

[Exhibit 12]

Non-Interference Compliance

Regarding Facility id 145228

Channel 227

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 μ 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.

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
624909	BLH20030130ACU	KATF	94.3	94.3
	Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour			94.3

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 **94.3 dBμ**, this makes the proposed translator's worst-case interfering contour **134.3 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **14.5 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"). 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: ERI
Antenna Model: 100-1
CORAGL: 4 m
Maximum ERP: 0.115 kW
Interfering Contour: 134.3 dBμ
Max Int. Contour Distance: 14.5 m

Adjacent Channel Study For Station W227BL, Facility_id: 145228

Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
624909	73661	BLH	20030130ACU	KATF	RADIO DUBUQUE, INC.	C1	DUBUQUE	IA	LIC	89.7	556	225	2	14.3	0.6862
634294	142421	BNPFT	20030311AKV	NEW	AMERICAN FAMILY ASSOCIATION	D	CLINTON	IA	APP	0.25	171	229	2	68.3	0
1154049	145166	BMPFT	20061010AED	K227BL	RADIO ASSIST MINISTRY INC.	D	ANAMOSA	IA	CP MOD	0.25	366	227	0	73.2	0
46066	25132	BLH	19820809AH	WEKZ-FM	RONALD M.SPIELMAN & SCOTT THOMPSON	B	MONROE	WI	LIC	36	454	229	2	74.4	0
244588	19791	BLH	19970408KB	KQCS	CONNOISSEUR COMM. OF QUAD CITIES, LP	A	BETTENDORF	IA	LIC	6	297	228	1	90	0
646100	152889	BNPFT	20030317AXR	NEW	SISTER GRACE, INC.	D	VERONA	WI	APP	0.12	328	224	3	106.9	0
637812	145262	BNPFT	20030317FLF	NEW	RADIO ASSIST MINISTRY, INC.	D	WINNEBAGO	IL	APP	0.01	441	227	0	109.9	0
1184970	70277	BMPH	20070510ABF	WYEC	VIRDEN BROADCASTING CORP.	A	CAMBRIDGE	IL	APP	4.2	333.7	230	3	118.2	0
1169191	70277	BPH	20070119AGY	WYEC	VIRDEN BROADCASTING CORP.	A	CAMBRIDGE	IL	CP	3.4	349.3	230	3	118.2	0
57453	20665	BLH	19830527AE	WIZM-FM	FAMILY RADIO, INC.	C	LA CROSSE	WI	LIC	100	579	227	0	168.8	0

Intermediate Frequencies (53 and 54 channels difference):

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
637596	145082	BNPFT	20030317FZK	NEW	EDUCATIONAL MEDIA FOUNDATION	D	SOUTH CLINTON	IA	APP	0.25	250	281	54	71.2	61.2
637453	144980	BNPFT	20030313BEE	NEW	EDUCATIONAL MEDIA FOUNDATION	D	DAVENPORT	IA	APP	0.25	241	281	54	94.8	84.8

