

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TV AMERICAS DE OMAHA, LLC, licensee of Low Power Television Station K57HV, Channel 57 in Columbus, Nebraska, in support of this Application for Construction Permit to specify operation on Channel 36 from the licensed K57HV site. This proposal is being submitted in response to the Commission's reclamation of Channel 57 spectrum for future auction, thereby placing this LPTV station in a displacement situation.

It is proposed to mount a standard Andrew omnidirectional antenna at the authorized height on the side of an existing 59 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 licensed K57HV 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. Due to the diminutive height of the tower and its proximity to the nearest airport runway, FCC antenna structure registration is not required. This conclusion was confirmed by the Commissions TOWAIR program.

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.

September 1, 2004

  
KEVIN T. FISHER

CONTOUR POPULATION  
GRADE A (74 DBU) : 30,396  
GRADE B (64 DBU) : 47,805

Smith and Fisher

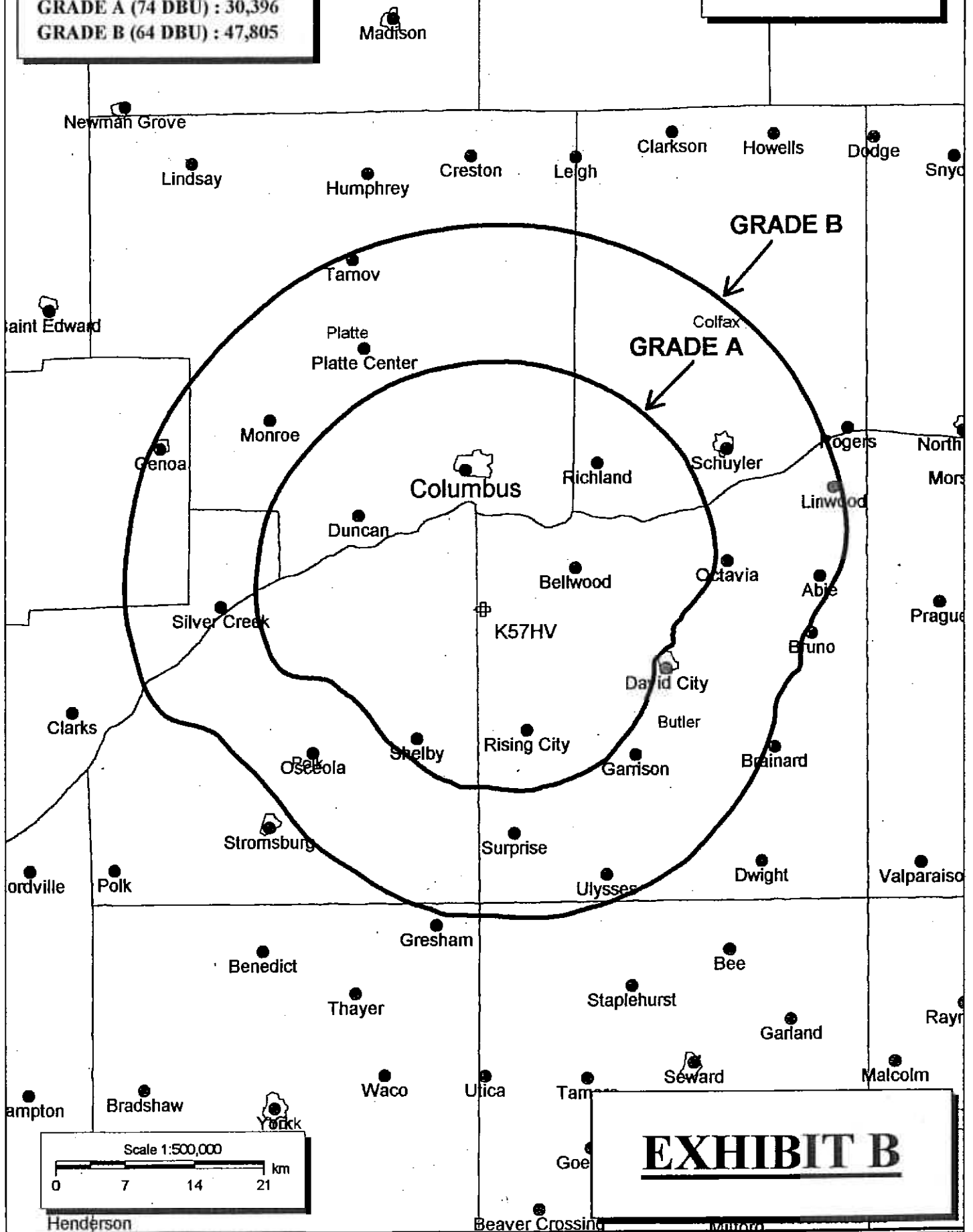


EXHIBIT C

## PROPOSED OPERATING PARAMETERS

PROPOSED K57HV  
CHANNEL 36 – COLUMBUS, NEBRASKA

Transmitter Power Output:	2.0 kw
Transmission Line Efficiency:	77.2%
Antenna Power Gain – Toward Horizon:	28.2
Antenna Power Gain – Main Lobe:	28.2
Effective Radiated Power – Toward Horizon:	43.6 kw
Effective Radiated Power – Main Lobe:	43.6 kw
Transmitter Make and Model:	Type-accepted
Rated Output	2.0 kw
Transmission Line Make and Model:	Andrew LDF7-50A
Size and Type:	1-5/8" foam heliax
Length:	184 feet
Antenna Make and Model:	Andrew ALP16L2-HSOC
Orientation	Omnidirectional
Beam Tilt	0.5 degrees
Effective Height Above Ground:	55 meters
Effective Height Above Mean Sea Level:	558 meters

EXHIBIT D-1

CONTOUR OVERLAP AND  
LONGLEY-RICE INTERFERENCE STUDIES  
PROPOSED K57HV  
CHANNEL 36 – COLUMBUS, NEBRASKA

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 three stations: KHGI-DT, Channel 36 in Kearney, Nebraska; KHIN(TV), Channel 36 in Red Oak, Iowa; and, an application for a new LPTV station on Channel 36 in South Sioux City, Iowa. It is important to note that the owner of K57HV is the owner of KHGI-DT as well as the South Sioux City LPTV proposal. Any actual interference that may be caused between these facilities is hereby accepted.

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 K57HV) 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 74.705 of the Commission's Rules with respect to interference to KHIN(TV), Section 74.706 with regard to KHGI-DT and Section 74.707 with respect to the South Sioux City proposal are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED K57HV  
CH. 36 - COLUMBUS NE

REFERENCE

41 18 23 N  
97 20 52 W

LPTV Pwr = 43.6 kW, HAMS L COR= 558 M

DISPLAY DATES

DATA 08-14-04  
SEARCH 08-23-04

..... Channel 36-, 602 MHz .....

Call	Channel	Location	Dist	Azi	FCC	Margin
KHGI-D CPM 36	Kearney	NE	146.81	241.0	> 328.63	-181.82
KHIN LI 36Z	Red Oak	IA	175.19	87.9	> 228.11	-52.92
NEW AP 36-	South Sioux City	NE	150.59	30.3	> 189.47	-38.88
K21ES* LI 21+	Columbus, Etc	NE	37.85	75.1	> 029.72	8.13
KMCI ALD 36	LAWRENCE	KS	325.51	144.7	> 316.74	8.77
KMCI-D LI 36	Lawrence	KS	352.61	136.3	> 320.88	31.73
KWSD LI 36+	Sioux Falls	SD	252.46	14.3	> 210.33	42.13
KWAZ-L AP 35+	Lincoln	NE	75.62	131.7	> 032.74	42.88
K35FM CPM 35N	Norfolk	NE	80.31	359.5	> 029.31	51.00
K52ES AP 21-	Norfolk	NE	80.50	359.4	> 029.01	51.49
KHIN-D CP 35	Red Oak	IA	175.19	87.9	> 117.58	57.61

\* Actual radials antenna height and directional patterns used (if any)

INTERFERENCE SUMMARY  
PROPOSED K57HV  
CHANNEL 36 – COLUMBUS, NEBRASKA

<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>
KHGI-DT BMPCDT-20020301AEB	CP	Keamey, NE	36	205,600	267	0.1
KHIN(TV) BLET-19860923KP	Lic.	Red Oak, IA	36	741,948	497	<0.1
NEW-T BNPTTL-20000831ASH	Appl.	So. Sioux City, IA	36	83,733	0	0

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED K57HV  
CHANNEL 36 – COLUMBUS, NEBRASKA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Columbus facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 43.6 kw, an effective antenna height of 55 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of  $0.0050 \text{ mw/cm}^2$  is calculated to occur 12 meters from the base of the tower. Since this is only 1.2 percent of the  $0.40 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 36 (602-608 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.