

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED W66DF
CHANNEL 45 - FAYETTEVILLE, NORTH CAROLINA

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: WJPM-DT, Channel 45 in Florence, South Carolina; WXLV-TV, Channel 45 in Winston-Salem, North Carolina; and, WUNU(TV), Channel 31 in Lumberton, North Carolina.

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 W66DF) 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 WXLV-TV and WUNU and Section 74.706 with regard to WJPM-DT are requested and believed to be justified based on the aforementioned Longley-Rice studies.

EXHIBIT D-2

PROPOSED W66DF
CH. 45 - FAYETTEVILLE NC

REFERENCE
35 05 08 N
78 54 25 W

LPTV Pwr = 41.5 kW, HAMSL COR= 132 M

DISPLAY DATES
DATA 05-22-03
SEARCH 05-30-03

..... Channel 45+, 656 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
WJPM-D*CP	45	Florence	SC 117.74	220.7	> 285.73	-167.99
WXLVTV*AP	45Z	Winston-salem	NC 120.22	316.6	> 212.87	-63.09
WUNU* LI	31Z	Lumberton	NC 34.35	201.4	> 088.19	-53.84
WXLVTV*LI	45Z	Winston-salem	NC 195.00	317.8	> 214.00	-18.51
WWAY-D*CPM	46	Wilmington	NC 124.70	148.0	> 123.93	5.27
WRAYTV*LI	30-	Wilson	NC 107.72	39.5	> 113.16	8.59
WASV-D*CP	45	Asheville	NC 332.25	273.7	> 321.13	11.12
WECT-D*CPM	44	Wilmington	NC 105.14	143.7	> 095.81	11.17
WRAYTV*AP	30-	Wilson	NC 107.72	39.5	> 113.04	11.37
WASV-D ST	45	Asheville	NC 332.25	273.7	> 311.57	20.68
WHOA-L CPM	44+	Raleigh	NC 53.73	28.4	> 029.16	24.57
WECT-D GRR	44	Wilmington	NC 105.14	143.7	> 079.36	25.78
WYBE-C LI	44-	Pinehurst	NC 47.61	281.0	> 017.40	30.21
WUNMTV ALD	44	JACKSONVILLE	NC 143.12	88.7	> 112.45	30.67
W46BF LI	46Z	Sanford	NC 50.45	330.6	> 016.98	33.47
WHOA-L CP	44+	Raleigh	NC 74.44	23.1	> 039.85	34.59
W66DE* AP	45-	Florence	SC 117.42	219.8	> 109.08	35.93
WHOA-L AP	44+	Raleigh	NC 79.56	11.7	> 039.79	39.77
ALDWPC AL	44+	Danville	VA 172.68	345.6	> 123.22	49.46
WUNGTV ALD	44	CONCORD	NC 158.00	281.6	> 099.34	58.66
WUNG-D LI	44	Concord	NC 158.00	281.6	> 098.41	59.59

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

INTERFERENCE SUMMARY

PROPOSED W66DF
CHANNEL 45 - FAYETTEVILLE, NORTH CAROLINA

<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>
WJPM-DT BPEDT-20000501AGS	CP	Florence, SC	45	465,411	775	0.2
*WXLV-TV BPCT-20000728AED	Appl.	Winston-Salem, NC	45	2,170,722	6,043	0.3
WXLV-TV BLCT-19940926KH	Lic.	Winston-Salem, NC	45	1,734,459	1,383	0.1
WUNU(TV) BLET-19960828KF	Lic.	Lumberton, NC	31	852,660	0	0

*Study utilized 1.0-kilometer cell size and 0.1-kilometer increment spacing.