## ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of

PAPPAS TELECASTING COMPANIES, permittee of Low Power Television Station

KAZK-LP, Channel 27 in O'Neill, Nebraska, in support of this Application for modification of

Construction Permit BNPTTL-20000831AJL to specify a reduction in antenna height and a

slight increase in effective radiated power.

It is now proposed to mount the authorized Andrew omnidirectional antenna at the

68-meter level of the existing 93-meter communications tower. Exhibit B is a map upon

which the revised 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 KAZK-LP facility. Operating parameters for the proposed facility are tabulated in

Exhibit C. A contour overlap analysis is 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 1025729 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.
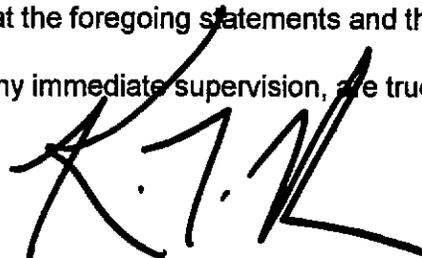
KEVIN T. FISHER

September 27, 2004

CONTOUR POPULATION
GRADE A (74 DBU) : 4,874
GRADE B (64 DBU) : 5,832

Smith and Fisher

GRADE B

GRADE A

Emmet

Holt

O'Neill

KAZK-LP

Page

Inman

Ewing

Chambers

On

Scale 1:300,000

0   4   8   12   km
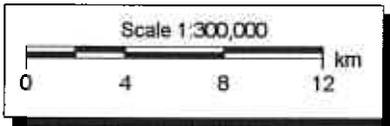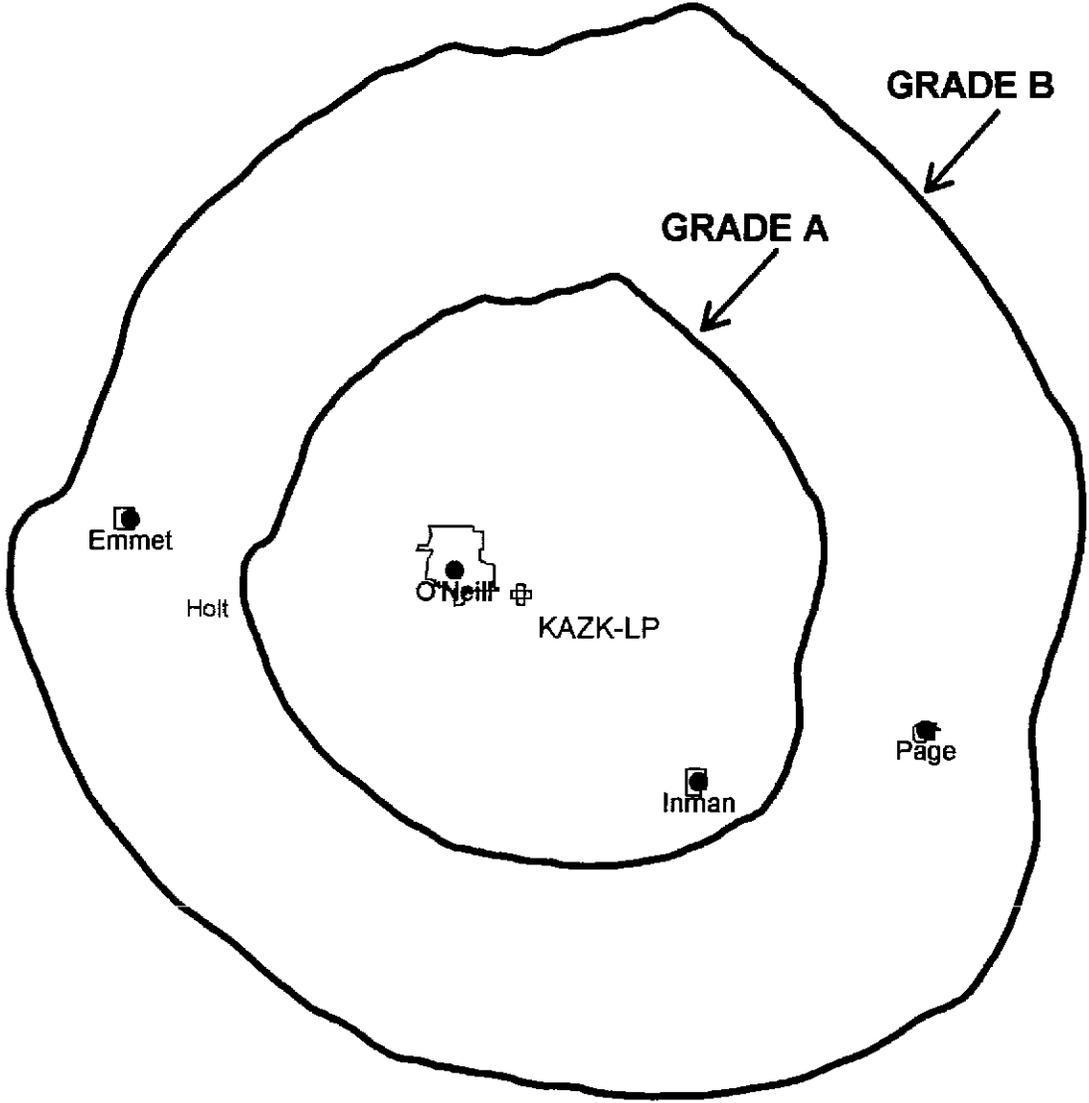
EXHIBIT B

EXHIBIT C

PROPOSED OPERATING PARAMETERS

PROPOSED KAZK-LP
CHANNEL 27 – O'NEILL, NEBRASKA
[MODIFICATION OF BNPTTL-20000831AJL]

Transmitter Power Output:	1.0 kw
Transmission Line Efficiency:	73.2%
Antenna Power Gain – Toward Horizon:	14.06
Antenna Power Gain – Main Lobe:	14.06
Effective Radiated Power – Toward Horizon:	10.3 kw
Effective Radiated Power – Main Lobe:	10.3 kw
Transmitter Make and Model:	Type-accepted
Rated Output	1.0 kw
Transmission Line Make and Model:	Andrew LDF7-50A
Size and Type:	1-5/8" foam heliax
Length:	234 feet
Antenna Make and Model:	Andrew AL8
Orientation	Omnidirectional
Beam Tilt	1.75 degrees
Effective Height Above Ground:	68 meters
Effective Height Above Mean Sea Level:	669 meters

CONTOUR OVERLAP STUDY
PROPOSED KAZK-LP
CHANNEL 27 – O'NEILL, NEBRASKA
[MODIFICATION OF BNPTTL-20000831AJL]

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 to all stations.

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                         PROPOSED KAZK-LP
                      CH. 27 - O'NEILL  NE
REFERENCE                                                 DISPLAY DATES
42 26 57 N        LPTV Pwr = 10 kW,  HAMSL COR= 668 M     DATA   09-24-04
98 36 53 W                                                SEARCH 09-27-04
........................... Channel 27Z,   548 MHz .....................
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Call	Channel	Location		Dist	Azi	FCC	Margin
KAZK-L CP	27Z	O'neill	NE	0.00	0.0	> 150.00	-150.00
KSINTV*LI	27-	Sioux City	IA	190.17	87.0	> 179.12	17.93
NEW* AP	27Z	Valentine	NE	162.78	287.2	> 136.54	26.24
KDLV-D CP	26	Mitchell	SD	146.46	6.4	> 104.28	42.18
KDLT ALD	26	MITCHELL	SD	165.89	37.1	> 117.22	48.67
K28HF* CP	28-	Bassett	NE	72.69	260.2	> 051.54	59.31
KRWF-D CPM	27	Redwood Falls	MN	339.15	47.0	> 265.83	73.32

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

POWER DENSITY CALCULATION

PROPOSED KAZK-LP
CHANNEL 27 – O'NEILL, NEBRASKA
[MODIFICATION OF BNPTTL-20000831AJL]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this O'Neill facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 10.3 kw, an effective antenna height of 68 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of 0.00032 mw/cm^2 is calculated to occur 32 meters from the base of the tower. Since this is only 0.08 percent of the 0.37 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 27 (548-554 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.