

CONTOUR OVERLAP AND  
LONGLEY-RICE INTERFERENCE STUDIES  
PROPOSED K59DA  
CHANNEL 28 - WICHITA, KANSAS

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 three stations: KSNT-DT, Channel 28 in Topeka, Kansas; KTPX-DT, Channel 28 in Okmulgee, Oklahoma; and, KPTS-DT, Channel 29 in Hutchinson, Kansas.

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 K59DA) 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 74.706 with regard to KSNT-DT, KTPX-DT and KPTS-DT are requested and believed to be justified based on the aforementioned Longley-Rice studies.

EXHIBIT D-2

PROPOSED K59DA  
CH. 28 - WICHITA KS

REFERENCE  
37 41 53 N  
97 19 10 W  
..... Channel 28+, 554 MHz .....

LPTV Pwr = 8.8 kW, HAMSL COR= 500 M

DISPLAY DATES  
DATA 06-28-03  
SEARCH 07-01-03

Call	Channel	Location		Dist	Azi	FCC	Margin
KSNT-D CP	28	Topeka	KS	204.82	40.3	> 294.31	-89.49
KTPX-D LI	28	Okmulgee	OK	232.76	152.5	> 281.48	-48.72
KSNT-D ST	28	Topeka	KS	204.82	40.3	> 244.76	-39.94
KPTS-D CPM	29	Hutchinson	KS	56.51	314.9	> 080.88	-24.37
KHNE-D CPM	28	Hastings	NE	347.70	349.3	> 285.11	62.59
KHNE-D GRR	28	Hastings	NE	347.70	349.3	> 285.11	62.59

## INTERFERENCE SUMMARY

PROPOSED K59DA  
CHANNEL 28 – WICHITA, KANSAS

<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>
KSNT-DT BPCDT-19991021AAM	CP	Topeka, KS	28	1,143,504	22	<0.1
KTPX-DT BLCDT-20020510AAQ	Lic.	Okmulgee, OK	28	873,771	0	0
KSNT-DT BDSTA-20020906ABP	STA	Topeka, KS	28	271,691	0	0
KPTS-DT BMPEDT-20020712ABD	CPM	Hutchinson, KS	29	562,415	0	0