

Non-Interference Compliance K204DX, San Antonio, TX FAC# 91767

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 ComStudy 2.2 which shows all co-channel, 1st adjacent, 2nd adjacent and 3rd 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.

File Number	Call Sign	Contour at Tower
BLED-20120423ABR	KSTX	84.1
BLED-20120423ABO	KPAC	83.9
Minimum F(50,50) Contour of Adjacent Station Within Proposed Translator's Interfering Contour		83.9

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 **83.9 dBμ**, this makes the proposed translator's worst-case interfering contour **123.9 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **42.1m** 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:	PSI
Antenna Model:	FML-DA
CORAGL:	149 m
Maximum ERP:	0.092 kW
Interfering Contour:	123.9 dBμ
Max Int. Contour Distance:	42.1 m

Adjacent Channel Study
K204DX, San Antonio, TX FAC# 91767
8/24/2023

Callsign	State	City	Channel	ERP (W)	Class	Status	Distance (km)	Clr
KSTX	TX	SAN ANTONIO	206	72000	C1	LIC	22.98	-24.72 dB
KPAC	TX	SAN ANTONIO	202	69000	C1	LIC	22.98	-24.54 dB
K204DX	TX	SAN ANTONIO	204	50	D	LIC	20.48	-23.12 dB
KSTX	TX	SAN ANTONIO	206	500	C1	LIC	10.53	-11.38 dB
KPAC	TX	SAN ANTONIO	202	500	C1	LIC	10.53	-11.38 dB
KKER	TX	KERRVILLE	204	100000	C1	CP MOD	87.11	0.36 dB
KKER	TX	KERRVILLE	204	52000	C1	LIC	87.11	3.49 dB
KISS-FM	TX	SAN ANTONIO	258	1000	C0	LIC	29.86	4.9
KISS-FM	TX	SAN ANTONIO	258	100000	C0	LIC	29.86	4.9
KAZI	TX	AUSTIN	204	1700	A	LIC	113.55	19.27 dB
K203CX	TX	SAN MARCOS	203	62	D	LIC	71.15	23.08 dB
ICE-MXG-196-AM	TX	GONZALES	205	25000	C3	CP MOD	106.19	27.02 dB
KPLV	TX	CORPUS CHRISTI	204	13500	C2	LIC	206.15	29.75 dB
KVGW	TX	COTULLA	207	100000	C1	CP	149.07	31.85 dB
KAYK	TX	VICTORIA	203	50000	C2	LIC	159.85	33.62 dB
KTSN-FM	TX	BLOWOUT	205	125	A	LIC	107.14	34.12 dB
KGVG	TX	ENCINAL	203	50000	C2	CP	164.5	34.84 dB
KBMD	TX	MARBLE FALLS	203	6000	A	LIC	125.54	36.82 dB
ICE-MXG-202-AM	TX	CARRIZO SPRINGS	201	33000	C2	CP MOD	157.62	36.86 dB
KHPS	TX	UVALDE	205	6200	C3	LIC	145.82	37.70 dB
KEPI	TX	EAGLE PASS	204	1000	A	LIC	205.39	37.30 dB
KUHF	TX	HOUSTON	204	100000	C	LIC	290.83	38.29 dB
KCTI-FM	TX	GONZALES	201	1300	A	LIC	98.87	38.12 dB
KUHF	TX	HOUSTON	204	100000	C	LIC	292.46	39.87 dB
KUHF	TX	HOUSTON	204	70000	C	APP	290.82	39.36 dB

Aerial Photo Zone Of Predicted Interference
K204DX, San Antonio, TX FAC# 91767
August 24, 2023

