

CONTOUR OVERLAP AND  
LONGLEY-RICE INTERFERENCE STUDIES  
PROPOSED TELEVISION TRANSLATOR K59GO  
CHANNEL 31 - SHREVEPORT, LOUISIANA

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: KLAX-TV, Channel 31 in Alexandria, Louisiana; and, KFXK-DT, Channel 31 in Longview, Texas.

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, 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 K59GO) 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 KLAX-TV and Section 74.706 with regard to KFXK-DT are requested and believed to be justified based on the aforementioned Longley-Rice studies.

EXHIBIT D-2

PROPOSED K59GO  
CH. 31 - SHREVEPORT LA  
REFERENCE  
32 39 58 N LPTV Pwr = 50 kW, HAMS L COR= 383 M  
93 55 59 W  
..... Channel 31-, 572 MHz .....

DISPLAY DATES  
DATA Herkimer  
SEARCH 08-16-03

Call	Channel	Location		Dist	Azi	FCC	Margin
KLAXTV*LI	31+	Alexandria	LA	178.73	132.9	> 237.78	-59.05
KFXK-D*CP	31	Longview	TX	105.75	244.9	> 169.45	-39.59
AP101* AP	30+	El Dorado	AR	165.98	73.5	> 107.71	61.37
AP406* AP	30+	El Dorado	AR	143.47	84.5	> 103.27	66.23
K30EA* LI	30-	Texarkana	TX	85.91	350.5	> 018.82	67.09
KHOU-D*LI	31	Houston	TX	375.34	203.8	> 306.46	68.88

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

INTERFERENCE SUMMARY

PROPOSED TELEVISION TRANSLATOR K59GO  
CHANNEL 31 - SHREVEPORT, LOUISIANA

<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>
KLAX-TV BLCT-19890705KG	Lic.	Alexandria, LA	31	256,909	780	0.3
KFXK-DT BPCDT-19991027ACM	CP	Longview, TX	31	731,421	527	< 0.1