

TECHNICAL EXHIBIT
APPLICATION FOR LICENSE
TELEVISION STATION KGEB-DT
TULSA, OKLAHOMA
CH 49 50 KW 182 M

Technical Statement

This Technical Exhibit was prepared on behalf of Television Station KGEB-DT on Channel 49 assigned to Tulsa, Oklahoma in support of its application for license. The station is presently operating on automatic program test authority with the authorized facilities of 50 kilowatts with an antenna height above average terrain of 182 meters on Channel 49.¹

Figure 1 is a tabulation of the carrier transmission system losses. A SWR SWEDT160M/49 transmitting antenna was installed in lieu of the authorized Andrew ATW18H3-HTO-49S antenna. However, the antenna will remain non-directional and therefore, remain in compliance with the specifications. Also, the electrical beamtilt is 0.7 degree. Attached within the Appendix is the vertical plane pattern for the installed SWR antenna. Furthermore, the licensee has undertaken a radiofrequency electromagnetic survey atop the building rooftop where KGEB-DT and KGEB(TV) operates. The results of this survey, according to the licensee Technical Director, indicate that the present radiofrequency exposure

¹ See FCC Construction Permit File Number: BPCDT-19991026ABX.

operating procedures remain compliant with the addition of
the new emitter.

Charles A. Cooper

August 9, 2006

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
941.329.6000

Figure 1

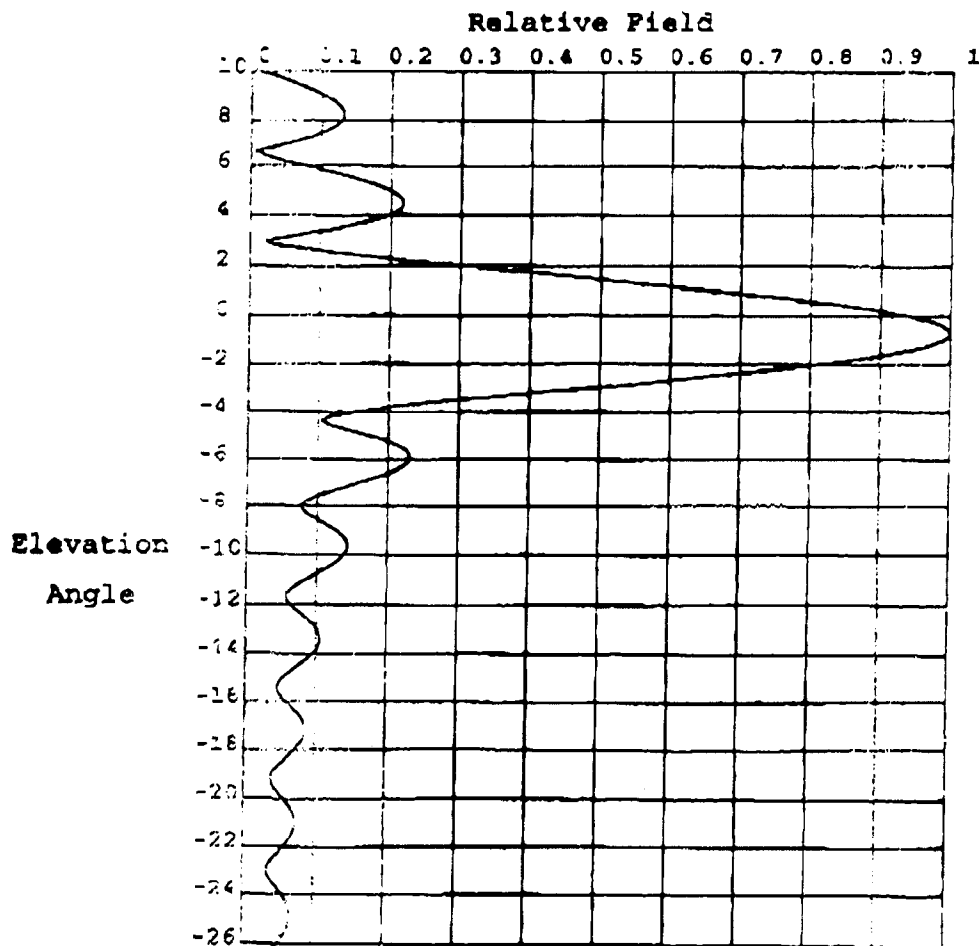
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CH 49 50 KW 182 M

KGEB-DT Transmission System

Description	System
Transmitter Power Output (2.95 kW):	4.7 dBk
Transmission Line Loss (Andrew 1-5/8" Heliax line) 30 feet:	0.2 dB
<i>Antenna SWR SWEDT160M/49</i> (17.6 Power Gain):	12.5 dB
Effective Radiated Power (50 kW):	17.0 dBk

APPENDIX

TRANSMITTING ANTENNA INFORMATION



Elevation Pattern

Scale: Linear

Systems With Reliability L.L.P. Units: Field, Relative

CLIENT: KGEB-TV

Date: 8/27/01

ANTENNA TYPE: SWEDT160M/D49

FREQUENCY: 682

PATTERN POL.: Horizontal

DIRECTIVITY(Peak) 17.595/12.454 dBd

Beam Tilt: (Deg.) -0.7

DIRECTIVITY(Horiz) 15.46/11.892 dBd

Null Fill(s) (%) 10, 7, 5

Micro-Tek Eng. Ver. 2.5

Relative Field Tabulation

AUG-27-2001 18:21

SWR INC.

8144725552 P.06/08

Relative Field Tabulation

Elev. Angle	Rel. Fld.(dB)	Elev. Angle	Rel. Fld.(dB)	Elev. Angle	Rel. Fld.(dB)	Elev. Angle	Rel. Fld.(dB)
3.2	.072 (-22.88)	-4.4	.106 (-19.524)	-12.0	.063 (-24.062)		
3.0	.022 (-32.965)	-4.6	.119 (-18.476)	-12.2	.071 (-22.99)		
2.8	.033 (-29.508)	-4.8	.144 (-16.813)	-12.4	.08 (-21.935)		
2.6	.095 (-20.47)	-5.0	.171 (-15.343)	-12.6	.089 (-21.039)		
2.4	.161 (-15.874)	-5.2	.194 (-14.229)	-12.8	.096 (-20.345)		
2.2	.251 (-12.730)	-5.4	.213 (-13.45)	-13.0	.102 (-19.859)		
2.0	.304 (-10.349)	-5.6	.225 (-12.961)	-13.2	.105 (-19.577)		
1.8	.378 (-8.435)	-5.8	.231 (-12.727)	-13.4	.106 (-19.491)		
1.6	.454 (-6.862)	-6.0	.231 (-12.722)	-13.6	.105 (-19.596)		
1.4	.529 (-5.537)	-6.2	.226 (-12.932)	-13.8	.101 (-19.892)		
1.2	.602 (-4.414)	-6.4	.215 (-13.35)	-14.0	.096 (-20.381)		
1.0	.672 (-3.459)	-6.6	.20 (-13.977)	-14.2	.088 (-21.067)		
.8	.737 (-2.647)	-6.8	.182 (-14.82)	-14.4	.08 (-21.954)		
.6	.798 (-1.965)	-7.0	.161 (-15.886)	-14.6	.071 (-23.033)		
.4	.852 (-1.393)	-7.2	.138 (-17.182)	-14.8	.061 (-24.264)		
.2	.899 (-0.928)	-7.4	.116 (-18.682)	-15.0	.053 (-25.522)		
.0	.937 (-0.562)	-7.6	.097 (-20.274)	-15.2	.047 (-26.532)		
-.2	.967 (-0.289)	-7.8	.083 (-21.648)	-15.4	.045 (-26.921)		
-.4	.988 (-0.106)	-8.0	.077 (-22.283)	-15.6	.047 (-26.533)		
-.6	.999 (-0.02)	-8.2	.08 (-21.918)	-15.8	.052 (-25.62)		
-.8	1.00 (0)	-8.4	.09 (-20.914)	-16.0	.059 (-24.551)		
-1.0	.991 (-0.076)	-8.6	.103 (-19.769)	-16.2	.066 (-23.552)		
-1.2	.973 (-0.239)	-8.8	.115 (-18.749)	-16.4	.073 (-22.719)		
-1.4	.945 (-0.489)	-9.0	.127 (-17.942)	-16.6	.079 (-22.081)		
-1.6	.909 (-0.831)	-9.2	.135 (-17.362)	-16.8	.083 (-21.639)		
-1.8	.864 (-1.265)	-9.4	.141 (-17.003)	-17.0	.085 (-21.39)		
-2.0	.812 (-1.80)	-9.6	.144 (-16.854)	-17.2	.086 (-21.326)		
-2.2	.754 (-2.454)	-9.8	.143 (-16.907)	-17.4	.085 (-21.446)		
-2.4	.69 (-3.22)	-10.0	.139 (-17.158)	-17.6	.082 (-21.749)		
-2.6	.623 (-4.177)	-10.2	.132 (-17.607)	-17.8	.077 (-22.238)		
-2.8	.552 (-5.162)	-10.4	.122 (-18.26)	-18.0	.071 (-22.915)		
-3.0	.48 (-6.38)	-10.6	.111 (-19.121)	-18.2	.065 (-23.781)		
-3.2	.407 (-7.7)	-10.8	.098 (-20.193)	-18.4	.057 (-24.823)		
-3.4	.336 (-9.462)	-11.0	.085 (-21.456)	-18.6	.05 (-25.988)		
-3.6	.269 (-11.417)	-11.2	.072 (-22.833)	-18.8	.044 (-27.139)		
-3.8	.206 (-13.705)	-11.4	.062 (-24.107)	-19.0	.04 (-28.304)		
-4.0	.153 (-16.284)	-11.6	.057 (-24.887)	-19.2	.039 (-28.257)		
-4.2	.117 (-18.654)	-11.8	.057 (-24.834)	-19.4	.041 (-27.802)		

Systems With Reliability L.L.P. Page 1 of 2

CLIENT: KGE8-TV

Date: 8/27/01

ANTENNA TYPE: SWEDT160M/D49

FREQUENCY: 683

PATTERN POL.: Horizontal

DIRECTIVITY(Peak): 17.595/12.454 dbd

Beam Tilt (Deg.) :-7

DIRECTIVITY(Horiz): 15.46/11.892 dbd

Null Fill(s) (%) 10, 7, 5

Micro-Tek Eng. Ver. 2.5