

TECHNICAL SUMMARY
APPLICATION FOR CONSTRUCTION PERMIT
FM TRANSLATOR STATION K267AO
FREDERICKSBURG, TEXAS
CHANNEL 267 (101.3 MHZ) 0.25 KW (DA)

1. Application Purpose: It is proposed to change the K267AO transmitter site and modify the facilities. Specifically, it is proposed to change transmitter site to ASRN 1268617 and operate with a maximum ERP of 0.25 kW using a Scala 2xYA7-FML/SV directional antenna (DA) system. The Scala DA system will be mounted at the 73 meter (240 foot) level on the existing tower which will result in an RCAMSL of 667.7 meters. No other changes are proposed. The proposal will be a non-fill-in translator for FM station KTSN-FM on channel 205A (88.9 MHz) at Blowout, TX (BLED-20130315ABF, Facility ID 174329).

2. Calculation of Maximum ERP (MERP): As K267AO will be a non-fill-in translator located west of the Mississippi River, and will utilize a DA system, the maximum permitted ERP (MERP) was calculated in accordance with Section 74.1235(b)(2). Specifically, Figure 1 sets forth the calculated HAAT for 12 equally-spaced radials commencing with true north and spaced 30 degrees apart. A 1-second terrain database was used for the HAAT calculations. Figure 1 also tabulates the resulting maximum permitted ERP (MERP) along the 12 equally-spaced radials as well as the MERP for additional radials spaced every 10 degrees of azimuth. The actual ERP along each radial has also been tabulated and, as indicated, the actual ERP is does not exceed the MERP along any radial depicted on Figure 1.

3. Minor Change Compliance: As depicted on Figure 2, the herein proposed 60 dBu contour overlaps the 60 dBu contour for currently licensed K267AO operation (BLFT-20070508AAG) which complies with the FCC's minor change rules.

4. Multiple Translators: FM translator stations K267AO and K295CK (Ch. 295, Luckenbach, TX, BLFT-20160405ABL, Facility ID 148380) are both non-fill-in translators for KTSN-FM. Figure 2 depicts the proposed K267AO and K295CK 60 dBu contours. As indicated, there is slight 60 dBu contour overlap between the proposed K267AO and K295CK 60 dBu contours. However, it is apparent that this slight overlap constitutes significantly less than 50% of the total land area within either the proposed K267AO or K295CK 60 dBu contours. Therefore, the K267AO proposal complies with the multiple translator requirements as it does not serve substantially the same area as K295CK.

5. Section 74.1204 compliance: Figure 3 is an allocation study for channel 267 based on Section 74.1204. Figure 3 lists the results of a numerical analysis of the potential for contour overlap to all nearby co-channel, first, second and third-adjacent channel facilities as

well as IF related stations. For the purposes of the numerical study, the maximum HAAT (210 meters) and ERP (0.25 kW) values were used in determining the maximum distance in any direction to the predicted coverage and interfering contours. Figure 4 demonstrates that the proposal complies with the contour overlap provisions of Section 73.1204 of the FCC rules.

6. RFR Compliance: The proposed K267AO facilities were evaluated in terms of potential radiofrequency radiation exposure at 2 meters above ground level in accordance with the OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation". This Bulletin provides assistance in determining whether FCC-regulated transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency (RF) electromagnetic fields.

The proposed Shively broadband DA will be mounted at the 73-meter level on the existing supporting structure. The calculated power density at 2 meters above ground level at the base of the supporting structure was calculated using the appropriate equation contained in the Bulletin. The total ERP will be 0.5 kW (H+V). A worst-case vertical plane relative field (VPRF) value of 1.0 is presumed for the antenna's downward radiation. The calculated power density (PD) at a point 2 meters above ground level is 3.3 uW/cm^2 . This is only 1.65% of the FCC's recommended limit of 200 uW/cm^2 for the FM band for an uncontrolled/general population environment. Thus, it is believed that the proposed K267AO facility is in full compliance with the FCC's requirements with regard to RF radiation exposure.

Access to the transmitting site will be restricted and appropriately marked with RFR warning signs. Furthermore, a protocol shall be in effect in the event that workers or other authorized personnel enter the restricted area or climb the supporting structure to ensure that appropriate measures will be taken to assure worker safety with respect to RF energy exposure.



W. Jeffrey Reynolds

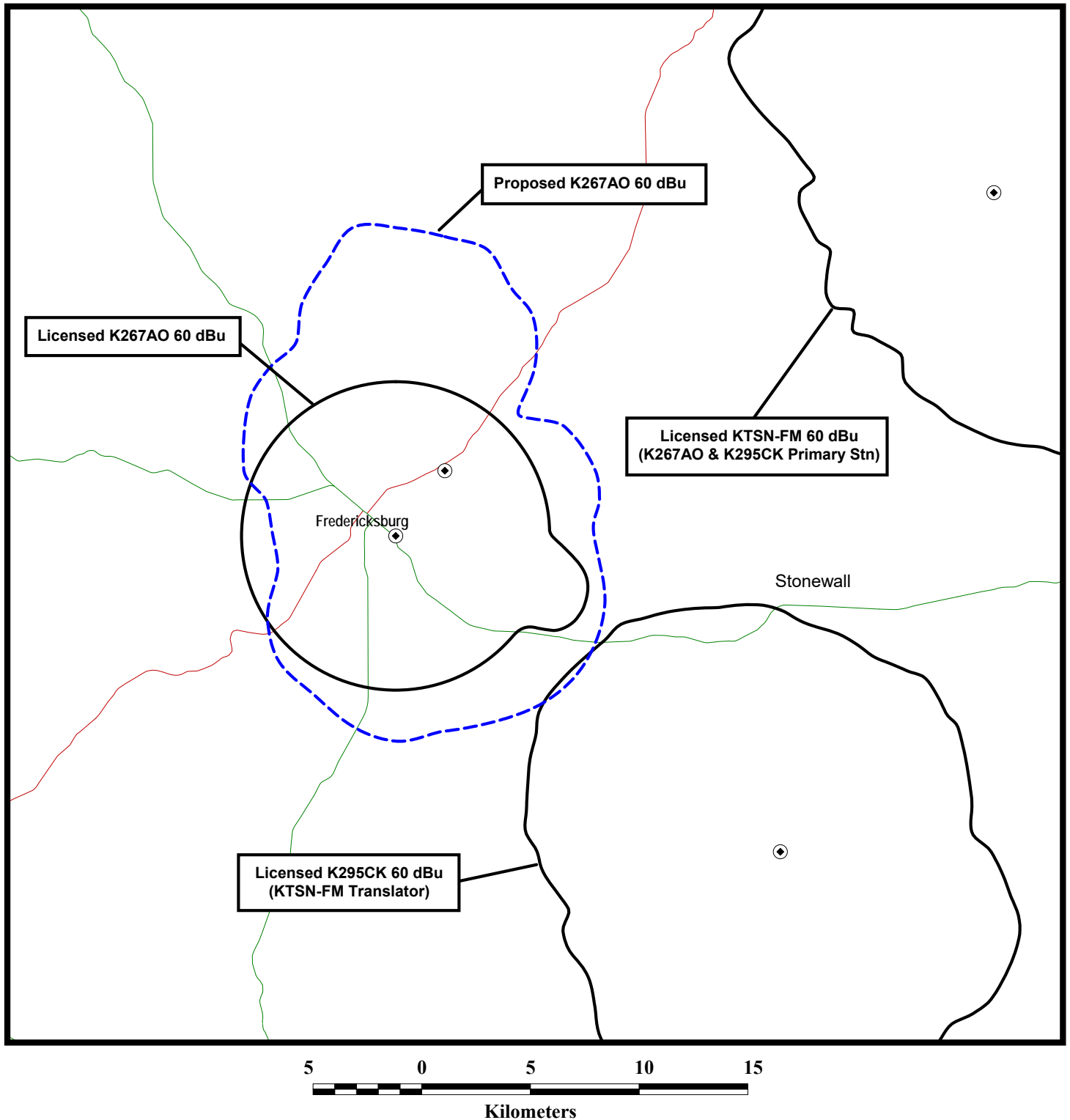
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COMPLIANCE WITH SECTION 74.1235(b)(2)

<u>Bearing</u> <u>(Deg T)</u>	<u>HAAT</u> <u>(m)</u>	<u>Maximum ERP (MERP)</u> <u>(Watts)</u>	<u>Actual ERP</u> <u>(Watts)</u>
0	91	250	143
10	-	250	95
20	-	170	38
30	118	170	19
40	-	170	8
50	-	205	3
60	112	205	3
70	-	205	5
80	-	92	3
90	159	92	3
100	-	92	3
110	-	62	2
120	199	62	2
130	-	62	5
140	-	75	9
150	178	75	13
160	-	75	18
170	-	115	34
180	146	115	40
190	-	115	44
200	-	115	44
210	144	115	41
220	-	115	32
230	-	115	21
240	146	115	12
250	-	115	12
260	-	205	28
270	114	205	40
280	-	205	61
290	-	250	111
300	62	250	168
310	-	250	216
320	-	250	245
330	71	250	250
340	-	250	228
350	-	250	190

Figure 2



FCC PREDICTED 60 DBU COVERAGE

FM TRANSLATOR STATION K267AO
FREDERICKSBURG, TEXAS
CH 267 (101.3 MHZ) 0.250 KW (DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

FM Contour Study LMS

du Treil, Lundin, & Rackley, Inc., Sarasota, Florida


Channel: 267 **Coordinates:** 030-17-29.8 098-49-59.5 (NAD83)
ERP: 0.25 kW**Max. HAAT:** 210 m**Considering Only Interference Caused****Comment:** Proposed K267AO

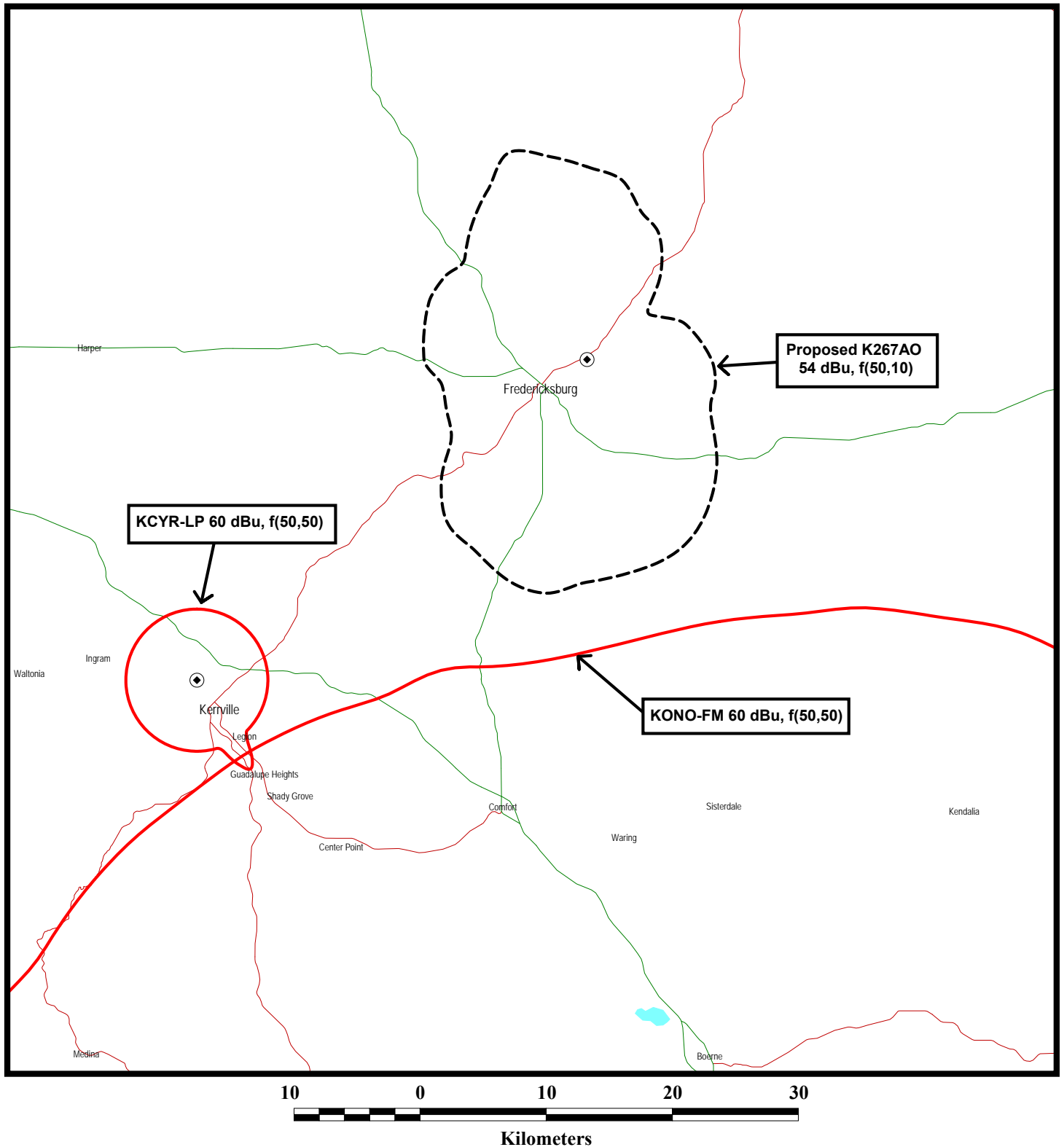
Callsign	Chan.	Service	Status	Freq.	City	State	Co.	Rec.	Latitude	Dist. (km)	Sep. (km)	Spac. (km)
Facility ID	ARN			Class	DA	73.215	ERP (kW)	HAAT (m)	Longitude	Bear. (deg)	Comment	
KASE-FM	264	FM	L2C	100.7	AUSTIN	TX	US	C	30-19-10.7	99.25	83.36	15.89
35849	BLH-19820628AN			C0	OT		100	363	097-48-07	87.94	CLOSE	
KASE-FM 60.0 dBu desired distance: 82.3 km						Proposed 100.0 dBu undesired distance: 1.1 km						
KONO-FM	266	FM	MOD	101.1	HELOTES	TX	US	C	29-31-25.8	85.76	105.46	-19.7
50030	BMLH-20001010ACP			C1	NDI		98	302	098-43-26.1	172.94	SHORT	/1
KONO-FM 60.0 dBu desired distance: 77.3 km						Proposed 54.0 dBu undesired distance: 28.2 km						
K267AO	267	FX	L2C	101.3	FREDERICKSBURG	TX	US	C	30-15-52.7	3.75	68.88	-65.13
139319	BLFT-20070508AAG			D	NDI		0.25	-18.2	098-51-24.1	216.96	SHORT	/2
K267AO 60.0 dBu desired distance: 9.8 km						Proposed 40.0 dBu undesired distance: 59.1 km						
K267AO	267	FX	STA	101.3	FREDERICKSBURG	TX	US	C	30-15-52.7	3.75	66.22	-62.47
139319	0000193558			D	NDI		0.25	-18.2	098-51-24.1	216.96	SHORT	/3
K267AO 60.0 dBu desired distance: 7.1 km						Proposed 40.0 dBu undesired distance: 59.1 km						
KCYR-LP	268	FL	L2C	101.5	KERRVILLE	TX	US	C	30-03-46.7	40.04	33.83	6.21
134081	BLL-20040205AAF			LP1	NDI		0.1	1.323273	099-09-18.1	230.67	CLOSE	/1
KCYR-LP 60.0 dBu desired distance: 5.6 km						Proposed 54.0 dBu undesired distance: 28.2 km						
KROX-FM	268	FM	MOD	101.5	BUDA	TX	US	C	30-19-20.7	99.33	77.06	22.27
54659	0000129844			C2	NDI		12.5	253	097-48-04	87.76	CLEAR	
KROX-FM 60.0 dBu desired distance: 48.9 km						Proposed 54.0 dBu undesired distance: 28.2 km						
KZZM	269	FM	L2C	101.7	MASON	TX	US	C	30-42-03.6	59.46	44.68	14.78
170992	BLH-20100524ABN			C3	NDI		8.2	172	099-14-00.2	319.99	CLOSE	
KZZM 60.0 dBu desired distance: 43.6 km						Proposed 100.0 dBu undesired distance: 1.1 km						

/1 The proposal complies with the contour overlap provisions of Section 74.1204(a). See Figure 3.

/2 K267AO currently licensed operation.

/3 K267AO STA.

Figure 4



COMPLIANCE WITH SECTION 74.1204

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