

[Exhibit 12]

## **Non-Interference Compliance**

Regarding Facility id 147617

Channel 237

### **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 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.

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 dB $\mu$  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 dB $\mu$  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 dB $\mu$  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>
1148045	BLH20060912ABJ	KYSS-FM	97.9	97.6
1190916	BLFT20070621AQN	K239AP	71.1	71.1
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>71.1</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 **71.1 dB $\mu$** , this makes the proposed translator's worst-case interfering contour **111.1 dB $\mu$** . By the free-space equation, this contour is calculated to extend a maximum of **107 m** from the transmit antenna.

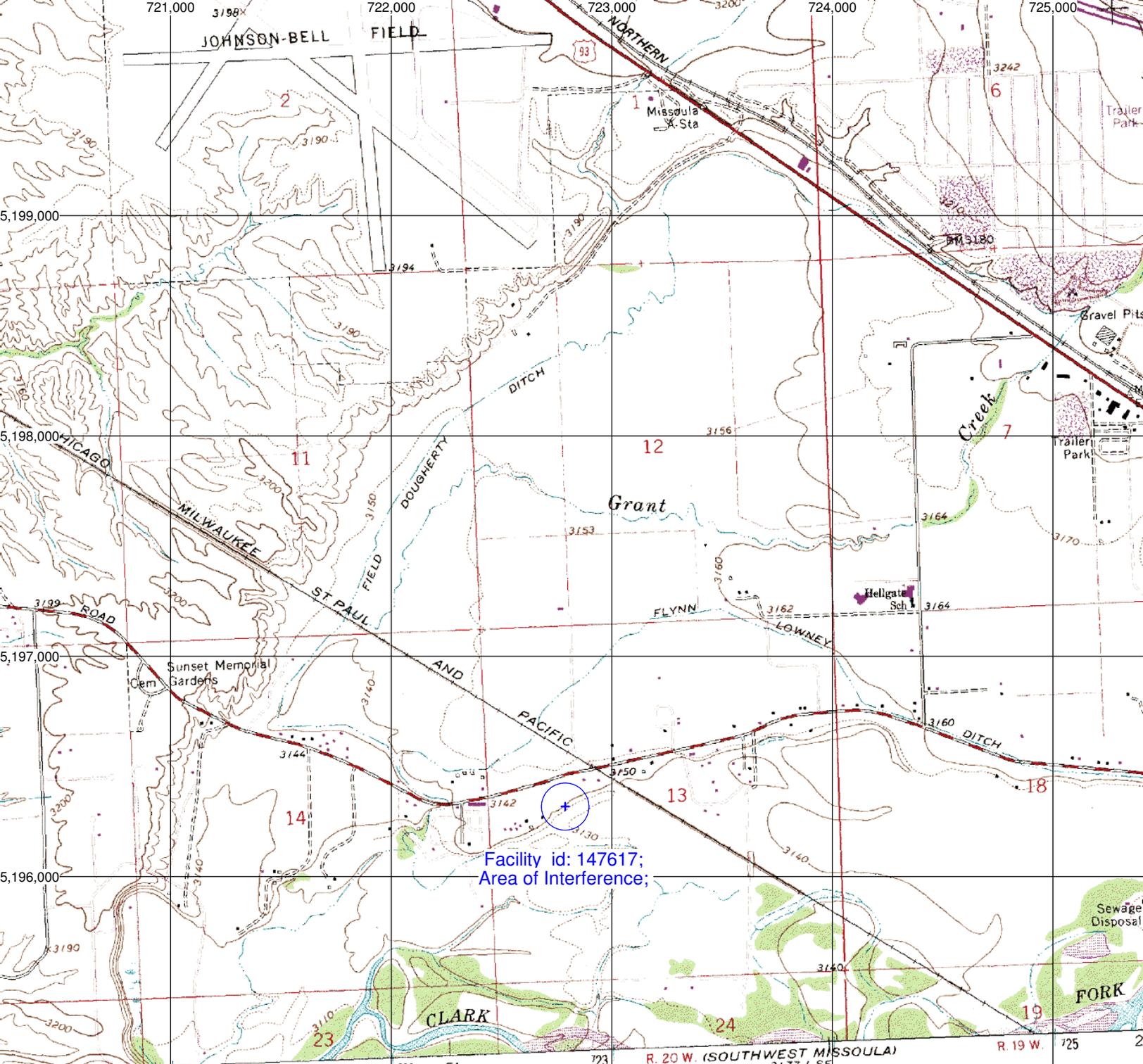
The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section 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.

**Antenna Manufacturer:** WRL  
**Antenna Model:** FMPV1  
**CORAGL:** 6 m  
**Maximum ERP:** 0.03 kW  
**Interfering Contour:** 111.1 dB $\mu$   
**Max Int. Contour Distance:** 107 m

**Adjacent Channel Study  
For Station K237DZ, Facility\_id: 147617**

**Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1190916	142915	BLFT	20070621AQN	K239AP	CCR-MISSOULA IV, LLC	D	MISSOULA	MT	LIC	0.25	1118	239	2	6.8	0.179
1148045	71759	BLH	20060912ABJ	KYSS-FM	CAPSTAR TX LIMITED PARTNERSHIP	C	MISSOULA	MT	LIC	63	2312	235	2	17.6	0.179



Facility id: 147617;  
Area of Interference;

by the Geological Survey

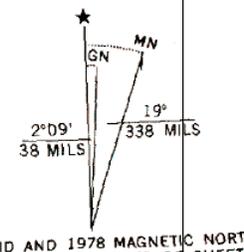
Methods from aerial  
checked 1964

**American Datum**  
a coordinate system, central zone  
Mercator grid ticks,

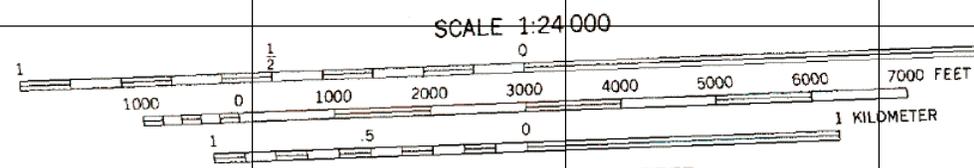
only landmark buildings are shown

from aerial photographs taken  
formation not field checked

**American Datum 1983**  
north and  
corner ticks



There may be private inholdings within the boundaries of  
the National or State reservations shown on this map



SCALE 1:24 000

CONTOUR INTERVAL 20 FEET  
DOTTED LINES REPRESENT 10-FOOT CONTOURS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

**THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY  
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092**

A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST