

Non-Interference Compliance

Regarding Facility id 144993

Channel 213

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 unoccupied 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
1685064	BPFT20150810AAC	K209FN	127.3	100
204771	BLED19941212KD	KGCB	92.8	92.7
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				92.7

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 **92.7 dBμ**, this makes the proposed translator's worst-case interfering contour **132.7 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **7.8 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 unoccupied 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: FMV1
CORAGL: 8 m
Maximum ERP: 0.023 kW
Interfering Contour: 132.7 dBμ
Max Int. Contour Distance: 7.8 m

Adjacent Channel Study
For Station K209FN, Facility_id: 144993

Co-channel through third adjacent:

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Char	Adj	Dist	Overlap
204771	24752	BLED-19941212KD	KGCB	GRAND CANYON BROADCASTER	C	PRESCOTT	AZ	LIC	58	2360	215	2	26.6	0.1373
1365636	173032	BLED-20091015ABS	KJZP	ST. PAUL BIBLE COLLEGE	A	PRESCOTT	AZ	LIC	0.027	2174	211	2	17.8	0
1128447	93402	BLFT-20060503AAV	K210DY	CALVARY CHAPEL OF TWIN FALLS	D	BLACK CANYON CITY	AZ	LIC	0.25	658	210	3	62.5	0
1185515	145997	BLFT-20070511AAM	K212FP	ADVANCE MINISTRIES DBA NEW	D	SELIGMAN	AZ	LIC	0.25	1607	212	1	94	0
1684516	122145	BPFT-20150806AAD	K214DT	GRAND CANYON BROADCASTER	D	FLAGSTAFF	AZ	CP	0.2	2828	214	1	101.8	0
1260216	32367	BLED-20080801AVL	KJTA	FAMILY LIFE BROADCASTING, INC.	C2	FLAGSTAFF	AZ	LIC	1	2839	210	3	101.8	0
534134	122145	BLFT-20001030ABA	K214DT	GRAND CANYON BROADCASTER	D	FLAGSTAFF	AZ	LIC	0.01	2828	214	1	101.8	0
1359111	94226	BLED-20100305ABC	KZAI	EDUCATIONAL MEDIA FOUNDATION	C	SUPERIOR	AZ	LIC	45	1748	210	3	134.9	0
1201298	20638	BLED-20070912ABQ	KFLR-FM	FAMILY LIFE BROADCASTING, INC.	C	PHOENIX	AZ	LIC	100	852	212	1	142.6	0



