

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED TELEVISION TRANSLATOR K58BS
CHANNEL 25 – MINNEAPOLIS, MINNESOTA

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 six stations: KTIN-DT, Channel 25 in Fort Dodge, Iowa; KMSP-DT, Channel 26 in Minneapolis, Minnesota; KDLO-DT, Channel 25 in Florence, South Dakota; WLAX(TV), Channel 25 in La Crosse, Wisconsin; KMWB(TV), Channel 23 in Minneapolis, Minnesota; and, WFTC(TV), Channel 29 in Minneapolis, Minnesota.

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 K58BS) 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 WLAX, KMWB and WFTC and Section 74.706 with regard to KTIN-DT, KMSP-DT and KDLO-DT are requested and believed to be justified based on the aforementioned Longley-Rice studies.

EXHIBIT D-2

REFERENCE

44 58 34 N
93 16 20 W

LPTV Pwr = 100 kW, HAMS L COR= 510 M

DISPLAY DATES

DATA 05-09-03
SEARCH 05-22-03

..... Channel 25-, 536 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
KTIN-D CP	25	Fort Dodge	IA 256.71	201.2	> 381.20	-124.49
KMSP-D LI	26	Minneapolis/st.	MN 14.82	51.8	> 125.72	-110.90
KDLO-D CP	25	Florence	SD 340.58	271.3	> 398.25	-57.67
WLAX CPM	25Z	La Crosse	WI 199.70	130.1	> 249.90	-50.20
WLAX LI	25Z	La Crosse	WI 199.70	130.1	> 241.05	-41.35
KMWB CP	23Z	Minneapolis	MN 14.20	47.5	> 032.00	-17.80
KMWB LI	23+	Minneapolis	MN 14.82	51.8	> 032.00	-17.18
WFTC LI	29+	Minneapolis	MN 14.82	51.8	> 032.00	-17.18
AL247 AL	25+	Rock Rapids	IA 288.39	234.4	> 281.92	6.47
KWKB ALD	25	IOWA CITY	IA 384.63	157.9	> 343.11	41.52
KCCOTV ALD	24	ALEXANDRIA	MN 166.04	299.0	> 118.57	47.47
KCCO-D CP	24	Alexandria	MN 165.93	299.1	> 116.16	49.77
ALK30F AL	32+	St. James	MN 154.40	224.8	> 100.00	54.40
AL189 AL	24Z	Alexandria	MN 193.25	302.3	> 137.38	55.87
K25FA LI	25-	Iowa Falls	IA 293.73	183.1	> 229.25	64.48
K25AA LI	25N	Rock Rapids, Etc	IA 293.70	233.7	> 228.45	65.25
KYIN LI	24+	Mason City	IA 181.64	168.7	> 115.28	66.36
NEW AP	25Z	Duluth	MN 215.01	24.1	> 140.65	74.36

INTERFERENCE SUMMARY

PROPOSED TELEVISION TRANSLATOR K58BS
CHANNEL 25 – MINNEAPOLIS, MINNESOTA

<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>
KTIN-DT BPEDT-20000427ACH	CP	Fort Dodge, IA	25	360,254	0	0
KMSP-DT BLCDT-20000712ABH	Lic.	Minneapolis, MN	26	2,896,108	0	0
KDLO-DT BPCDT-19991021ABN	CP	Florence, SD	25	190,773	57	<0.1
WLAX(TV) BMPCT-20000114AAA	CP	La Crosse, WI	25	278,351	0	0
WLAX(TV) BLCT-20000314AA	Lic.	La Crosse, WI	25	225,426	0	0
KMWB(TV) BPCT-19991118AAV	CP	Minneapolis, MN	23	2,669,150	0	0
KMWB(TV) BLCT-19940923KE	Lic.	Minneapolis, MN	23	2,659,551	0	0
WFTC(TV) BLCT-19910823KG	Lic.	Minneapolis, MN	29	2,669,151	0	0