

K294CQ, Lake Havasu City, AZ FAC# 156889
Non-Interference Compliance

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 an Adjacent Channel Study prepared by V-Soft FM-Commander.

Page 4 of this exhibit is an aerial photo of the vicinity surrounding the proposed translator's tower site. The zone of predicted interference is plotted on photo.

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
1563162	BLFT20130715AAI	K292GC	113.5	113.5
606662	BLH20020708AAZ	KNKK	63.1	63.1
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				63.1

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 **63.1 dBμ**, this makes the proposed translator's worst-case interfering contour **103.1 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **564 m** from the transmit antenna.

Note: The only buildings 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: BEX
Antenna Model: LOG-R @ 284°
CORAGL: 6 m
Maximum ERP: 0.132 kW
Interfering Contour: 103.1 dBμ
Max Int. Contour Distance: 564 m

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Adjacent Channel Study

REFERENCE CH# 294D - 106.7 MHz, Pwr= 0.132 kW DA, HAAT= 762.2 M, COR= 1379 M DISPLAY DATES
 34 33 00.00 N. DATA 01-24-23
 114 11 40.80 W. Average Protected F(50-50)= 31.24 km SEARCH 01-26-23
 Standard Directional

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
294D Lake Havasu City	K294CQ	LIC DVN AZ		0.0 91.0	0.00 BLFT20170131AEQ	34 33 00.00 114 11 40.80	0.050	1379	---Reference---		
294D Kingman	K294BU	LIC DCN AZ		24.1 204.3	64.73 BLFT20100104ABI	35 04 52.00 113 54 14.80	0.090 1099	75.8 2565	6.7 Cameron Broadcasting, Inc.	-21.2*	-1.2
292A Desert Hills	KVSU	LIC _CN AZ		289.4 109.3	17.12 0000189194	34 36 04.00 114 22 16.00	0.900 23	1.6 379	9.9 Itm, LLC	-16.8*	6.4
296C1 Needles	KNKK	LIC _CN CA		343.7 163.6	55.92 BLH20020708AAZ	35 01 58.00 114 21 59.80	16.500 582	6.7 1368	64.2 Cameron Broadcasting, Inc.	28.2	-8.5*
292D Lake Havasu City	K292GC	LIC DVN AZ		0.0 91.0	0.00 0000181445	34 33 00.00 114 11 40.80	0.160	0.0 1380	3.3	-8.4*	-3.4*
294C2 Prescott Valley	KPPV	LIC _CN AZ		92.0 273.0	152.26 BLH19930204KB	34 29 25.10 112 32 02.60	3.700 493	139.6 2181	60.4 Prescott Valley Broadcasti	8.0	68.6
293D Parker	K293BR	LIC _VN AZ		189.6 9.5	46.78 BLFT20160419ABL	34 08 06.10 114 16 44.80	0.250	10.1 141	7.1 Aircraft Storage Solutions	22.9	32.9
293D Laughlin	K293DA/K2	CP DVN NV		327.3 147.0	92.23 0000188795	35 14 48.32 114 44 37.50	0.052	37.4 1474	22.9	30.3	33.3
291D Yucca	K291BU	LIC DVN AZ		343.7 163.6	55.92 BLFT20160425AAV	35 01 58.00 114 21 59.80	0.175	0.5 1334	20.9 Advance Ministries, Inc.	34.4	34.8
293C0 Las Vegas	KSNE-FM	LIC _CN NV		335.8 155.3	178.08 BMLH20110126ABC	36 00 29.90 115 00 23.00	100.000 352	112.3 1048	76.8 Ihm Licenses, LLC	43.5	70.2
295C2 Prescott Valley	R17780	RSV-R AZ		92.0 273.0	152.26	34 29 25.08 112 32 02.61	50.000 150	100.9 1847	69.0 From CDBS	46.6	74.7
295C2 Prescott Valley	KPPV	RUL AZ		92.0 273.0	152.26	34 29 25.10 112 32 02.60	50.000 150	100.9 1847	69.0	46.6	74.7

Terrain database is SRTM 03 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.
 Reference station has protected zone issue: Mexico

