

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED K61HD
CHANNEL 44 – DAVENPORT, IOWA

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 three instances: WRSP-DT, Channel 44 in Springfield, Illinois; WMMF-DT, Channel 44 in Fond Du Lac, Wisconsin; and, KIIN-DT, Channel 45 in Iowa City, Iowa.

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 K61HD) 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, waiver of Section 74.706 of the Commission's Rules with respect to interference to WRSP-DT, WMMF-DT and KIIN-DT is requested and believed to be justified based on the aforementioned Longley-Rice studies.

EXHIBIT D-2

PROPOSED K61HD
CH. 44 - DAVENPORT IA

REFERENCE		DISPLAY DATES
41 32 51 N	LPTV Pwr = 25.2 kW, HAMS L COR= 369 M	DATA 05-31-03
90 28 28 W		SEARCH 06-02-03
..... Channel 44-, 650 MHz		

Call	Channel	Location	Dist	Azi	FCC	Margin	
WRSP-D*CP	44	Springfield	IL	212.73	155.6	> 314.37	-101.64
WMMF-D*CPM	44	Fond Du Lac	WI	239.79	32.2	> 294.17	-54.38
KIIN-D*CP	45	Iowa City	IA	74.78	285.3	> 114.91	-40.13
K44FK* LI	44-	Waterloo	IA	186.41	303.1	> 170.03	16.38
WCRD-L*CP	44+	Carthage	IL	119.00	66.8	> 101.37	19.68
KCDE-L*CP	44+	Cedar Rapids	IA	106.10	292.7	> 090.76	21.94
WSNSTV*LI	44Z	Chicago	IL	239.07	80.2	> 211.28	30.71
KFXB* ALD	43	DUBUQUE	IA	108.48	353.6	> 077.52	31.05
KFXB-D*CP	43	Dubuque	IA	108.59	353.7	> 096.47	31.97
AP381 AP	29-	Dubuque	IA	108.63	348.1	> 072.66	35.97
WMMF-D ST	44	Fond Du Lac	WI	300.12	33.0	> 254.53	45.59
WMMF-D ST	44	Fond Du Lac	WI	300.12	33.0	> 254.06	46.06
KFXB-D ST	43	Dubuque	IA	108.59	353.7	> 053.43	55.16
LMNEW AD	45	Richland Center	WI	211.05	13.3	> 153.62	57.43
WYZZTV LI	43Z	Bloomington	IL	147.88	132.3	> 089.58	58.30
W44BF LI	44N	La Crosse	WI	261.28	344.0	> 197.20	64.08
AL899 AL	51Z	Highland	WI	166.62	2.7	> 100.00	66.62
ALDWKT AL	45+	Richland Center	WI	199.42	2.0	> 126.56	72.86

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

INTERFERENCE SUMMARY

PROPOSED K61HD
CHANNEL 44 – DAVENPORT, IOWA

<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>	.
WRSP-DT BPCDT-19991101AJJ	CP	Springfield, IL	44	1,129,364	2	<0.1	
WMMF-DT BMPCDT-20000908ABG	CP	Fond Du Lac, WI	44	2,459,603	0	0	
KIIN-DT BPEDT-20000406AAQ	CP	Iowa City, IA	44	1,055,260	0	0	