

CONTOUR OVERLAP AND  
LONGLY-RICE INTERFERENCE STUDIES  
PROPOSED TELEVISION TRANSLATOR W52CL  
CHANNEL 50 - MACON, GEORGIA

It is important to note that WGNM-DT was originally assigned Channel 50 in Macon, Georgia. However, as a result of BPRM-20010226ABO, and its subsequent grant by the Commission recently, WNGM-DT will operate on Channel 45. That channel change opens the door for Trinity to specify Channel 50 as the displacement channel proposed herein.

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 one instance: WTLH-DT, Channel 50 in Bainbridge, Georgia, as authorized in BPCDT-19980928KH.

We then conducted a detailed interference study using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to WTLH-DT. The software utilizes a 2-square kilometer cell size, calculates signal strength at 1.0 kilometer increments along each radial studied, and employs the 2000 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within the WTLH-DT protected contour where interference from another source (other than Trinity's proposed W52CL) already is predicted to exist

EXHIBIT D-1

(also known as "masking"). The results of this study are provided in Exhibit D-3. It concludes that the facility proposed herein causes no new interference to authorized WTLH-DT.

As a result, a waiver of Section 74.706 of the Commission's Rules with respect to interference to authorized WTLH-DT is requested and believed to be justified based on the aforementioned Longley-Rice study.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED W52CL  
CHANNEL 50 - MACON GA

REFERENCE  
32 45 09 N  
83 33 35 W

LPTV Pwr = 15 kW, HAMS L COR= 247 M

DISPLAY DATES  
DATA 01-29-03  
SEARCH 02-03-03

..... Channel 50-, 686 MHz .....

Call	Channel	Location	Dist	Azi	FCC	Margin
WTLH-D*CP	50	Bainbridge	GA 233.01	189.7	> 319.10	-86.09
WBRC-D*CP	50	Birmingham	AL 313.18	286.1	> 302.78	10.40
WSST-D*AP	51	Cordele	GA 98.06	193.6	> 076.16	21.90
WXTX-D*CP	49	Columbus	GA 127.95	255.7	> 104.63	24.67
WSSTV ALD	51	CORDELE	GA 96.83	193.7	> 068.79	28.04
W35BB LI	35-	Dublin	GA 61.07	115.3	> 030.59	30.48
WSST-D CP	51	Cordele	GA 98.06	193.6	> 067.44	30.62
	ADR 57+	Atlanta	GA 135.99	325.8	> 100.00	35.99
WCB D-D CPM	50	Charleston	SC 362.32	85.6	> 319.68	42.64
WCB D-D GRR	50	Charleston	SC 362.32	85.6	> 319.68	42.64
WXTX ALD	49	COLUMBUS	GA 127.95	255.7	> 085.13	42.82
ALW49A AL	49-	Carrollton	GA 168.66	303.5	> 121.97	46.69
WATL LI	36Z	Atlanta	GA 137.69	328.5	> 088.12	49.57
WXTX-D ST	49	Columbus	GA 127.95	255.7	> 067.41	60.54
WINT ALD	50	CROSSVILLE	TN 379.16	349.4	> 318.42	60.74
WBXX-D CP	50	Crossville	TN 379.16	349.4	> 318.10	61.06
WATC LI	57+	Atlanta	GA 167.83	330.6	> 100.00	67.83
WFXG-D CP	51	Augusta	GA 177.08	64.8	> 109.00	68.08
W50AB LI	50N	Hiawassee	GA 244.71	356.4	> 176.04	68.67
AL671 AL	50+	Cullowhee	NC 297.66	6.9	> 226.26	71.40
WPXA-D LI	51	Rome	GA 200.50	330.1	> 127.72	72.78

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

## INTERFERENCE SUMMARY

PROPOSED TELEVISION TRANSLATOR W52CL  
CHANNEL 50 - MACON, GEORGIA

<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>
WTLH-DT BPCDT-19980928KH	CP	Bainbridge, GA	50	821,281	0	0