

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of FOX TELEVISION STATIONS, INC., licensee of KTXH-DT, Channel 19 in Houston, Texas, in support of its Application for Construction Permit to operate an auxiliary facility at its present transmitter site.

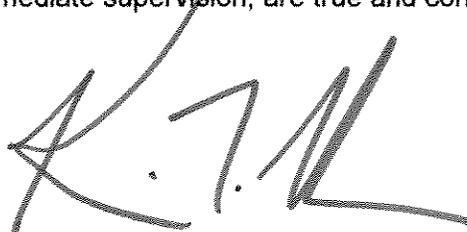
It is proposed to mount a Dielectric directional antenna at the 532-meter level of an existing 602-meter communications tower. Elevation and azimuth pattern data for the antenna are provided in Exhibit B. Exhibit C is a map upon which the predicted service contours of the proposed auxiliary and licensed facilities are plotted. As shown, the proposed auxiliary 41 dBu service contour is completely contained within that authorized to KTXH-DT. A power density calculation is provided in Exhibit D.

It is important to note that, because this is an auxiliary application, the Commission's city-grade coverage requirements and interference Rules do not pertain. In addition, it is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the proposed site. However, if such should occur, the owner of the station recognizes its obligation to take whatever corrective actions are necessary.

Since no change in the overall height or location of the existing tower is specified herein, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1059622 to this tower.

EXHIBIT A

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.

A handwritten signature in black ink, appearing to read 'K. T. Fisher', with a stylized flourish at the end.

KEVIN T. FISHER

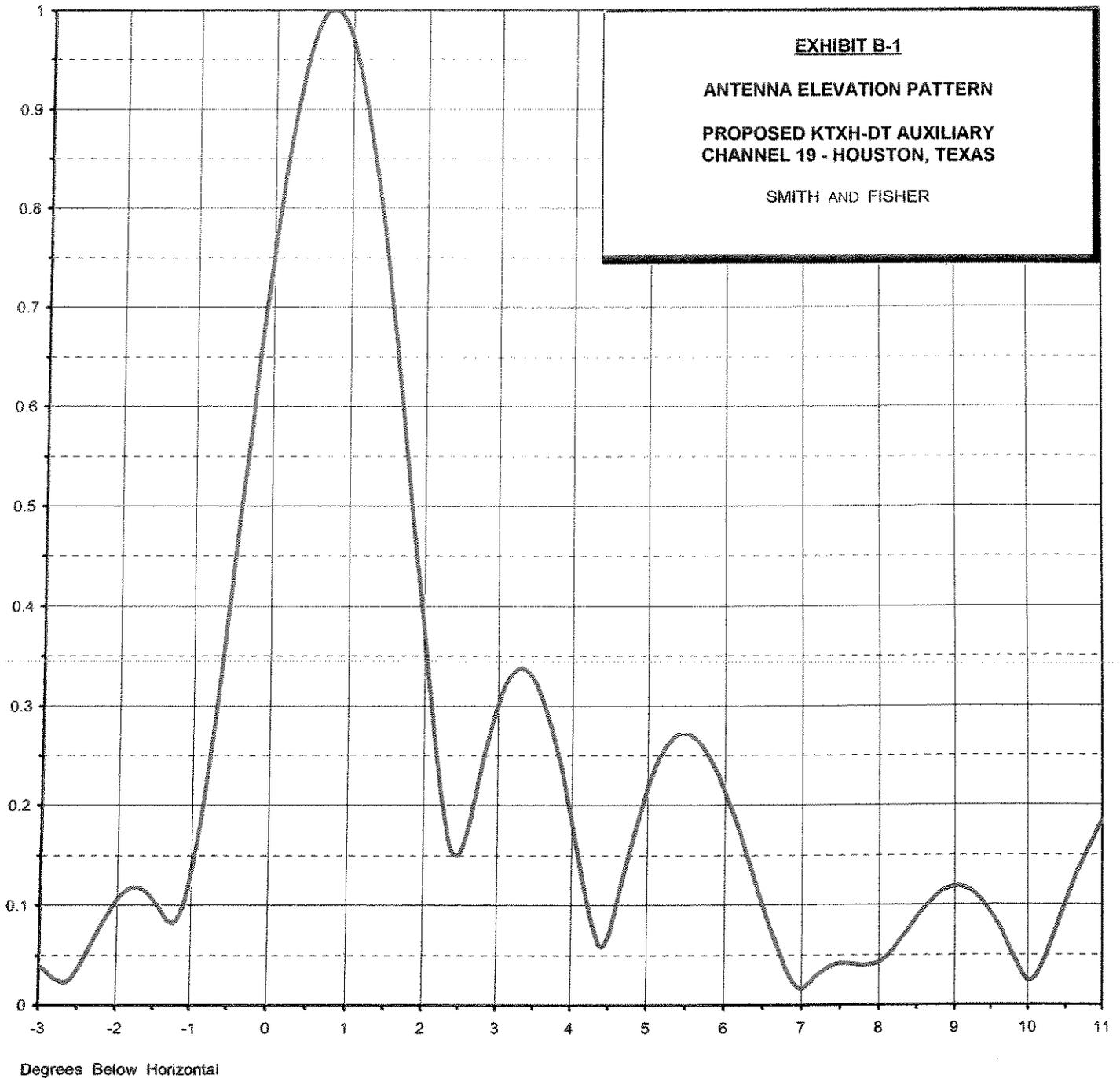
August 25, 2005



Proposal Number **DCA-10875** Revision: **2**  
Date **20-Jul-05**  
Call Letters **Houston, TX** Channel  
Location **Houston, TX**  
Customer  
Antenna Type **TFU-24WB-R WC**

### ELEVATION PATTERN

RMS Gain at Main Lobe **22.09 (13.44 dB)** Beam Tilt **0.75 deg**  
RMS Gain at Horizontal **12.20 (10.86 dB)** Frequency  
Calculated / Measured **Calculated** Drawing # **24H221075**

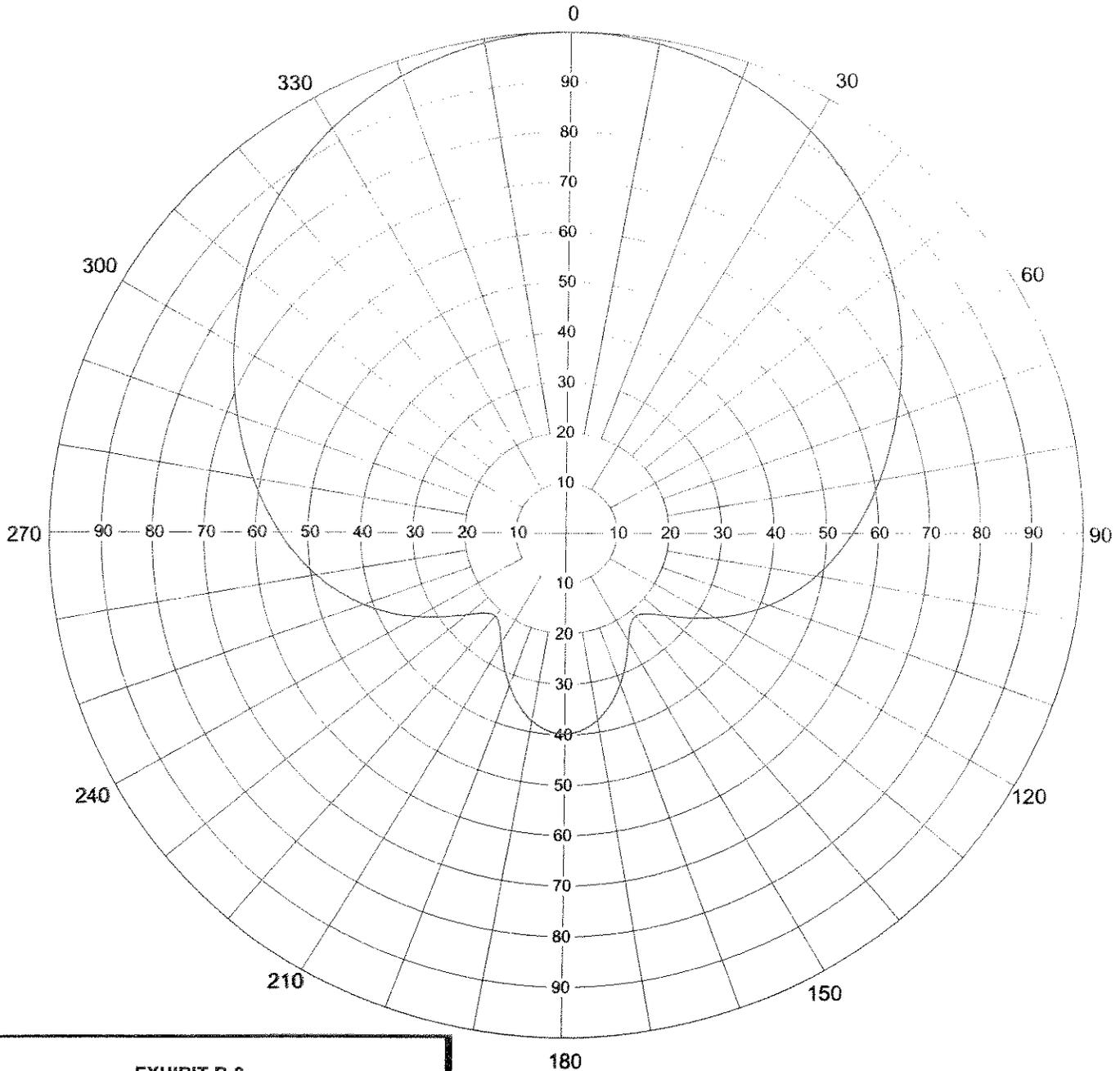


### AZIMUTH PATTERN

Gain  
Calculated / Measured

**2.50 (3.98 dB)**  
Calculated

Frequency  
Drawing #



**EXHIBIT B-2**

**ANTENNA AZIMUTH PATTERN**  
**PROPOSED KTXH-DT AUXILIARY**  
**CHANNEL 19 - HOUSTON, TEXAS**  
  
SMITH AND FISHER

Note: Antenna will be mounted such that 0° on graph will be oriented at 35° T.

ANTENNA RADIATION VALUES  
 PROPOSED KTXH-DT AUXILIARY  
 CHANNEL 19 – HOUSTON, TEXAS

<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>	<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>
0	1.000	27.2	180	0.398	19.2
10	0.992	27.1	190	0.376	18.7
20	0.967	26.9	200	0.318	17.2
30	0.927	26.5	210	0.248	15.1
40	0.874	26.0	220	0.214	13.8
50	0.811	25.4	230	0.254	15.3
60	0.743	24.6	240	0.334	17.7
70	0.675	23.8	250	0.417	19.6
80	0.612	22.9	260	0.488	21.0
90	0.551	22.0	270	0.551	22.0
100	0.488	21.0	280	0.612	22.9
110	0.416	19.6	290	0.675	23.8
120	0.334	17.7	300	0.743	24.6
130	0.254	15.3	310	0.811	25.4
140	0.214	13.8	320	0.874	26.0
150	0.248	15.1	330	0.927	26.5
160	0.318	17.2	340	0.967	26.9
170	0.376	18.7	350	0.992	27.1

Note: Antenna will be mounted such that 0° in tabulation will be oriented at 35° T.

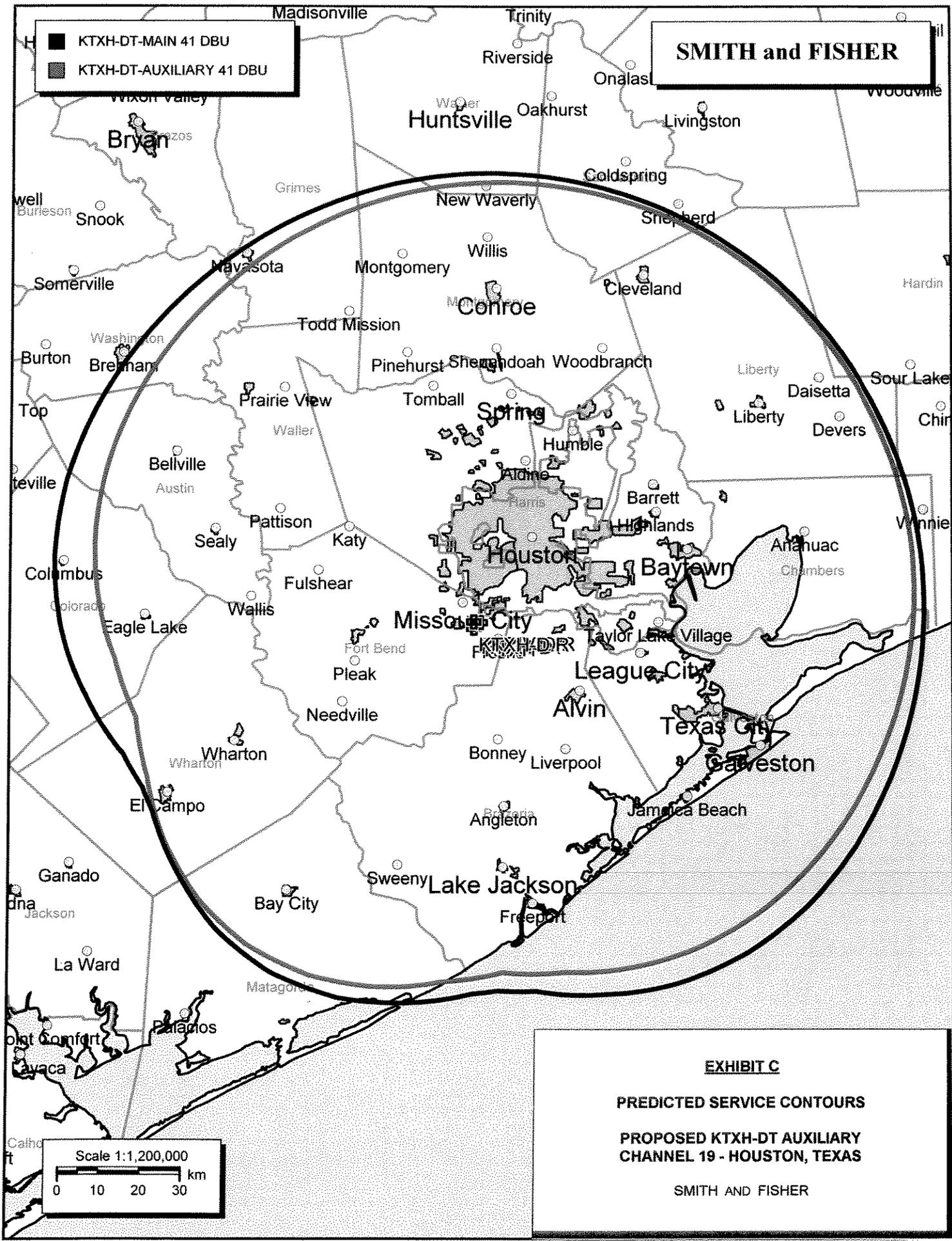


EXHIBIT D

POWER DENSITY CALCULATION

PROPOSED KTXH-DT AUXILIARY  
CHANNEL 19 – 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 520 kw, an effective antenna height of 532 meters above ground, and the elevation pattern of the Dielectric antenna, maximum power density two meters above ground of  $0.0012 \text{ mw/cm}^2$  is calculated to occur 270 meters northeast of the base of the tower. Since this is only 0.4 percent of the  $0.33 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 19 (500-506 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level 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.