

[Exhibit 12]

Non-Interference Compliance

Regarding FCC File Number: BNPFT-20030317IVD

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 110.7 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:

- 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 0.25kW at 85 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 136.5dBu 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 plotted on the pertinent portion of a USGS quadrangle (page 5 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the calculated area of interference (Note: FCC 02-244, II, A, 6 states that USGS quadrangles are sufficient for demonstrating lack of population). 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), a lack of population has been demonstrated within the area of interference and therefore this application is in full compliance with 47 CFR 74.1204.

CORAGL: 85m

Antenna Manufacturer: SWR

Maximum ERP: 0.25kW

Antenna Model: FM1

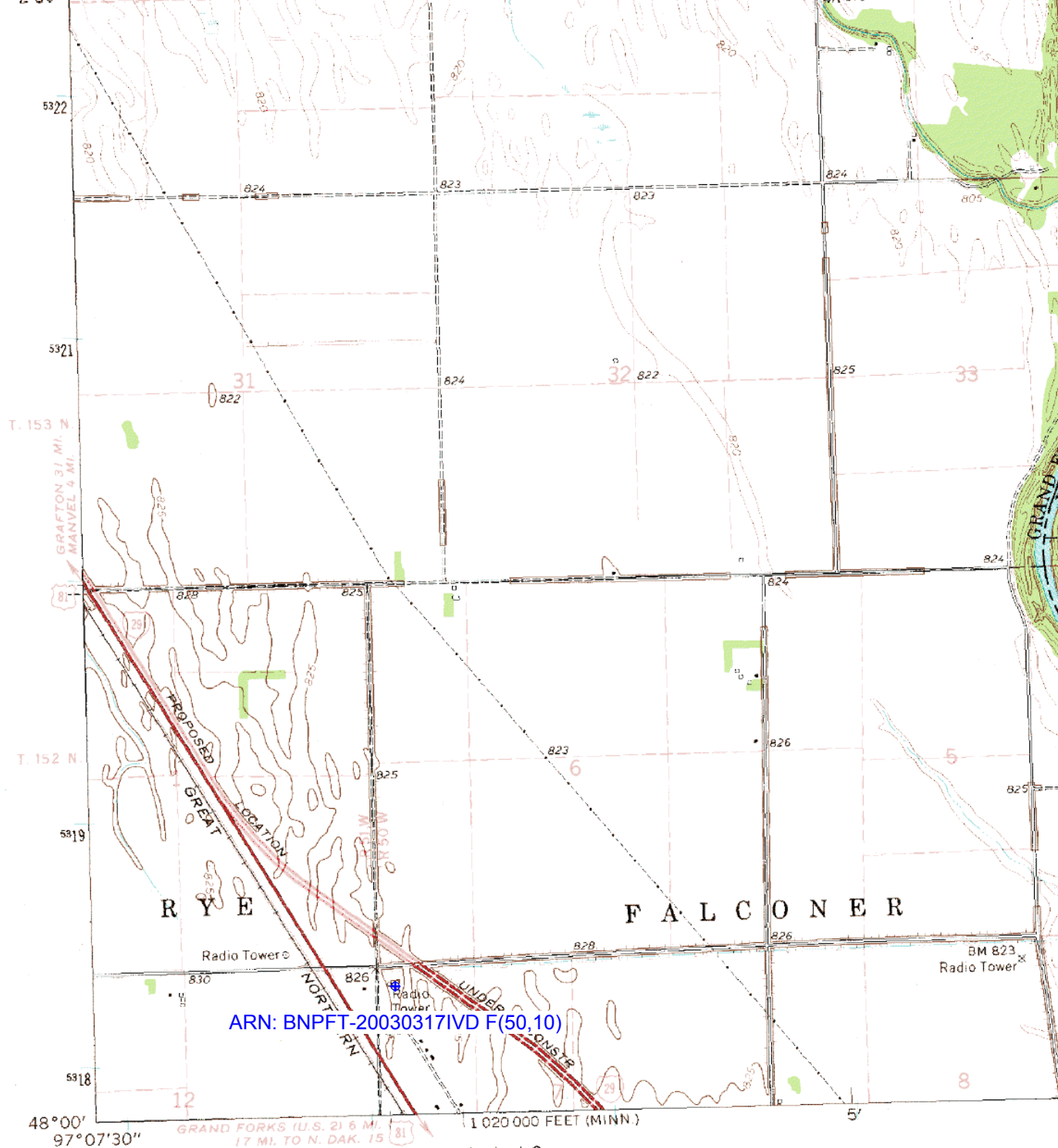
F(50,10) Interfering Contour: 136.5dBu

F(50,10) Max Distance: 16.6m

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
BLH19980518KB	KJKJ	99dBu	96.5dBu
Minimum F(50,50) Protected Contour of Adjacent Station Within Proposed Application's 100dBu F(50,10) Contour:			96.5dBu

Callsign	State	City	Channel	ERP_w	Licensee	ARN	Class	Status	Distance_km	Clr	Facility_id
KJKJ	ND	GRAND FORKS	298	100000	CITICASTERS LICENSES, L.P.	BLH19980518KB	C1	LIC	7.4	-41.94 dB	35012
NEW	MN	THIEF RIVER FALL	300	115	RADIO ASSIST MINISTRY INC.	BNPFT20030317IMF	D	APP	69.61	5.17 dB	150140
KYCK	MN	CROOKSTON	246	100000	SS BROADCASTING, INC.	BLH19800303AA	C1	LIC	29.8	7.8	62059
KYCK	MN	CROOKSTON	246	0	SS BROADCASTING, INC.		C1	USE	29.8	7.8	62059
KJKJ	ND	GRAND FORKS	298	0	CITICASTERS LICENSES, L.P.		C1	USE	13.46	13.01 dB	35012
KPFX	ND	FARGO	300	100000	MONTEREY LICENSES, LLC	BLH19930119KC	C1	LIC	166.37	18.22 dB	47310
KPFX	ND	FARGO	300	0	MONTEREY LICENSES, LLC		C1	USE	127.78	22.96 dB	47310
NEW	ND	JAMESTOWN	300	115	RADIO ASSIST MINISTRY INC.	BNPFT20030317IVM	D	APP	173.68	29.32 dB	150154
NEW	MN	BEMIDJI	300	92	RADIO ASSIST MINISTRY INC.	BNPFT20030317IIL	D	APP	179.96	29.87 dB	150137
	MB	WINNIPEG	300	0			C		208.95	36.87 dB	94282
	MB	WINNIPEG	300	0			A		215.31	37.98 dB	-1



(KELLY)
6575 T NW

Mapped, edited, and published by the Geological Survey

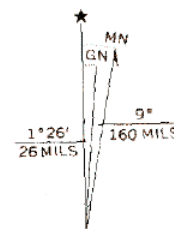
Control by USGS and USC&GS

Planimetry by photogrammetric methods from aerial photographs taken 1966. Topography by planetable surveys 1966

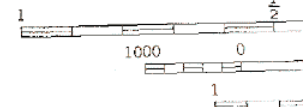
Polyconic projection. 1927 North American datum
10,000-foot grids based on Minnesota coordinate system, north zone, and North Dakota coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 14, shown in blue

Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs

This information is unchecked



UTM GRID AND 1966 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



THIS MAP
FOR SALE BY U. S. GEOLOGICAL
AND STATE
A FOLDER DESCRIB