14.80 dB
	MI	HUBBARDSTON	279	0		RM9493	0	A	APP	62.36	19.80 dB
WZBL	MI	HARTFORD	279	3000	WSJM INC	BLH19960314KC	57954	A	LIC	87.8	20.77 dB
NEW	MI	HILLSDALE	279	100	GREAT LAKES COMMUNITY BROADCASTING, INC.	BNPFT20030317KOL	157237	D	APP	94.17	20.67 dB
NEW	IN	HUNTINGTON	279	80	PUBLIC BROADCASTING OF NORTHEAST INDIANA, INC.	BNPFT20030310AJV	139843	D	APP	86.02	20.91 dB
NEW	MI	COLDWATER	279	10	EDGEWATER BROADCASTING INC.	BNPFT20030317DPU	152344	D	APP	80.99	22.43 dB
NEW	MI	GRAND HAVEN	279	27	EDGEWATER BROADCASTING INC.	BNPFT20030317DPX	152350	D	APP	86.06	22.04 dB
WKFR-FM	MI	BATTLE CREEK	277	0	CUMULUS LICENSING CORP.		14658	B	USE	30.52	22.74 dB
NEW	MI	JACKSON	279	10	ELMER HESS, JR.	BNPFT20030313BJP	143033	D	APP	81.44	24.88 dB
NEW	MI	BATTLE CREEK	226	100	FAITH FOR LIFE RADIO BROADCAST CORP.	BNPL20000901ADJ	126787	LP100	APP	33.78	26.8
NEW	MI	BATTLE CREEK	226	100	KELLOGG COMMUNITY COLLEGE	BNPL20000828ADA	125896	LP100	APP	33.01	26
870820MB	MI	HARTFORD	279	0	AMERICAN INDIAN BROADCAST GROUP, INC		1739	A	USE	83.26	26.24 dB
WOMC	MI	DETROIT	282	190000	INFINITY BROADCASTING CORPORATION OF MICHIGAN	BLH19970512KI	28623	B	LIC	178.52	26.90 dB
	MI	SOUTH HAVEN	279	0		RMspm112	0	A	APP	87.8	27.45 dB
	MI	HARTFORD	279	0		RMspm112	0	A	APP	87.8	27.45 dB
NEW	IN	ANGOLA	279	27	TAYLOR UNIVERSITY BROADCASTING, INC.	BNPFT20030314AXH	140161	D	APP	107.45	27.71 dB
WUVS-LP	MI	MUSKEGON	279	100	THE WEST MICHIGAN COMMUNITY HELP NETWORK	BMLL20030425ABG	125796	LP100	LIC	104.39	28.82 dB
WMUZ	MI	DETROIT	278	50000	WMUZ RADIO, INC.	BLH19851223KG	73298	B	LIC	169.6	28.39 dB
WMUZ	MI	DETROIT	278	50000	WMUZ RADIO, INC.	BLH19950505KD	73298	B	LIC	169.6	28.71 dB
NEW	MI	KALAMAZOO	226	100	FAITH TEMPLE CHURCH OF GOD	BNPL20000831AAZ	126386	LP100	APP	37.78	30.8
WXSS	WI	WAUWATOSA	279	19500	ENTERCOM MILWAUKEE LICENSE, LLC	BMLH20010731ABY	27031	B	LIC	220.96	33.65 dB
NEW	IN	COLUMBIA CITY	279	120	PUBLIC BROADCASTING OF NORTHEAST INDIANA, INC.	BNPFT20030310AIQ	139829	D	APP	165.66	34.56 dB
WRSR	MI	OWOSSO	280	2850	CUMULUS LICENSING CORP.	BLH19960111KR	41681	A	LIC	112.88	34.89 dB
WCKY-FM	OH	TIFFIN	279	50000	CITICASTERS LICENSES, L.P.	BLH19850715KW	70526	B	LIC	236.09	36.86 dB
WTCM-FM	MI	TRAVERSE CITY	278	100000	WTCM RADIO, INC.	BLH19870203KB	70525	C	LIC	206.44	36.18 dB
WCZY-FM	MI	MOUNT PLEASANT	282	3000	CENTRAL MICHIGAN COMMUNICATIONS, INC	BLH19910828KB	9920	A	LIC	113.72	39.54 dB



ARN: BNPFT-20030317DQE F(50,10);



1	2	3	1 Alto
			2 Freeport
4		5	3 Lake Odessa
			4 Middleville
			5 Woodland
6	7	8	6 Cloverdale
			7 Dowling
			8 Maple Grove

ADJOINING 7.5' QUADRANGLE NAMES

ROAD LEGEND

- Improved Road
- Unimproved Road
- Trail
- Interstate Route
- U. S. Route
- State Route

HASTINGS, MICHIGAN

PROVISIONAL EDITION 1982

42085-F3-TF-024

ACCURACY STANDARDS
RESTON VIRGINIA 22092
SURVEY DIVISION
LANSING, MICHIGAN 48909