

Non-Interference Compliance

Regarding Facility id 145014

Channel 234

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 structures within the zone of predicted interference are communications buildings 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.

Application_id	File Number	Callsign	Contour at Tower	Min. Contour
1065460	BLH20050623AAN	KVIB	74.8	74.8
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				74.8

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 **74.8 dBμ**, this makes the proposed translator's worst-case interfering contour **114.8 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **201.8 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 structures within the zone of predicted interference are communications buildings 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.

Antenna Manufacturer:	SCA
Antenna Model:	CL-FM @ 240°
CORAGL:	35 m
Maximum ERP:	0.25 kW
Interfering Contour:	114.8 dBμ
Max Int. Contour Distance:	201.8 m

Adjacent Channel Study **For Station K234CF, Facility_id: 145014**

Co-channel through third adjacent:

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Chan	Adj	Dist	Overlap
1065460	16770	BLH-20050623AAN	KVIB	RIVIERA BROADCASTING, LLC	C	SUN CITY WEST	AZ	LIC	41	2382	236	2	55.3	0.2275
1009722	109	BLH-20040831ACC	KDDL	PRESCOTT VALLEY BROADCASTING CO. INC.	C3	CHINO VALLEY	AZ	LIC	4.1	1683	232	2	44.1	0
1569951	144651	BNPFT-20130821AAB	K231CF	DONALD F. HENDREN	D	CHILEAN MILL	AZ	CP	0.01	2340	231	3	55.4	0
1627777	193094	BNPL-20131112BNI	NEW	NORTHERN ARIZONA UNIVERSITY	L1	FLAGSTAFF	AZ	APP	0	2119.6	235	1	70.1	0
1586151	194786	BNPL-20131104AAX	NEW	WEAVEL INC	L1	FLAGSTAFF	AZ	APP	0	2119	233	1	71	0
1584207	194399	BNPL-20131114AAH	NEW	SUNNYSIDE NEIGHBORHOOD ASSOCIATION OF FL	L1	FLAGSTAFF	AZ	APP	0	2041	233	1	73.1	0
1579934	193362	BNPL-20131018AHP	NEW	FLAGSTAFF LIBERTY ALLIANCE	L1	FLAGSTAFF	AZ	APP	0	2830	233	1	77.6	0
1594304	196985	BNPL-20131114AWE	NEW	CALVARY CHAPEL OF FLAGSTAFF	L1	FLAGSTAFF	AZ	APP	0	2099	235	1	80.9	0
610513	13506	BMLH-20021018AAD	KOOL-FM	CBS RADIO STATIONS INC.	C	PHOENIX	AZ	LIC	95.6	871	233	1	150.6	0
1244655	55495	BLH-20080409ADN	KFLG-FM	CAMERON BROADCASTING, INC.	C0	BIG RIVER	CA	LIC	19.5	1462	234	0	190.6	0

Intermediate Frequencies (53 and 54 channels difference):

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
164356	29021	BLH-19910830KD	KHOV-FM	UNIVISION RADIO LICENSE CORPORATION	C2	WICKENBURG	AZ	LIC	6	1623	287	53	80.3	65.3
232457	77422	BLFTB-19960920TI	KHOV-FM1	UNIVISION RADIO LICENSE CORPORATION	D	CONSTELLATION	AZ	LIC	0.42	1132	287	53	87.9	77.9

3842
T 16 N

42'30"

3841

3840

3553 II NW
(HICKEY MOUNTAIN)

3838

3837

40'

3836



