

## **Non-Interference Compliance**

Regarding Facility id 152832

Channel 288

### **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.

The second tabulation on page 3 shows all stations in the vicinity of the proposed translator operating on intermediate frequencies to the proposed translator. The column labeled "Clr" shows the station's clearance in km of the minimum separation distance required by 47 C.F.R. § 74.1204(g) and § 73.207.

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>
938669	BPH20040426AAJ	KSEL-FM	75.5	74.9
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>74.9</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 **74.9 dBμ**, this makes the proposed translator's worst-case interfering contour **114.9 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **164.5 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:** TEL  
**Antenna Model:** ANT90D  
**CORAGL:** 76 m  
**Maximum ERP:** 0.17 kW  
**Interfering Contour:** 114.9 dBμ  
**Max Int. Contour Distance:** 164.5 m

# **Adjacent Channel Study** **For Station NEW, Facility\_id: 152832**

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

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1026804	4816	BPH	20040426AAJ	KSEL-FM	ROONEY MOON BROADCASTING, INC.	C1	PORTALES	NM	APP	100	1397	290	2	28.2	1.0145
643342	150388	BNPFT	20030317HWK	NEW	EDGEWATER BROADCASTING, INC.	D	CLOVIS	NM	APP	0.25	1344.2	286	2	12.5	0
648513	155289	BNPFT	20030317IYA	NEW	RADIO ASSIST MINISTRY, INC.	D	CANNON AFB	NM	APP	0.075	1513	291	3	18.4	0
648510	155286	BNPFT	20030317IXY	NEW	RADIO ASSIST MINISTRY, INC.	D	CANNON AFB	NM	APP	0.075	1513	290	2	18.4	0
648594	155370	BNPFT	20030317IZW	NEW	RADIO ASSIST MINISTRY, INC.	D	PORTALES	NM	APP	0.17	1322.7	290	2	42.2	0
648595	155371	BNPFT	20030317IZY	NEW	RADIO ASSIST MINISTRY, INC.	D	PORTALES	NM	APP	0.17	1322.7	291	3	42.2	0
646152	152941	BNPFT	20030317FCQ	NEW	EDGEWATER BROADCASTING, INC.	D	PORTALES	NM	APP	0.17	1322.7	289	1	42.2	0
684831	157651	BNPFT	20030811AHH	K286BA	FAMILY LIFE BROADCASTING SYSTEM	D	MONTOYA	NM	CP	0.25	1672	286	2	102.8	0
997413	30027	BLH	20040602ABR	KLVT-FM	PAUL R. BEANE	C3	LEVELLAND	TX	LIC	25	1162	287	1	121.1	0
1019012	30027	BPH	20020709AAB	KLVT-FM	PAUL R. BEANE	C2	LEVELLAND	TX	APP	50	1162	287	1	129.9	0
685029	1302	BLH	20030908ACF	KBTE	DOVE MEDIA, INC.	C1	TULIA	TX	LIC	96.6	1286	285	3	157.9	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
595273	858	BPH	20020301ACE	KGRW	AMIGO BROADCASTING, L.P.	C2	FRIONA	TX	CP	50	1441	234	54	36.4	21.4
203921	858	BLH	19941109KF	KGRW	EQUICOM, INC	C2	FRIONA	TX	LIC	50	1390	234	54	36.4	21.4

