

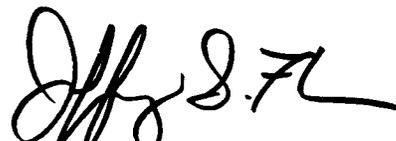
ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TV 34, INC., licensee of Low Power Television Station K52FJ in Fort Smith, Arkansas, and permittee of a displacement facility on Channel 33, in support of this application for modification of the Channel 33 Construction Permit BPTTL-20010116AET, now to specify a new site.

It is proposed to mount a standard SWR directional antenna on the side of an existing 74-meter communications tower. Exhibit B is a map upon which the predicted service contours of the proposed facility are plotted. The newly proposed 74 dBu contour encompasses a significant portion of that which obtains from the current Channel 33 Construction Permit. Therefore, the changes proposed herein constitute a "minor" change in facilities. 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 1057620 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.


JEFFREY S. FISHER

May 23, 2003

Smith and Fisher

**CONTOUR POPULATION
(BASED ON MAIN-LOBE ERP)**

GRADE A : 26,078

GRADE B : 61,703

Saint Paul

Chester
Mountainburg

GRADE B

GRADE A

Johnson

Crawford

Rudy
Alma
Kibler
Dyer
Mulberry

Franklin
Ozark

Altus

Coal Hill

Clarksville

Lamar

Morrison Bluff
Scranton

Knoxville

PROPOSED SITE

Charleston

Branch

Ratcliff

Paris

Subiaco

Irean

Greenwood
Sebastian

Booneville

Magazine

Havana

Belleville

Danville

Mansfield

Yell

Plainview

Waldron

Scott

Scale 1:500,000

0 7 14 21 km

EXHIBIT B

PROPOSED OPERATING PARAMETERS

PROPOSED K52FJ
CHANNEL 33 – FORT SMITH, ARKANSAS
[MODIFICATION OF BPTTL-20010116AET]

Transmitter Power Output:	1.0 kw
Transmission Line Efficiency:	79.6%
Antenna Power Gain – Toward Horizon:	29.2
Antenna Power Gain – Main Lobe:	29.2
Effective Radiated Power – Toward Horizon:	23.2 kw
Effective Radiated Power – Main Lobe:	23.2 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:	190 feet
Antenna Make and Model:	SWR SWLP16WCRR-33
Orientation	0 degrees true
Beam Tilt	0.75 degrees
Effective Height Above Ground:	50 meters
Effective Height Above Mean Sea Level:	366 meters

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED K52FJ
CHANNEL 33 – FORT SMITH, ARKANSAS
[MODIFICATION OF BPTTL-20010116AET]

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 in two instances: KHBS, Channel 40 in Fort Smith, Arkansas; and, KSPR, Channel 33 in Springfield, Missouri.

We then conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to KHSP and KSPR. The software utilizes a 2-square kilometer cell size, calculates signal strength at 1.0 kilometer increments along each radial studied, except where noted, 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 K52FJ) 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 either KHSB or KSPR.

As a result, a waiver of Section 74.705 of the Commission's Rules with respect to interference to KHSB and KSPR is requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED K52FJ
CH. 33 FORT SMITH

REFERENCE
35 18 06 N
93 45 42 W

LPTV Pwr = 23.2 kW, HANSL COR= 366 M

DISPLAY DATES
DATA 05-10-03
SEARCH 05-22-03

..... Channel 33+, 584 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
KSPR*	LI 33-	Springfield	MO 224.93	18.6	> 242.54	-17.51
KHBS	LI 40-	Fort Smith	AR 87.42	253.2	> 100.00	-12.58
KOCB-D*CPM	33	Oklahoma City	OK 339.55	275.7	> 337.95	1.60
KARK-D*CP	32	Little Rock	AR 127.92	115.6	> 119.98	8.01
K68ET*	AP 32-	Fort Smith	AR 68.72	328.8	> 051.61	17.11
K33FG*	LI 33Z	Siloam Springs	AR 116.40	324.5	> 093.92	23.10
K68ET	AP 32-	Fort Smith	AR 57.16	286.7	> 033.28	23.88
K34EN	LI 34Z	Fort Smith	AR 60.90	294.3	> 034.00	26.90
K18EU	LI 18Z	Fort Smith	AR 57.16	286.7	> 029.59	27.57
KOCB	ALD 33	OKLAHOMA CITY	OK 339.35	275.9	> 308.71	30.64
K33EK	LI 33+	Tulsa	OK 232.77	295.9	> 199.27	33.50
KWBSTV	CP 34+	Eureka Springs	AR 127.93	351.5	> 090.03	37.90
KWBSTV	LI 34+	Eureka Springs	AR 127.93	351.5	> 077.31	50.62
KARK-D	ST 32	Little Rock	AR 127.92	115.6	> 074.28	53.64
KMSSTV	CPM 33Z	Shreveport	LA 292.76	183.1	> 236.86	55.90
KMSSTV	LI 33Z	Shreveport	LA 292.76	183.1	> 236.86	55.90
AL758	AL 32-	Mcalester	OK 187.15	257.9	> 126.03	61.12
AL734	AL 18-	Miami	OK 201.47	330.5	> 137.31	64.16
KOCB-D	ST 33	Oklahoma City	OK 339.35	275.9	> 273.20	66.15

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

INTERFERENCE SUMMARY

PROPOSED K52FJ
CHANNEL 33 – FORT SMITH, ARKANSAS
[MODIFICATION OF BPTTL-20010116AET]

<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>
*KHBS(TV) BLCT-19840830KH	Lic.	Fort Smith, AR	40	290,222	1,331	0.46
KSPR(TV) BLCT-19861020KF	Lic.	Springfield, MO	33	515,306	0	0

*In this Longley-Rice study we used a cell size of 1 kilometer and increment spacing of 0.1 kilometers.