

Non-Interference Compliance

Regarding Facility id 150179

Channel 270

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 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 an aerial photo of the vicinity surrounding the proposed translator's tower site.

Note: There are no occupied buildings 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.

Application_id	File Number	Callsign	Contour at Tower	Min. Contour
1645939	BLED20140801AHI	WWJC	62.6	62.6
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				62.6

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 **62.6 dBμ**, this makes the proposed translator's worst-case interfering contour **102.6 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **164.4 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 occupied buildings 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:	NIC
Antenna Model:	BKG77
CORAGL:	30 m
Maximum ERP:	0.01 kW
Interfering Contour:	102.6 dBμ
Max Int. Contour Distance:	164.4 m

Adjacent Channel Study
For Station W214BS, Facility_id: 150179

Co-channel through third adjacent:

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Char	Adj	Dist	Overlap
1645939	185159	BLD-20140801AHI	WWJC	LBN, INC.	C3	AUGUSTA	WI	LIC	1	785	268	2	33.5	0.0597
19617	59856	BLFT-19800410IA	DW272AC	SHALOM TRANSLATORS, INC.	D	BLACK RIVER FAI	WI	LIC	0.005	418	272	2	9.5	0
270519	72325	BLH-19980630KB	WHTL-FM	THE WHTL GROUP, L.L.C.	A	WHITEHALL	WI	LIC	1.55	418	272	2	35.2	0
1685567	56618	BLFT-20150818AAB	W271CM	SPARTA-TOMAH BROADCASTING	D	SPARTA	WI	LIC	0.25	414	271	1	45.2	0
1540460	42978	BLFT-20121120ADQ	K270AB	MINNESOTA PUBLIC RADIO	D	WINONA	MN	LIC	0.235	476	270	0	67.5	0
1065678	131963	BLL-20050606AAT	WRFP-LP	EAU CLAIRE PUBLIC ACCESS CE	L1	EAU CLAIRE	WI	LIC	0	296	270	0	71.1	0
1677313	157423	BLFT-20150501AJN	W269CV	DAVID M. STOUT	D	CHIPPEWA FALLS	WI	LIC	0.003	283	269	1	73.1	0
259572	57256	BMLH-19971222KB	WVRQ-FM	ROBINSON CORPORATION	A	VIROQUA	WI	LIC	3.3	438	272	2	94.6	0
694815	70522	BLH-20031021AFB	WDEZ	WRIG, INC.	C	WAUSAU	WI	LIC	98.5	715	270	0	109.4	0

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF WISCONSIN
DIVISION OF HIGHWAYS
GEOLOGICAL AND NATURAL HISTORY
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