

Non-Interference Compliance K266BG, Edmond, OK FAC# 93289

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 contour map of KMSJ-LP demonstrating contour non-interference of this 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
BLH-200080324AAX	KATT-FM	109.5
Minimum F(50,50) Contour of Adjacent Station Within Proposed Translator's Interfering Contour		109.5

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 **109.5 dBμ**, this makes the proposed translator's worst-case interfering contour **149.5 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **2.0 m** from the transmit antenna.

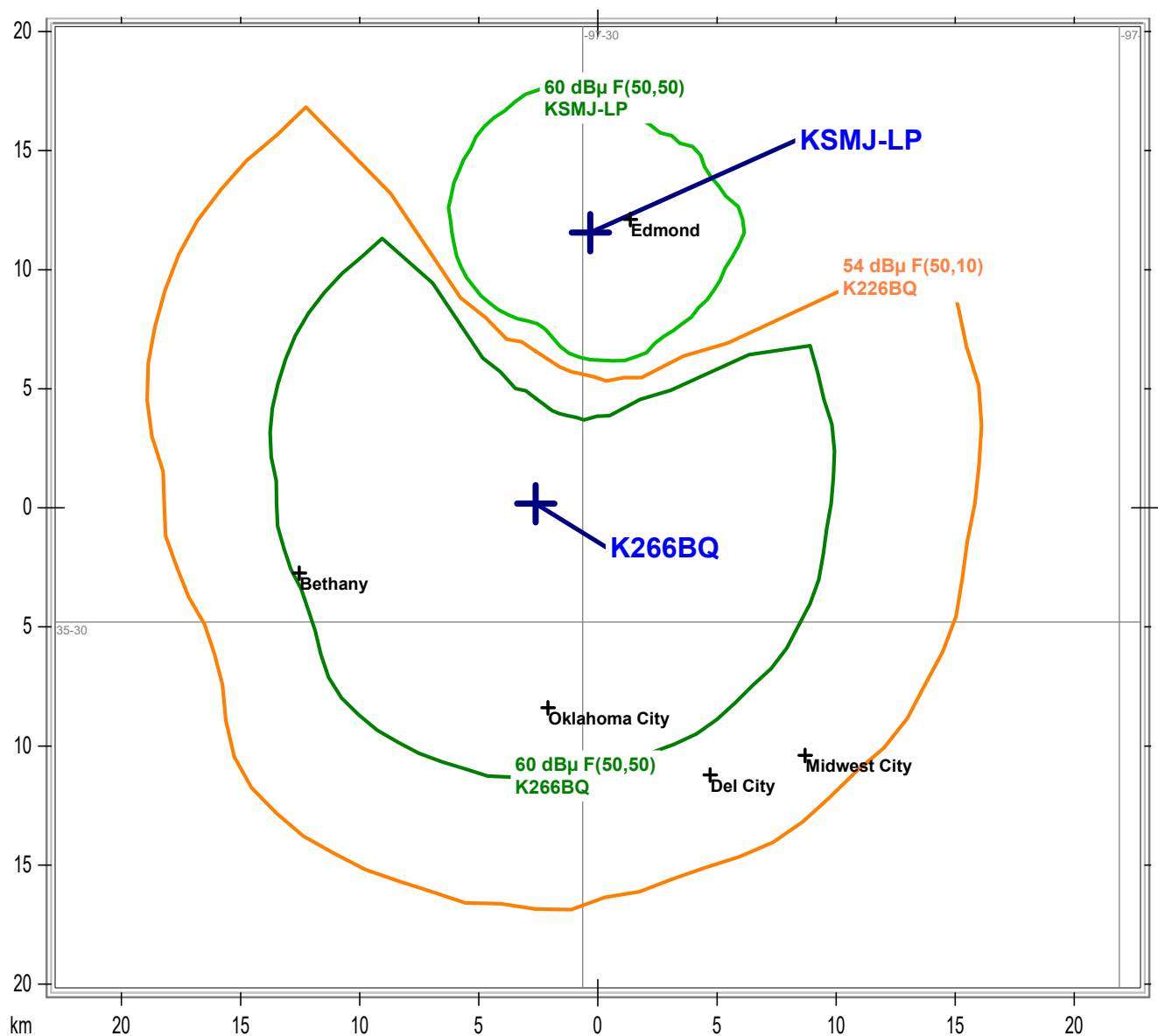
Note: There are no structures within the zone of predicted interference so in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

Antenna Manufacturer:	PSI
Antenna Model:	FML-DA
CORAGL:	131m
Maximum ERP:	0.115 kW
Interfering Contour:	149.5.0 dBμ
Max Int. Contour Distance:	2.0 m

Adjacent Channel Study
K266BG, Edmond, OK FAC# 93289
8/22/2023

Callsign	State	City	Channel	ERP (W)	Class	Status	Distance (km)	Clr
K266BG	OK	EDMOND	266	140	D	LIC	11.88	-66.38 dB
KATT-FM	OK	OKLAHOMA CITY	263	31000	C1	LIC	3.7	-52.19 dB
KATT-FM	OK	OKLAHOMA CITY	263	11000	C1	LIC	3.36	-42.40 dB
KSMJ-LP	OK	EDMOND	265	22	LP100	LIC	11.64	1.86 dB
K268BR	OK	OKLAHOMA CITY	268	99	D	CP MOD	16.23	1.81 dB
K268BR	OK	OKLAHOMA CITY	268	99	D	LIC	16.23	1.74 dB
K213EM	OK	EDMOND	213	23	D	DEL	6.55	6.5
K213EM	OK	EDMOND	213	23	D	LIC	6.55	6.5
K265FE	OK	SHAWNEE	265	150	D	LIC	49.35	12.14 dB
KVRO	OK	STILLWATER	266	6000	A	LIC	81.47	12.22 dB
MM-FM1232-A	OK	WAYNE	266	0	A		74.41	12.78 dB
MM-FM1232-A	OK	WAYNE	266	0	A		74.41	12.78 dB
KPCG-LP	OK	EDMOND	267	40	LP100	LIC	22.41	14.89 dB
KWOX	OK	WOODWARD	266	82000	C0	LIC	191.58	21.64 dB
K265DT	OK	CHICKASHA	265	92	D	LIC	77	22.37 dB
KLAW	OK	LAWTON	267	100000	C1	LIC	144.25	24.61 dB
KOCD	OK	OKEENE	268	14000	C3	LIC	92.47	25.93 dB
K265FL	OK	ENID	265	250	D	LIC	99.96	30.12 dB
KMCO	OK	WILBURTON	267	100000	C1	LIC	176.69	30.38 dB
KTSO	OK	SAPULPA	265	19000	C3	LIC	142.17	33.23 dB
KYDA	TX	AZLE	269	92000	C	LIC	233.86	36.98 dB
KWRD-FM	TX	HIGHLAND VILLAGE	264	100000	C	LIC	231.55	36.93 dB
KWRD-FM	TX	HIGHLAND VILLAGE	264	98000	C	LIC	231.53	36.56 dB
KWRD-FM	TX	HIGHLAND VILLAGE	264	100000	C	LIC	231.55	36.93 dB
KKZU	OK	SAYRE	269	50000	C2	LIC	178.62	37.50 dB
KYDA	TX	AZLE	269	100000	C	LIC	233.85	37.56 dB
KWRD-FM	TX	HIGHLAND VILLAGE	264	100000	C	LIC	231.55	37.83 dB
KPNC	OK	PONCA CITY	264	25000	C3	LIC	143.24	39.39 dB

KSMJ-LP Contour Non-Interference MAP



ASR# 1212936, 131m, 115W, channel 266, FML-1-DA, KAWZ

Aerial Photo Zone of Predicted Interference
K266BG, Edmond, OK FAC# 93289
August 22, 2023

