

## **Non-Interference Compliance**

Regarding Facility id 144309

Channel 225

### **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.

### 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.

<b>Application_id</b>	<b>File Number</b>	<b>Callsign</b>	<b>Contour at Tower</b>	<b>Min. Contour</b>
238368	BLH19961226KC	KZOZ	56.9	56.8
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>56.8</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 **56.8 dBμ**, this makes the proposed translator's worst-case interfering contour **96.8 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **226.7 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:** 7 m  
**Maximum ERP:** 0.005 kW  
**Interfering Contour:** 96.8 dBμ  
**Max Int. Contour Distance:** 226.7 m

# **Adjacent Channel Study** **For Station K225AO, Facility\_id: 144309**

## **Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1168670	43589	BPH	20070118AES	KJEE	MONTECITO FM, INC.	B1	MONTECITO	CA	APP	3.75	633	225	0	62.1	62.9513
238368	36025	BLH	19961226KC	KZOZ	AMERICAN GENERAL MEDIA-TEXAS, INC.	B	SAN LUIS OBISPO	CA	LIC	23	808	227	2	85.6	0.1188
636565	144312	BNPFT	20030317CNZ	NEW	RADIO ASSIST MINISTRY, INC.	D	SANTA MARIA	CA	APP	0.019	151.7	225	0	35.1	0
641317	148496	BNPFT	20030317AIQ	NEW	CALVARY CHAPEL OF TWIN FALLS, INC.	D	GUADALUPE	CA	APP	0.01	127	225	0	38.4	0
1083502	139642	BLFT	20050908ABY	K227BI	EDUCATIONAL MEDIA FOUNDATION	D	SANTA BARBARA	CA	LIC	0.01	1243	227	2	49.2	0
636559	144306	BNPFT	20030317CJB	NEW	RADIO ASSIST MINISTRY, INC.	D	ARROYO GRANDE	CA	APP	0.01	256	225	0	63	0
194797	43589	BLH	19940209KC	KJEE	MONTECITO, FM, INC	A	MONTECITO	CA	LIC	0.82	664	225	0	75.9	0
632835	141268	BNPFT	20030311ATP	NEW	RADIO BILINGUE, INC.	D	SANTA MARGARITA	CA	APP	0.01	755	225	0	85.5	0
238366	64343	BLH	19961226KA	KKAL	LAGNIAPPE BROADCASTING, INC	B	PASO ROBLES	CA	LIC	4.8	790	223	2	85.6	0
636560	144307	BNPFT	20030317CJL	NEW	RADIO ASSIST MINISTRY, INC.	D	ATASCADERO	CA	APP	0.01	476.2	225	0	101	0



