

## **Non-Interference Compliance**

Regarding Facility id 149233

Channel 300

### **Description of Exhibit 13 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 an aerial photo of the vicinity surrounding the proposed translator's tower site.

**Note: The only buildings in the zone of predicted interference are unoccupied communications structures so 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.**

### 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>
202048	BLH19940826KB	KSED	83.7	83.7
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>83.7</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 **83.7 dBμ**, this makes the proposed translator's worst-case interfering contour **123.7 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **72.4 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").

**Note: The only buildings in the zone of predicted interference are unoccupied communications structures so 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.**

<b>Antenna Manufacturer:</b>	<b>NIC</b>
<b>Antenna Model:</b>	<b>BKG77</b>
<b>CORAGL:</b>	<b>27 m</b>
<b>Maximum ERP:</b>	<b>0.25 kW</b>
<b>Interfering Contour:</b>	<b>123.7 dBμ</b>
<b>Max Int. Contour Distance:</b>	<b>72.4 m</b>

# Adjacent Channel Study

## For Station NEW, Facility\_id: 149233

### Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
202048	55402	BLH	19940826KB	KSED	GRENAX BROADCASTING II, LLC	C0	SEDONA	AZ	LIC	96	2625	298	2	31.8	1.4918
289238	94487	Null	Null	Null		C0	SEDONA	AZ	USE	0	0	298	2	41.7	1.4918
649355	156077	BNPFT	20030317FWS	NEW	FRED HANNEL	D	PRESCOTT	AZ	APP	0.05	1719	300	0	112.3	0
645225	152108	BNPFT	20030317HIC	NEW	DONALD F. HENDREN	D	PEACH SPRINGS	AZ	APP	0.25	3638	298	2	163.1	0
1099965	0	RM	bg-144*	Null		A	BAGDAD	AZ	ADD	0	0	299	1	169.2	0
1434374	77750	BLH	20110705ACK	KFTT	SMOKE AND MIRRORS, LLC	C3	BAGDAD	AZ	LIC	1	1381	299	1	169.2	0
649742	156453	BNPFT	20030317HNC	NEW	DONALD F. HENDREN	D	NOTHING	AZ	APP	0.25	2018	298	2	178.8	0
649685	156403	BNPFT	20030317JJO	NEW	DONALD F. HENDREN	D	PEACH SPRINGS	AZ	APP	0.25	2304	298	2	181.8	0
1425293	170953	BNPH	20070403ACO	NEW	ABLE RADIO CORPORATION	C2	AGUILA	AZ	CP	50	929	297	3	185.5	0
542774	59965	BXLH	20001220AAL	KMLE	CBS RADIO STATIONS INC.	C	CHANDLER	AZ	LIC	36	705	300	0	188.3	0
295422	66816	Null	Null	KFXR-FM	CC LICENSES, LLC	C2	CHINLE	AZ	USE	0	0	297	3	202.3	0
213553	66816	BLH	19950908KE	KFXR-FM	CC LICENSES, LLC	C2	CHINLE	AZ	LIC	3.6	2507	297	3	202.3	0
298304	59965	Null	Null	KMLE	CBS RADIO STATIONS INC.	C	CHANDLER	AZ	USE	0	0	300	0	216.2	0
119958	59965	BLH	19881103KA	KMLE	CBS RADIO STATIONS INC.	C	CHANDLER	AZ	LIC	96	898	300	0	216.2	0
1100012	0	RM	bg-144*	Null		C	LAUGHLIN	NV	DEL	0	0	300	0	248.9	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
1488389	190224	BNPH	20120221ACZ	NEW	GRENAX BROADCASTING II, LLC	C2	MUNDS PARK	AZ	APP	5	2622	246	54	31.9	16.9
1488729	190224	Null	Null	NEW	GRENAX BROADCASTING II, LLC	C2	MUNDS PARK	AZ	RSV	0	0	246	54	31.9	16.9
1492134	0	RM	11669	Null		C2	MUNDS PARK	AZ	ADD	0	0	246	54	31.9	16.9
1495469	0	RM	11517	Null		C2	KACHINA VILLAGE	AZ	ADD	0	0	246	54	31.9	16.9
1269582	0	RM	11518	Null		C2	KACHINA VILLAGE	AZ	ADD	0	0	246	54	31.9	16.9
1488389	190224	BNPH	20120221ACZ	NEW	GRENAX BROADCASTING II, LLC	C2	MUNDS PARK	AZ	APP	5	2622	246	54	31.9	16.9



3654' (SW)  
(HUMPHREYS PEAK)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

111°37'30" 35°15' 444000m E. 445 R.7 E. R.8 E. 35' 447





