

## **Non-Interference Compliance K213FF, Prescott, AZ FAC# 144993**

### **Description of Exhibit 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 adjacent channel study created with FM Commander which shows all co-channel, 1<sup>st</sup> adjacent, 2<sup>nd</sup> adjacent and 3<sup>rd</sup> adjacent to the proposal.

Page 4 of this exhibit is a Google Earth aerial photo of the vicinity surrounding the proposed translator's tower site with the plotted zone of predicted interference.

## 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>File Number</b>	<b>Call Sign</b>	<b>Contour at Tower</b>
<b>BLED-19941212KD</b>	<b>KLVH</b>	<b>87.7</b>
<b>BMLED-20171004ABQ</b>	<b>KJZP</b>	<b>58.8</b>
Minimum F(50,50) Contour of Adjacent Station Within Proposed Translator's Interfering Contour		<b>60.0</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 **60.0 dBμ**, this makes the proposed translator's worst-case interfering contour **100.0 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **1270.2m** from the transmit antenna.

**Note: The only structures within the zone of predicted interference are unoccupied communications buildings, so 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:** SCALA  
**Antenna Model:** FMV @ 190°  
**CORAGL:** 10.0 m  
**Maximum ERP:** 0.025 kW  
**Interfering Contour:** 100.0 dBμ  
**Max Int. Contour Distance:** 1270.2 m

Adjacent Channel Study  
 K213FF, Prescott, AZ FAC# 144993  
 Average Protected F(50-50)= 19.27 km  
 Omni-directional

REFERENCE  
 34 35 20.10 N.  
 112 22 54.60 W.

CH# 213D - 90.5 MHz, Pwr= 0.25 kw, HAAT= 216.6 M, COR= 1838 M

DISPLAY DATES  
 DATA 08-24-23  
 SEARCH 08-30-23

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
213D Prescott	K213FF	LIC_VN AZ		0.0 0.0	0.00 BLFT20151221CJH	34 35 20.10 112 22 54.60	0.023	1836	---Reference---		
215C Prescott	KLVH	LIC_CN AZ		65.5 245.6	26.51 BLED19941212KD	34 41 15.10 112 07 04.60	58.000 772	11.8 2360	87.8	-7.7	-62.4*
06 -- Prescott	K06AE-D	LI_D_N AZ		65.6 245.8	26.54 BLDTV-20111114AAT	34 41 14.00 112 07 02.51	0.500	9.5 2347	64.6	74.0R	-47.5M
213D Flagstaff	K213FL	LIC_DVN AZ		44.4 224.9	101.76 0000215815	35 14 25.00 111 35 51.60	0.100 627	85.1 2854	28.0	-6.0	6.1
212C Phoenix	KFLR-FM	STA_DCN AZ		168.0 348.2	142.59 0000218684	33 20 02.10 112 03 46.50	100.000 483	129.7 852	86.9	-4.3	39.7
212C Phoenix	KFLR-FM	LIC_DCN AZ		168.0 348.2	142.59 BLED20070912ABQ	33 20 02.10 112 03 46.50	100.000 483	129.7 852	86.9	-4.3	39.7
211A Prescott	KJZP	LIC_DCN AZ		231.9 51.8	17.73 BMLED20171004ABQ	34 29 25.10 112 32 02.60	0.027 486	0.4 2174	16.5	2.4	0.1
266C Cordes Lakes	KZCE	LIC_NCN AZ		176.0 356.0	39.93 BLH20120321AET	34 13 47.10 112 21 05.50	40.000 807	0.0 2323	0.0	28.5R	11.4M
210D Black Canyon City	K210DY	LIC_VN AZ		160.1 340.3	62.53 BLFT20060503AAV	34 03 35.10 112 09 03.50	0.250	1.1 658	7.1	43.2	54.3

Terrain database is FCC NGDC 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
 In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.  
 All separation margins (if shown) include rounding.  
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
 "\*"affixed to 'IN' or 'OUT' values = site inside restricted contour.  
 « = Station meets FCC minimum distance spacing for its class.  
 Reference station has protected zone issue: Mexico

Aerial Photo Zone Of Predicted Interference  
K213FF, Prescott, AZ FAC# 144993  
August 30, 2023

