

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, licensee of television translator K54ER, Channel 54 in Jonesboro, Arkansas, in support of this Application for Construction Permit to specify operation on Channel 42 from the licensed K54ER site. This proposal is being submitted in response to the Commission's reclamation of Channel 54 spectrum for future auction, thereby placing this translator in a displacement situation.

It is proposed to mount a standard Andrew omnidirectional antenna at the authorized height on the side of an existing 204-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 K54ER 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 1038709 to this tower.

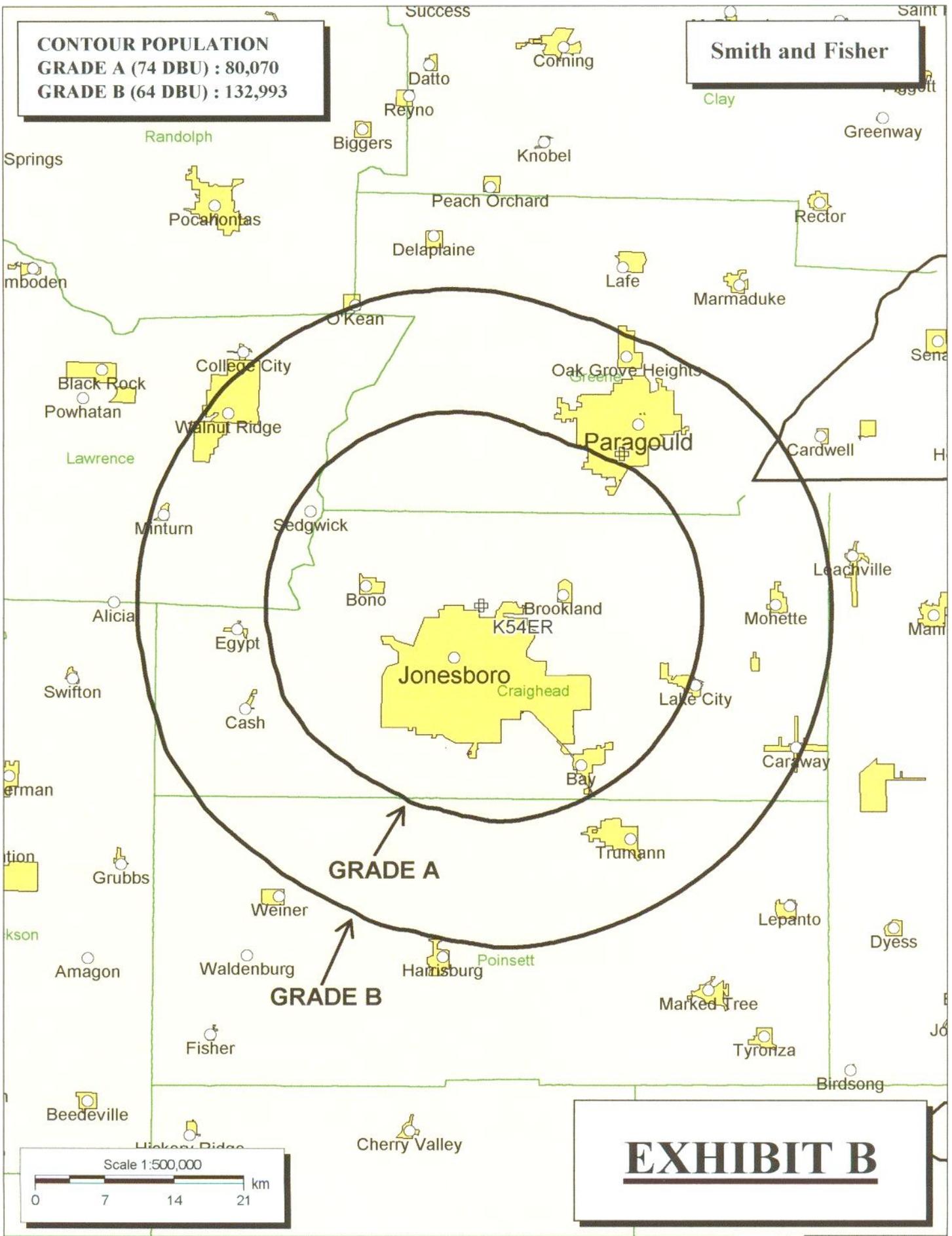
I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.


KYLE T. FISHER

August 6, 2003

CONTOUR POPULATION
GRADE A (74 DBU) : 80,070
GRADE B (64 DBU) : 132,993

Smith and Fisher



GRADE A

GRADE B

EXHIBIT B



PROPOSED OPERATING PARAMETERS

PROPOSED K54ER
CHANNEL 42 – JONESBORO, ARKANSAS

Transmitter Power Output:	1.0 kw
Transmission Line Efficiency:	52.6%
Antenna Power Gain – Toward Horizon:	28.2
Antenna Power Gain – Main Lobe:	28.2
Effective Radiated Power – Toward Horizon:	14.8 kw
Effective Radiated Power – Main Lobe:	14.8 kw
Transmitter Make and Model:	Type-accepted
Rated Output	1.0 kw
Transmission Line Make and Model:	Andrew HJ7-50A
Size and Type:	1-5/8" air heliax
Length:	510 feet
Antenna Make and Model:	Andrew ALP16L2-HSOC
Orientation	Omnidirectional
Beam Tilt	0.5 degrees
Effective Height Above Ground:	151 meters
Effective Height Above Mean Sea Level:	263 meters

CONTOUR OVERLAP AND
LONGLY-RICE INTERFERENCE STUDIES
PROPOSED K54ER
CHANNEL 42 – JONESBORO, ARKANSAS

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 two stations: K27FC, Channel 27 in Paragould, Arkansas; and, KWBF(TV), Channel 42 in Little Rock, Arkansas.

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 Trinity's proposed K54ER) 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 proposed herein causes no significant new interference to any of the potentially affected stations.

EXHIBIT D-1

As a result, waivers of Section 74.705 of the Commission's Rules with respect to interference to KWBF(TV), and Section 74.707 with respect to K27FC, are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED K54ER
 CH. 42 - JONESBORO AR

REFERENCE
 35 53 26 N
 90 40 26 W

LPTV Pwr = 14.8 kW, HAMS L COR= 263 M

DISPLAY DATES
 DATA 07-22-03
 SEARCH 08-06-03

..... Channel 42Z, 638 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
KWBF	LI 42Z	Little Rock	AR 205.16	234.2	> 301.53	-96.37
K27FC	LI 27+	Paragould	AR 21.13	42.3	> 024.29	-3.16
K42FJ	CP 42+	Batesville	AR 88.20	262.1	> 082.07	6.13
W42BY	LI 42-	Memphis	TN 100.24	145.7	> 082.33	17.91
K27GU	CP 27Z	Newport	AR 57.59	244.7	> 027.45	30.14
WKMATV	ALD 42	MADISONVILLE	KY 317.67	62.0	> 286.04	31.63
WKMA-D	LI 42	Madisonville	KY 317.57	62.0	> 284.96	32.61
AP391	AP 42Z	Nashville	TN 347.13	86.0	> 300.41	46.72
WBUY-D	CP 41	Holly Springs	MS 134.31	138.0	> 081.02	53.29
WBUY	ALD 41	HOLLY SPRINGS	MS 134.31	138.0	> 075.94	58.37
WBBJTV	ALD 43	JACKSON	TN 181.40	98.4	> 106.74	74.66

INTERFERENCE SUMMARY

PROPOSED K54ER
CHANNEL 42 – JONESBORO, ARKANSAS

<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>
K27FC BLTT-19980129JC	Lic.	Paragould, AR	27	19,755	0	0
KWBF(TV) BLCT-19980415KE	Lic.	Little Rock, AR	42	678,511	0	0