

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED K18EG
CHANNEL 22 – EUREKA SPRINGS, 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, 74.708, 74.709 and 74.710 of the FCC's Rules with respect to analog and digital full-power, analog and digital low power television stations, and Land Mobile allotments. It concludes that the facility proposed herein meets these requirements except to four stations: KOKI-DT, Channel 22 in Tulsa, Oklahoma; KGCS-LP, Channel 22 in Joplin, Missouri; KATV-DT, Channel 22 in Little Rock, Arkansas; and, KHOG-TV, Channel 29 in Fayetteville, 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 1.0-square kilometer cell size, calculates signal strength at 0.1 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 K18EG) 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.

As a result, waivers of Section 74.705 of the Commission's Rules with respect to interference to KHOG-TV, Section 74.706 with regard to KATV-DT and KOKI-DT, and Section 74.707 with respect to KGCS-LP are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED K18EG
CH. 22 - EUREKA SPRINGS, AR

REFERENCE

36 21 38 N
93 44 54 W

LPTV Pwr = 10 kW, HAMS L COR= 564 M

DISPLAY DATES

DATA 05-27-06
SEARCH 06-06-06

..... Channel 22+, 518 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
KOKI-D LI	22	Tulsa	OK 177.55	258.5	> 311.38	-133.83
KGCS-L AP	22	Joplin	MO 107.45	318.1	> 197.17	-89.72
KATV-D CP	22	Little Rock	AR 252.08	145.8	> 313.74	-61.66
KHOGTV LI	29+	Fayetteville	AR 48.68	218.2	> 100.00	-51.32
KGCS-L CP	22Z	Joplin	MO 107.67	318.2	> 106.98	0.69
KOZK-D LI	23	Springfield	MO 115.11	38.4	> 109.02	6.09
KOZK LI	21-	Springfield	MO 115.11	38.4	> 104.74	10.37
KMIZ-D CP	22	Columbia	MO 287.90	21.0	> 276.52	11.38
KMIZ-D ST	22	Columbia	MO 287.90	21.0	> 275.49	12.41
K23DU LI	23N	Harrison	AR 49.15	105.3	> 016.06	33.09
KHBS-D LI	21	Fort Smith	AR 166.02	210.6	> 118.63	47.39
KHBS-D ST	21	Fort Smith	AR 166.02	210.6	> 117.27	48.75
AP662 AP	22+	Topeka	KS 352.40	327.8	> 282.14	70.26
KOKITV LI	23Z	Tulsa	OK 177.55	258.5	> 104.34	73.21

INTERFERENCE SUMMARY

PROPOSED K18EG
CHANNEL 22 – EUREKA SPRINGS, 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>
KOKI-DT BLC DT-20021127AGL	Lic.	Tulsa, OK	22	1,102,482	156	<0.1
KGCS-LP BDFCDTL-20060328ADD	Appl.	Joplin, MO	22	193,632	0	0
KATV-DT BPCDT-199991027ABF	CP	Little Rock, AR	22	980,837	0	0
KHOG-TV BLCT-19980109KF	Lic.	Fayetteville, AR	29	286,711	0	0