

Non-Interference Compliance

Regarding Facility id 91707

Channel 272

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 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 a high resolution aerial photo of the vicinity surrounding the proposed translator's tower site provided by the U.S. Geological Survey's National Aerial Photography Program. It has been included to provide clarification of the nature of the buildings in the vicinity.

Note: The quadrangle and aerial photo indicate the presence of county roads in the area of interference. It is apparent that these are not major roads, e.g. interstate highways, as described in the Living Way decision and therefore "lack of population" is demonstrated.

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
217239	BLH19951201KB	KWFR	80.9	80.9
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				80.9

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 **80.9 dBμ**, this makes the proposed translator's worst-case interfering contour **120.9 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **100 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.

Note: The quadrangle and aerial photo indicate the presence of county roads in the area of interference. It is apparent that these are not major roads, e.g. interstate highways, as described in the Living Way decision and therefore "lack of population" is demonstrated.

Antenna Manufacturer:	TEL
Antenna Model:	ANT90D
CORAGL:	10 m
Maximum ERP:	0.25 kW
Interfering Contour:	120.9 dBμ
Max Int. Contour Distance:	100 m

Adjacent Channel Study **For Station K218CW, Facility_id: 91707**

Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
217239	22159	BLH	19951201KB	KWFR	FOSTER COMMUNICATIONS, INC.	C1	SAN ANGELO	TX	LIC	100	685	270	2	16.6	1.4918
661044	50790	BLH	20021018AAT	KHXS	CUMULUS LICENSING CORP.	C1	MERKEL	TX	LIC	99.2	861	274	2	100.2	0
652428	12237	BLH	20030318AFC	KQBZ	WATTS COMMUNICATIONS, INC.	C2	COLEMAN	TX	LIC	12	700	272	0	117.3	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
1278050	172164	BNPED	20071022ASU	NEW	SANTA RITA RADIO	C3	EDEN	TX	APP	11.5	707	218	54	54.8	42.8

