

Non-Interference Compliance

Regarding Facility id 139337

Channel 291

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: The only structures within the zone of predicted interference are unoccupied communications buildings on the Bald Mountain Electronics Site 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
90717	BMLH19860730MN	WQCB	65.6	65.6
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				65.6

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 **65.6 dBμ**, this makes the proposed translator's worst-case interfering contour **105.6 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **386.1 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: The only structures within the zone of predicted interference are unoccupied communications buildings on the Bald Mountain Electronics Site 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:	SHI
Antenna Model:	6812B
CORAGL:	25 m
Maximum ERP:	0.11 kW
Interfering Contour:	105.6 dBμ
Max Int. Contour Distance:	386.1 m

Adjacent Channel Study
For Station W291CO, Facility_id: 139337

Co-channel through third adjacent:

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Chan	Adj	Dist	Overlap
90717	9284	BMLH-19860730MN	WQCB	TOWNSQUARE MEDIA BANGOR LICENSE, LLC	C	BREWER	ME	LIC	98	463	293	2	64	0.6564
281315	41105	BLH-19990202KB	WBYA	WBIN MEDIA CO., INC.	B1	ISLESBORO	ME	LIC	25	142	288	3	47.9	0
264034	49690	BLED-19980320KB	WHMX	LIGHTHOUSE RADIO NETOWRK, INC.	C2	LINCOLN	ME	LIC	48	240	289	2	76.6	0
288479	33288	BLH-7422	WBCI	BLOUNT COMMUNICATIONS, INC.	B	BATH	ME	LIC	50	213	290	1	123.7	0

Intermediate Frequencies (53 and 54 channels difference):

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
1057951	37467	BLED-20050415AAG	WWWA	LIGHT OF LIFE MINISTRIES, INC.	C2	WINSLOW	ME	LIC	12	294	237	54	89	74
1414899	37467	BPED-20110419AAR	WWWA	LIGHT OF LIFE MINISTRIES, INC.	C2	WINSLOW	ME	CP	27.5	294	237	54	89	74
5808	54578	BLH-19781113AG	WALZ-FM	WILLIAM MCVICAR & ROGER HOLST, GEN. PART	A	MACHIAS	ME	LIC	3	101	237	54	87.5	77.5

