

[Exhibit 13]

## **Non-Interference Compliance**

Regarding Facility id 152488

Channel 238

### **Description of Exhibit 13 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 dB $\mu$  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 an aerial photo of the vicinity surrounding the proposed translator's tower site.

**Note: There are no building or major roads within the zone of predicted interference so 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.**

## 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.

<b>Application_id</b>	<b>File Number</b>	<b>Callsign</b>	<b>Contour at Tower</b>	<b>Min. Contour</b>
93414	BLH19861017KB	KMXG	67.2	67.2
	Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour			<b>67.2</b>

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 **67.2 dBμ**, this makes the proposed translator's worst-case interfering contour **107.2 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **68.5 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").

**Note: There are no building or major roads within the zone of predicted interference so 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.**

**Antenna Manufacturer:** WRL  
**Antenna Model:** FMPV1  
**CORAGL:** 6 m  
**Maximum ERP:** 0.005 kW  
**Interfering Contour:** 107.2 dBμ  
**Max Int. Contour Distance:** 68.5 m

## Adjacent Channel Study For Station W238AX, Facility\_id: 152488

### Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
93414	60359	BLH	19861017KB	KMXG	CITICASTERS LICENSES, INC.	C1	CLINTON	IA	LIC	100	502	241	3	56.7	0.0298
645521	152376	BNPFT	20030317FGW	NEW	RADIO ASSIST MINISTRY, INC.	D	GALENA	IL	APP	0.01	324.5	239	1	38.5	0
1171564	0	RM	inv-01	Null		A	MAQUOKETA	IA	DEL	0	0	236	2	41.4	0
282917	39857	BLH	19990316KC	KMAQ-FM	MAQUOKETA BROADCASTING COMPANY	A	MAQUOKETA	IA	LIC	6	335	236	2	41.4	0
291668	39857	Null	Null	KMAQ-FM	MAQUOKETA BROADCASTING COMPANY	A	MAQUOKETA	IA	USE	0	0	236	2	41.4	0
1171566	0	RM	inv-01	Null		A	MAQUOKETA	IA	ADD	0	0	237	1	41.4	0
400798	106499	Null	Null	Null		A	OREGON	IL	USE	0	0	239	1	53.4	0
299438	1641	Null	Null	WSEY	NRG LICENSE SUB, LLC	A	MOUNT MORRIS	IL	USE	0	0	239	1	55.8	0
292118	60359	Null	Null	KMXG	CITICASTERS LICENSES, INC.	C1	CLINTON	IA	USE	0	0	241	3	56.7	0
287765	1641	BLH	19990809KB	WSEY	NRG LICENSE SUB, LLC	A	OREGON	IL	LIC	3.2	355	239	1	58.5	0
645327	152206	BNPFT	20030317DSS	NEW	RADIO ASSIST MINISTRY, INC.	D	DAVENPORT	IA	APP	0.17	304.1	239	1	60.7	0
1346588	77016	BLFT	20100120ABY	K240DZ	AUGUSTANA COLLEGE	D	DUBUQUE	IA	LIC	0.153	299	240	2	63.9	0
292639	0	RM	8924	Null		A	ASBURY	IA	VAC	0	0	238	0	64.2	0
1495752	0	RM	11661	Null		A	ASBURY	IA	DEL	0	0	238	0	70.5	0
75262	59620	BLH	19850108LQ	WRTB	MAVERICK MEDIA OF ROCKFORD LICENSE LLC	A	WINNEBAGO	IL	LIC	1.25	400	237	1	82.2	0
291720	59620	Null	Null	WRTB	MAVERICK MEDIA OF ROCKFORD LICENSE LLC	A	WINNEBAGO	IL	USE	0	0	237	1	82.2	0
1168913	170131	BNPH	20070119AGH	NEW	KM RADIO OF INDEPENDENCE, L.L.C.	A	MINERAL POINT	WI	APP	6	409	238	0	82.8	0
1170421	170131	Null	Null	NEW	KM RADIO OF INDEPENDENCE, L.L.C.	A	MINERAL POINT	WI	RSV	0	0	238	0	85	0



15 MI. TO U.S. 20  
BLACKHAWK 6 MI.  
2 910 000 FEET (IOWA SOUTH)

2910 000 FEET (IOWA NORTH)

737 R. 3 E. 90°07'30"  
42°07'30"

4667  
790 000 FEET  
(IOWA SOUTH)

T. 25 N.  
T. 24 N.  
240 000 FEET  
(IOWA NORTH)

4665  
4664  
4663  
4662

64  
52  
9 MI.  
DIXON 48 MI.

Facility id: 152488;  
Area of Interference;

OMSON 7 MI.  
LITON 14 MI.

