

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of KAZH LICENSE, L.L.C., licensee of Low Power Television Station KVVV-LP, Channel 53 in Houston, Texas, in support of this Application for Construction Permit to specify a new site.

It is proposed to mount a standard Andrew omnidirectional antenna at the 142-meter level of an existing 177-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the newly proposed 74 dBu contour encompasses a significant portion of that which obtains from the authorized KVVV-LP facility. Operating parameters for the proposed facility are tabulated in Exhibit C. A contour overlap analysis and interference study are provided in Exhibit D, and a power density calculation follows as Exhibit E.

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1001973 to this tower.

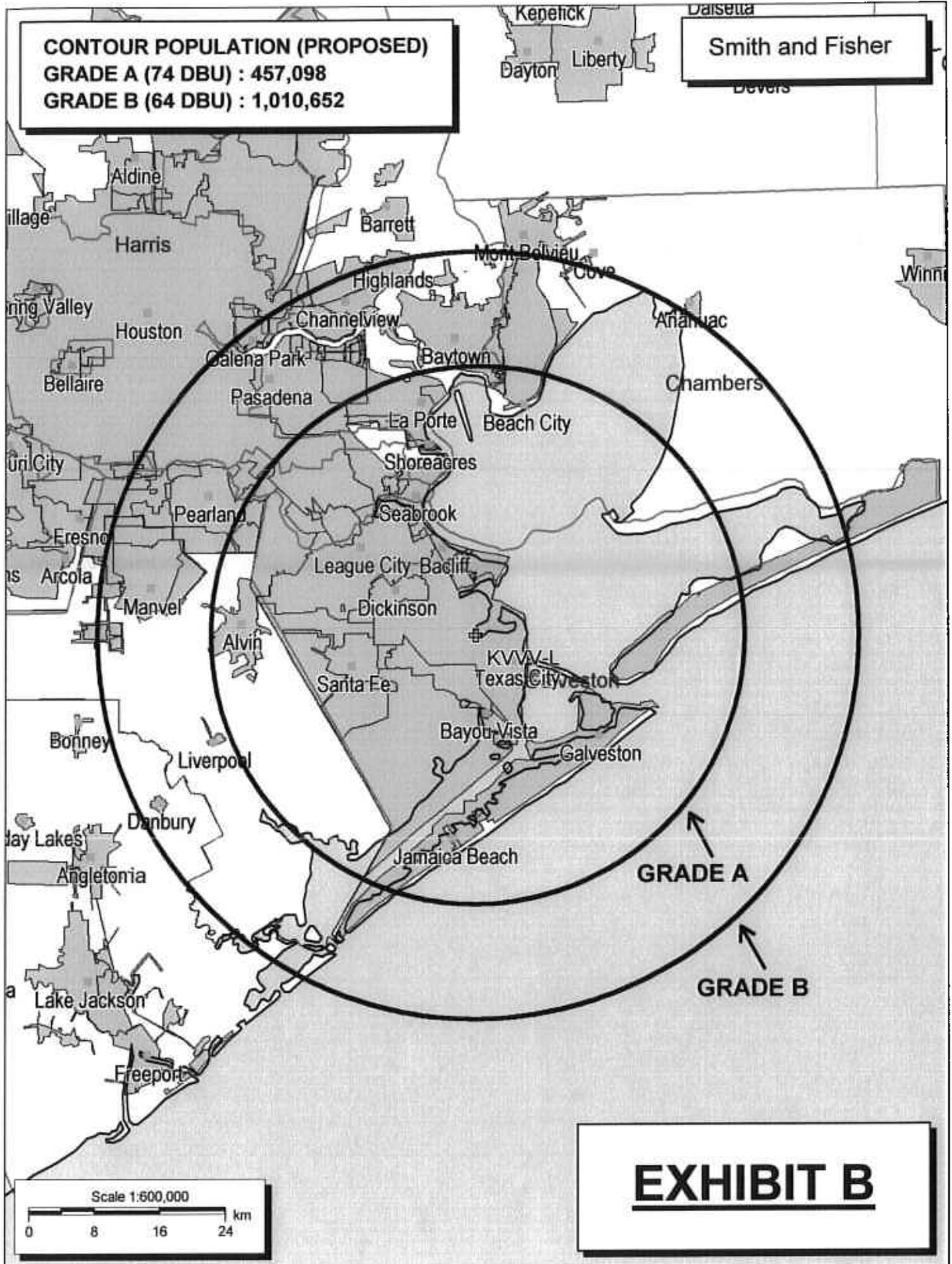
I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

  
KYLE T. FISHER

May 13, 2004

**CONTOUR POPULATION (PROPOSED)**  
**GRADE A (74 DBU) : 457,098**  
**GRADE B (64 DBU) : 1,010,652**

**Smith and Fisher**



Scale 1:600,000

0 8 16 24 km

**EXHIBIT B**

## PROPOSED OPERATING PARAMETERS

PROPOSED KVVV-LP  
CHANNEL 53 – HOUSTON, TEXAS

Transmitter Power Output:	8.9 kw
Transmission Line Efficiency:	60.1%
Antenna Power Gain – Toward Horizon:	28.2
Antenna Power Gain – Main Lobe:	28.2
Effective Radiated Power – Toward Horizon:	150.0 kw
Effective Radiated Power – Main Lobe:	150.0 kw
Transmitter Make and Model:	Type-accepted
Rated Output	9.0 kw
Transmission Line Make and Model:	Andrew HJ8-50B
Size and Type:	3" air heliax
Length:	490 feet*
Antenna Make and Model:	Andrew ALP16M2-HSOC
Orientation	Omnidirectional
Beam Tilt	0.5 degrees
Effective Height Above Ground:	142 meters
Effective Height Above Mean Sea Level:	144 meters

\*Assumed

CONTOUR OVERLAP AND  
LONGLY-RICE INTERFERENCE STUDIES  
PROPOSED KVVV-LP  
CHANNEL 53 – HOUSTON, TEXAS

We conducted a computer analysis of the interference situation for the proposed facility, the results of which are shown in Exhibit D-2. The study is based on contour protection requirements of Sections 74.705, 74.706, and 74.707 of the FCC's Rules with respect to analog full-power, digital full-power, and low power television stations, respectively. It concludes that the facility proposed herein meets these requirements except to five stations: KNWS-DT, Channel 52 in Katy, Texas; KWTX-DT, Channel 53 in Waco, Texas; KHWB(TV), Channel 39 in Houston, Texas; K53II, Channel 53 in Beaumont, Texas; and, KAZH(TV), Channel 57 in Baytown, Texas.

We then conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to these facilities of concern. The software utilizes a 2-square kilometer cell size (except where noted), calculates signal strength at 1.0 kilometer increments along each radial studied, and employs the 1990 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within the protected contour of the station under study where interference from another source (other than proposed KVVV-LP) already is predicted to exist (also known as "masking"). The results of these studies are provided in Exhibit D-3. They conclude that the facility

EXHIBIT D-1

proposed herein causes no significant new interference to any of the potentially affected stations.

As a result, waivers of Section 74.706 of the Commission's Rules with respect to interference to KNWS-DT and KWTX-DT, Section 74.705 with regard to KHWB and KAZH, and Section 74.707 with respect to K53II are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED KVVV-LP  
HOUSTON TX

REFERENCE

29 24 40 N  
94 57 04 W

LPTV Pwr = 150 kW, HAMS L COR= 144 M

DISPLAY DATES

DATA 05-08-04  
SEARCH 05-13-04

..... Channel 53-, 704 MHz .....

Call	Channel	Location	Dist	Azi	FCC	Margin
KVVV-L	LI 53-	Houston	TX 55.76	313.9	> 237.07	-181.31
KNWS-D	CPM 52	Katy	TX 56.70	287.4	> 133.35	-76.65
KWTX-D	CPM 53	Waco	TX 310.82	313.7	> 382.89	-72.07
KWTX-TV	ALD 53	WACO	TX 310.74	313.7	> 382.33	-71.59
KHWB	LI 39-	Houston	TX 55.93	288.4	> 122.31	-66.38
KNWSTV	ALD 52	KATY	TX 55.87	287.5	> 104.64	-48.77
K53II	CP 53+	Beaumont	TX 110.26	39.8	> 147.08	-36.82
KAZH	LI 57+	Baytown	TX 30.37	245.8	> 032.00	-1.63
NEW	AP 53Z	Woodville	TX 160.86	19.3	> 137.66	23.20
KNWSTV	LI 51+	Katy	TX 55.87	287.5	> 032.00	23.87
KTBU	AP 55+	Conroe	TX 56.70	287.4	> 032.00	24.70
KPXB	AP 49+	Conroe	TX 57.04	288.3	> 032.00	25.04
KAZH	CP 57+	Baytown	TX 57.04	288.3	> 032.00	25.04
KTBU	LI 55+	Conroe	TX 92.44	349.7	> 032.00	60.44
KPXB	CP 49+	Conroe	TX 92.44	349.7	> 032.00	60.44
NEW	ADM 53Z	New Iberia	LA 320.48	73.0	> 254.41	66.07
KPXB	LI 49+	Conroe	TX 98.62	343.3	> 032.00	66.62
NEW	ADM 53Z	Corpus Christi	TX 323.27	234.8	> 253.28	69.99

INTERFERENCE SUMMARY  
 PROPOSED KVVV-LP  
 CHANNEL 53 – HOUSTON, TEXAS

<u>Call Sign</u>	<u>Status</u>	<u>City, State</u>	<u>Ch.</u>	<u>Longley-Rice Service Population</u>	<u>Unmasked Interference From Proposed Facility</u>	<u>%</u>
KNWS-DT BMPCDT-20010612AEL	CP	Katy, TX	52	3,891,701	0	0
KWTX-DT BMPCDT-20010912AAJ	CP	Waco, TX	53	882,939	23	<0.1
KWTX-TV BLCT-790730KP	Allot.	Waco, TX	53	890,564	13	<0.1
KHWB(TV) BMLCT-20011009ADG	Lic.	Houston, TX	39	3,778,424	0	0
KNWS-TV BLCT-931104KE	Allot.	Katy, TX	52	3,687,079	0	0
K53II BNPTTL-20000830BBR	CP	Beaumont, TX	53	142,352	350	0.2
KAZH(TV) BLCT-19920207KE	Lic.	Baytown, TX	57	3,625,902	0	0

POWER DENSITY CALCULATION

PROPOSED KVVV-LP  
CHANNEL 53 – HOUSTON, TEXAS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Houston facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 150 kw, an effective antenna height of 142 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of  $0.0024 \text{ mw/cm}^2$  is calculated to occur 32 meters from the base of the tower. Since this is only than 0.5 percent of the  $0.47 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 53 (704-710 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.