

[Exhibit 12]

## **Non-Interference Compliance**

Regarding Facility id 147964

Channel 290

### **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.

**Note: The quadrangle indicates the presence of a county road in the area of interference. It is apparent that this is not a major road, e.g. interstate highway, 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
199553	BLFT19940524TC	K287AC	118	98.5
635237	BNPFT20030312AIQ	NEW	71.6	69.6
648566	BNPFT20030317IZA	NEW	118.4	100
648571	BNPFT20030317IZE	NEW	68.6	66.6

Minimum F(50,50) Contour of Adjacent Station within  
Proposed Translator's Standard Interfering Contour **66.6**

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 **66.6 dBμ**, this makes the proposed translator's worst-case interfering contour **106.6 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **157.3 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 indicates the presence of a county road in the area of interference. It is apparent that this is not a major road, e.g. interstate highway, as described in the Living Way decision and therefore "lack of population" is demonstrated.**

**Antenna Manufacturer:** NIC  
**Antenna Model:** BKG77  
**CORAGL:** 53 m  
**Maximum ERP:** 0.023 kW  
**Interfering Contour:** 106.6 dBμ  
**Max Int. Contour Distance:** 157.3 m

# **Adjacent Channel Study** **For Station NEW, Facility\_id: 147964**

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

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
648566	155342	BNPFT	20030317IZA	NEW	RADIO ASSIST MINISTRY, INC.	D	FARMINGTON	NM	APP	0.034	1928.4	293	3	0	0.1373
199553	35820	BLFT	19940524TC	K287AC	KUTE, INC.	D	FARMINGTON	NM	LIC	0.041	1903	287	3	0.1	0.1373
635237	143099	BNPFT	20030312AIQ	NEW	WINTON ROAD BROADCASTING CO., LLC	D	FARMINGTON	NM	APP	0.095	1794	292	2	2.8	0.1373
648571	155347	BNPFT	20030317IZE	NEW	RADIO ASSIST MINISTRY, INC.	D	FARMINGTON	NM	APP	0.05	1837	292	2	2.9	0.1373
253935	88570	BPH	19970925NA	970925NA	LANCER MDEIA	A	DURANGO	CO	APP	6	2323	287	3	60.8	0
1035814	88570	BPH	19970925NA	970925NA	LANCER MEDIA	A	DURANGO	CO	APP	6	2323	287	3	60.8	0
253924	88463	BPH	19970925MP	970925MP	KRJ COMPANY	A	DURANGO	CO	APP	6	2361	287	3	71.8	0
253605	88425	BPH	19970922MD	970922MD	EB NEEDLES LLC	A	DURANGO	CO	APP	5.5	2373	287	3	71.8	0
253918	88456	BPH	19970925MJ	970925MJ	FOUR CORNERS BROADCASTING LLC	A	DURANGO	CO	APP	3.9	2392	287	3	72.2	0
253923	88462	BPH	19970925MO	970925MO	ARKANSAS VALLEY BROADCASTING, L.L.C.	A	DURANGO	CO	APP	6	2342	287	3	72.2	0
253911	88433	BPED	19970925MC	970925MC	EDUCATIONAL COMMUNICATIONS OF COLORAD	A	DURANGO	CO	APP	5	2371	287	3	72.2	0
45416	47097	BLFT	19820727IC	K292AX	MUSIC MEN, INCORPORATED	D	CORTEZ	CO	LIC	0.043	3101	292	2	76.9	0
205402	53616	BLFT	19950106TC	K289AD	PROCLAIMING CHRIST'S LOVE MINISTRIES	D	CHINLE	AZ	LIC	0.009	2990	289	1	80.7	0
705262	141411	BNPFT	20030822ABD	K289AL	SPIRIT MEDIA	D	CORTEZ	CO	CP	0.205	1903	289	1	81.6	0
253932	88490	BPH	19970925MX	970925MX	ROCKY MOUNTAIN RADIO COMPANY LLC	A	DURANGO	CO	APP	0.56	2727	287	3	82.5	0
253940	88538	BPH	19970925NF	970925NF	ROBERT DURANGO L.L.C.	A	DURANGO	CO	APP	0.51	2748	287	3	82.6	0
253927	88478	BPH	19970925MS	970925MS	STEVEN DINETZ	A	DURANGO	CO	APP	0.5	2751	287	3	82.6	0
137779	51286	BMLH	19891211KX	KWUF-FM	STUBBS BROADCASTING COMPANY, INC.	A	PAGOSA SPRINGS	CO	LIC	0.255	2633	292	2	116.1	0

