

Non-Interference Compliance

Regarding Facility id 147568

Channel 236

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.

Page 5 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.

Note: The quadrangle and aerial photo indicate the presence of a county road in the area of interference. It is apparent that this is not a major road, e.g. interstate highway, as described in the Living Way decision and therefore "lack of population" is demonstrated.

Since the proposed translator is within 320 km of the Canadian border, 47 C.F.R. § 74.1235(d) has been taken into account and this applicant certifies that in no direction does the 34 dBμ F(50,10) extend beyond 60 km, and this application is therefore in full compliance with 47 C.F.R. § 74.1235(d)(3), which states that "the distance to the 34 dBμ interfering contour may not exceed 60 km in any direction," and hence complies with 47 C.F.R. § 74.1204(h).

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
65524	BLH19840120AE	WLHT-FM	80.2	80
67517	BLH19840309AR	WTNR	64.3	64.3
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				64.3

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 **64.3 dBμ**, this makes the proposed translator's worst-case interfering contour **104.3 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **154.2 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.

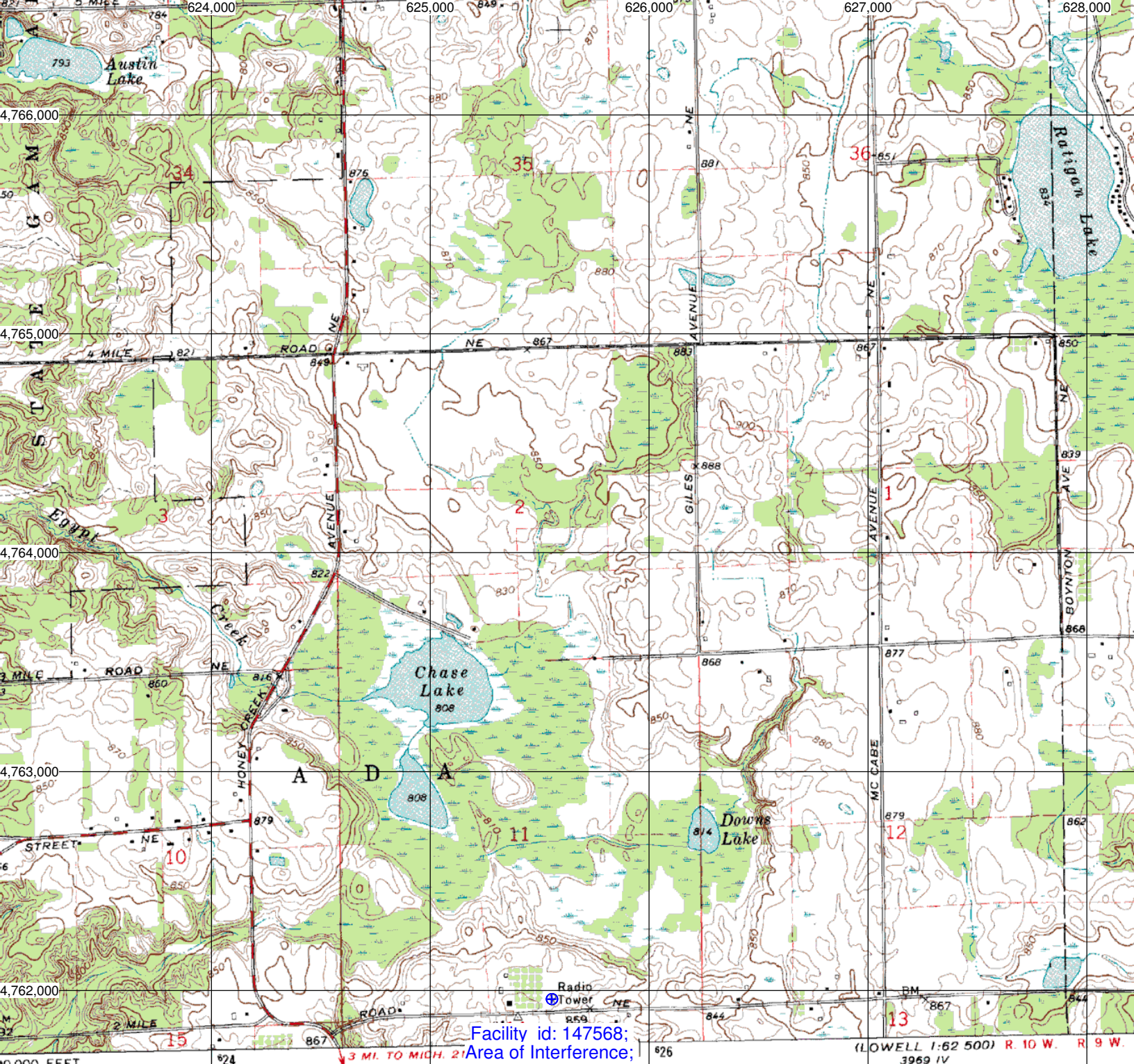
Note: The quadrangle and aerial photo indicate the presence of a county road in the area of interference. It is apparent that this is not a major road, e.g. interstate highway, as described in the Living Way decision and therefore "lack of population" is demonstrated.

Antenna Manufacturer: ERI
Antenna Model: 100-1
CORAGL: 63 m
Maximum ERP: 0.013 kW
Interfering Contour: 104.3 dBμ
Max Int. Contour Distance: 154.2 m

Adjacent Channel Study
For Station W237BW, Facility_id: 147568

Co-channel through third adjacent:

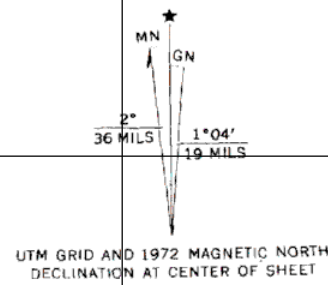
Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
65524	37457	BLH	19840120AE	WLHT-FM	CAPSTAR TX LIMITED PARTNERSHIP	B	GRAND RAPIDS	MI	LIC	40	397	239	3	19.5	0.3088
67517	41678	BLH	19840309AR	WTNR	MICHIGAN MEDIA, INC.	B	HOLLAND	MI	LIC	50	353	233	3	44	0.3088
681186	147577	BNPFT	20030825AEG	K237DB	EDGEWATER BROADCASTING, INC.	D	HUDSONVILLE	MI	CP	0.055	259	237	1	34.5	0
629243	138661	BNPFT	20030310BBP	NEW	CALVARY CHAPEL OF TWIN FALLS, INC.	D	SPRING LAKE	MI	APP	0.019	280	235	1	56	0
643238	150284	BNPFT	20030317JEZ	NEW	RADIO ASSIST MINISTRY, INC.	D	GRAND HAVEN	MI	APP	0.08	234.3	235	1	61.6	0
48801	33696	BLH	19821105AF	WGVS-FM	GRAND VALLEY STATE UNIVERSITY	A	WHITEHALL	MI	LIC	2	304	237	1	80.5	0
1036817	142077	BLFT	20041228AAQ	W236AV	FAMILY LIFE BROADCASTING SYSTEM	D	KALAMAZOO	MI	LIC	0.036	324	236	0	82.4	0
294551	37461	BLH	6625	WBXX		A	BATTLE CREEK	MI	LIC	3	362	237	1	83	0
166428	24641	BLH	19911106KF	WMMQ	LIGGETT BROADCAST, INC.	B	EAST LANSING	MI	LIC	50	421	235	1	83.3	0
1146666	145136	BLFT	20060830AAF	W238AL	MIDWEST COMMUNICATIONS, INC.	D	PORTAGE	MI	LIC	0.13	308	238	2	85.6	0
1026762	39546	BPH	20031103ACY	WCFX	GRENAX BROADCASTING, LLC	A	CLARE	MI	CP	6	358	237	1	97.9	0
155827	39546	BMLH	19901227KB	WCFX	MACKIN-HULTS BROADCASTING, INC.	A	CLARE	MI	LIC	6	355	237	1	98.2	0
1051916	60787	BMLH	20041124AGB	WCEN-FM	NM LICENSING LLC	C1	HEMLOCK	MI	LIC	100	519	233	3	106.2	0



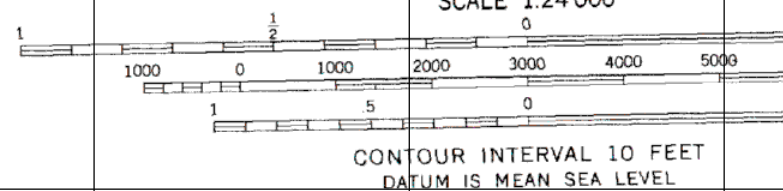
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of the State of Michigan agencies
USGS

symmetric methods from aerial
photographs. Field checked 1972
North American datum
on Michigan coordinate system, south zone
transverse Mercator grid ticks,

indicate selected fence and field lines where
aerial photographs. This information is unchecked



UTM GRID AND 1972 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE



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