

EXHIBIT #1
ENGINEERING STATEMENT

Concerning the Application of
North Texas Public Broadcasting
To Make a Minor Change
To K259AQ
An FM Translator Serving Tyler, TX

December 2003

Channel 261D

0.25 kW ERP V (DA)

This engineering statement supports the application of North Texas Public Broadcasting of Dallas, Texas to change the frequency, transmitting location, effective radiated power, directional antenna pattern and antenna height of its FM translator, K259AQ, in Tyler, Texas to Channel 261. This application corrects coordinates from the Text Box in Section III-A in dismissed application BPFT20030818ACD.

The proposed facility will transmit 0.25 kW of ERP on Channel 261 (100.1 MHz) from an antenna height above mean sea level of 240 meters on a new 6.1 meter pole atop a building located at 110 N. College Street, Tyler, Texas. The facility will use a Scala FMVMP, vertically polarized antenna. Information on this antenna can be found on Page #3 of this exhibit (Ex #1).

Under the instant proposal, the off-air audio signal of primary station KERA, channel 211, Dallas, will be delivered to a type-approved transmitter. This unit will deliver 0.2 kW to the input of a Scala FMVMP. The antenna has a power gain of 1.25 resulting in an effective radiated power of 0.25 kW, polarized vertically.

A total of 12 evenly spaced radials were used to determine the antenna height above average terrain. The highest radial of the 12 was used to determine the maximum effective radiated power. The USGS 30 arc-second terrain elevation database was employed to determine the elevations along the radials that were averaged using the required four-point interpolation method. The resulting averaged radial antenna heights were employed using the Commission's own TVFMINT algorithm to project the distances to signal contours. A tabular listing of the distance to the 1 mV/m contour can be found on page #4 of this exhibit. A coverage map can be found on page #5.

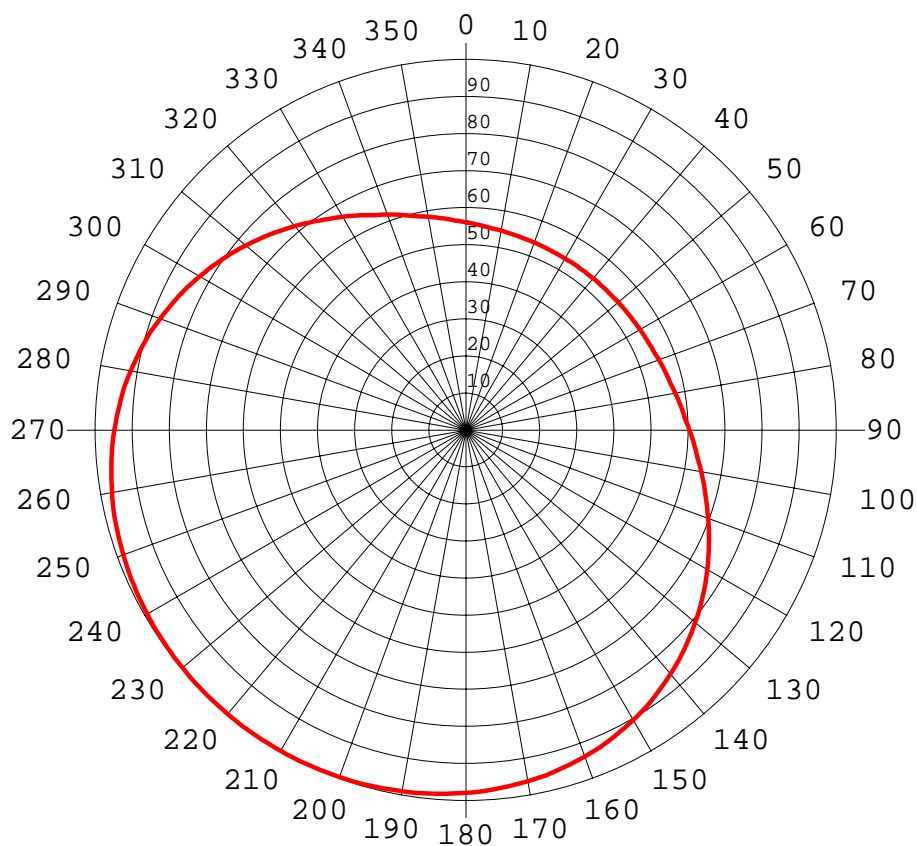
Exhibit #12 is an Allocation Study showing that no interference will be caused any existing licenses, construction permits or allocations. The first page is a computer channel study of all stations having a frequency and distance relationship. The exhibit gives current operating powers, HAAT's bearings and distances. (All distances were computed according to the method described under Section 73.208 of the Commission's Rules.) Page #2 of this exhibit is an explanation of the methods used. Pages 3-5 are a map and FMOVER tables, depicting the relationship between the proposed translator and a co-channel translator application in Gilmer, TX. Page #6 is a map of the contour relationship between the new K259AQ and third adjacent station KPXI, Overton.

The proposed station is not within 320 kilometers of the US border with Mexico or Canada. The proposed facility is okay with respect to AM stations, FCC monitoring stations, Table Mountain and the West Virginia Quiet Zone.

Exhibit #16 is an RF hazard compliance statement.

Page #6 of Exhibit #E1 is a statement of the qualifications of the preparer.

Kate Michler



Azi	Rel	dBk	kW	dB	Azi	Rel	dBk	kW	dB
0	1.000	-6.02	0.250	0.00	180	0.534	-11.47	0.071	-5.45
10	0.999	-6.03	0.250	-0.01	190	0.535	-11.45	0.072	-5.43
20	0.995	-6.06	0.248	-0.04	200	0.540	-11.37	0.073	-5.35
30	0.987	-6.13	0.244	-0.11	210	0.549	-11.23	0.075	-5.21
40	0.975	-6.24	0.238	-0.22	220	0.566	-10.96	0.080	-4.94
50	0.956	-6.41	0.228	-0.39	230	0.592	-10.57	0.088	-4.55
60	0.929	-6.66	0.216	-0.64	240	0.630	-10.03	0.099	-4.01
70	0.892	-7.01	0.199	-0.99	250	0.679	-9.38	0.115	-3.36
80	0.845	-7.48	0.179	-1.46	260	0.735	-8.69	0.135	-2.67
90	0.792	-8.05	0.157	-2.03	270	0.792	-8.05	0.157	-2.03
100	0.735	-8.69	0.135	-2.67	280	0.845	-7.48	0.179	-1.46
110	0.679	-9.38	0.115	-3.36	290	0.892	-7.01	0.199	-0.99
120	0.630	-10.03	0.099	-4.01	300	0.929	-6.66	0.216	-0.64
130	0.592	-10.57	0.088	-4.55	310	0.956	-6.41	0.228	-0.39
140	0.566	-10.96	0.080	-4.94	320	0.975	-6.24	0.238	-0.22
150	0.549	-11.23	0.075	-5.21	330	0.987	-6.13	0.244	-0.11
160	0.540	-11.37	0.073	-5.35	340	0.995	-6.06	0.248	-0.04
170	0.535	-11.45	0.072	-5.43	350	0.999	-6.03	0.250	-0.01

Rotation Angle = 217

K259AQ - Minor Change
North Texas Public Broadcasting

Proposed Translator 60 dBu Coverage

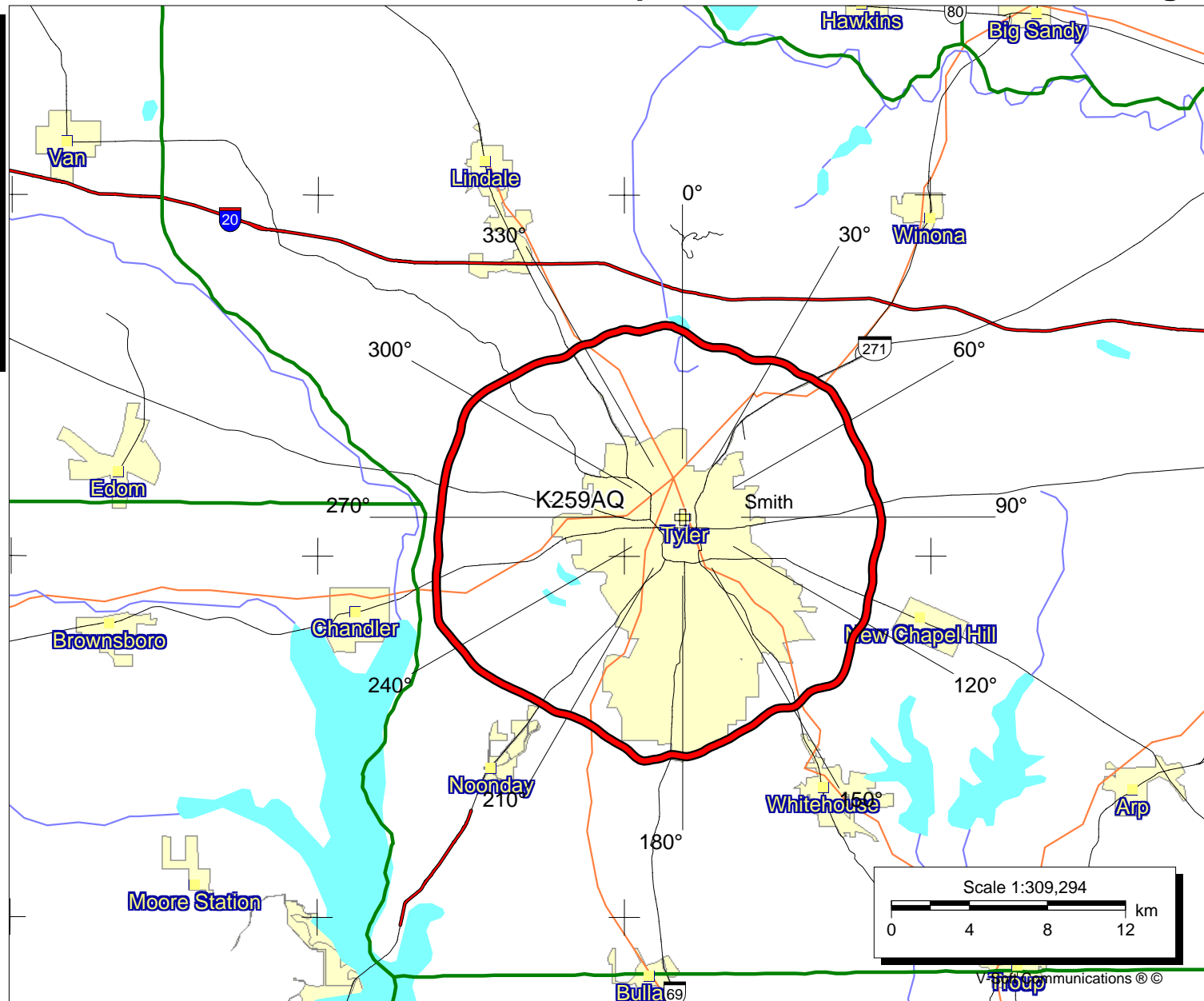
K259AQNew

Latitude: 32-21-05 N
 Longitude: 095-18-06 W
 ERP: 0.25 kW
 Channel: 261
 Frequency: 100.1 MHz
 AMSL Height: 240.0 m
 Elevation: 162 m
 Horiz. Pattern: Directional
 Vert. Pattern: No
 Prop Model: FCC Contour

Pop = 105,145
 Area = 385.3 sq km

December 11, 2003

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 Cedar Falls, Iowa 50613
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Vernier Communications ©

Doug Vernier Telecommunications Consultants

N. Lat. = 32 21 05 W. Lng. = 95 18 06

HAAT and Distance to Contour - FCC Method - 30 Arc Sec.

K259AQ, North Texas Public Broadcasting, Minor Change to BLFT20020621AAP

Azi.	AV EL	HAAT	Max ERP kW		dBk	Field	60-F5
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0	144.1	95.9	0.250	0.0787	-11.04	0.561	9.53
30	144.9	95.1	0.250	0.0715	-11.46	0.535	9.26
60	136.0	104.0	0.250	0.0736	-11.33	0.543	9.76
90	138.4	101.6	0.250	0.091	-10.41	0.603	10.16
120	149.2	90.8	0.250	0.1414	-8.50	0.752	10.71
150	156.6	83.4	0.250	0.2039	-6.91	0.903	11.24
180	147.9	92.1	0.250	0.2394	-6.21	0.979	12.23
210	158.3	81.7	0.250	0.2497	-6.03	0.999	11.68
240	133.4	106.6	0.250	0.2463	-6.09	0.993	13.23
270	142.1	97.9	0.250	0.2246	-6.49	0.948	12.41
300	132.1	107.9	0.205	0.1719	-7.65	0.829	12.18 *
330	147.5	92.5	0.250	0.1103	-9.57	0.664	10.18

Ave El= 144.23 M

HAAT= 95.77 M

AMSL= 240 M

* Highest HAAT of the 12 cardinal radials, relative field <100%. Maximum ERP is not exceeded by directional antenna pattern along this radial.

Declaration:

I, Katherine A. Michler, have received a Bachelor of Science degree from the University of Northern Iowa, and;

That, I declare that I have received training as a technical consultant as a member of the staff of Doug Vernier Telecommunications Consultants, and;

That, I have apprenticed under Douglas Vernier for over six years, and;

That, he has been active in broadcast consulting for over 25 years, and;

That, his qualifications are a matter of record with the Federal Communications Commission, and;

That, I am an Associate Member (#20792) of the Society of Broadcast Engineers, Indianapolis, Indiana, and;

That, the consulting firm of Doug Vernier Telecommunications Consultants has been retained by North Texas Public Broadcasting, Dallas, Texas;

That, I have personally prepared these engineering showings, the technical information contained in same and the facts stated within are true to my knowledge, and;

That, under penalty of perjury, I declare that the foregoing is correct.

Katherine A. Michler Katherine A. Michler

Executed on December 11, 2003