

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED W67DF
CHANNEL 45 - SPRINGFIELD, MASSACHUSETTS

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 eleven instances: WEDN-DT (CP), Channel 45, Norwich, Connecticut; WABC-DT (CP), Channel 45, New York, New York; WVIT(TV), Channel 30, New Britain, Connecticut; WEWB-TV (CP, Lic.), Channel 45, Schenectady, New York; WUVN-DT (STA, CP), Channel 46, Hartford, Connecticut; WEKW(TV), Channel 52, Keene, New Hampshire; WMEA-DT, Channel 45, Biddeford, Maine; and, WOLF-DT (CP, PRM), Channel 45, Hazleton, Pennsylvania.

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 each station's protected contour where interference from another source (other than Trinity's proposed W67DF) already is predicted to exist (also known as "masking"). The results of these studies are

EXHIBIT D-1

provided in Exhibit D-3. It concludes that the facility proposed herein causes no new interference to any of the above stations.

As a result, a waiver of Section 74.705 of the Commission's Rules with respect to interference to WVIT(TV), WEWB-TV, and WEKW-TV, and Section 74.706 with respect to interference to WEDN-DT, WABC-DT, WUNV-DT, WMEA-DT, and WOLF-DT are requested and believed to be justified based on the aforementioned Longley-Rice studies.

With further regard to WEKW(TV), which operates seven channels above that proposed herein, the FCC requires a 100-kilometer separation between the two stations. The concept behind this separation is that interference occurs where television sets in close proximity can receive either station. The oscillator of the set tuned to the lower channel can generate interference to the reception of the upper channel on the other set. Exhibit D-4 is a map upon which the Grade B contours of each station have been plotted. Since the service contours do not overlap, this particular interference scenario would not likely exist.

EXHIBIT D-2PROPOSED W67DF
SPRINGFIELD - MA

REFERENCE

42 14 28 N
72 38 54 W

LPTV Pwr = 20 kW, HAMS L COR= 364 M

DISPLAY DATES

DATA 07-22-03

SEARCH 07-30-03

..... Channel 45+, 656 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin	
WEDN-D*CP	45	Norwich	CT	89.43	153.4	> 299.17	-209.74
WABC-D*CPM	45	New York	NY	204.57	214.2	> 318.31	-113.74
WVIT* LI	30+	New Britain	CT	61.95	194.3	> 119.11	-57.15
WEWBT*CP	45Z	Schenectady	NY	119.94	291.4	> 179.72	-51.81
WEWBT*LI	45Z	Schenectady	NY	120.01	291.5	> 173.75	-49.91
WUVN-D*CPM	46	Hartford	CT	53.30	193.7	> 088.40	-35.10
WUVN-D*ST	46	Hartford	CT	53.30	193.7	> 068.96	-9.78
WEKWT* LI	52+	Keene	NH	90.96	14.5	> 100.00	-9.04
WMEA-D*LI	45	Biddeford	ME	199.45	48.4	> 221.68	-8.81
WOLF-D*CP	45	Hazleton	PA	292.69	247.3	> 292.80	-0.11
WOLF-D*GRR	45	Hazleton	PA	292.69	247.3	> 292.80	-0.11
WNNE* LI	31Z	Hartford	VT	134.55	6.7	> 105.96	29.38
WNNE* CP	31Z	Hartford	VT	134.55	6.7	> 103.50	31.46
WGBX*TV LI	44Z	Boston	MA	116.66	85.7	> 083.32	33.34
WOLF-D DS	45	Hazleton	PA	292.51	247.3	> 253.55	38.96
WRDM-L CP	44+	Hartford	CT	52.52	182.3	> 008.82	43.70
WWDP AP	46+	Norwell	MA	131.09	100.7	> 076.72	54.37
AL018 AL	45+	Brockville	ON	359.22	318.0	> 303.31	55.91
AL547 AL	45+	Prescott	ON	369.77	322.2	> 303.31	66.46

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

INTERFERENCE SUMMARY

PROPOSED TELEVISION TRANSLATOR W67DF
CHANNEL 45 - SPRINGFIELD, MASSACHUSETTS

<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>
WEDN-DT BPEDT-20000202AAG	CP	Norwich, CT	45	2,579,480	9,092	0.35
WABC-DT BMPCDT-20000508AAS	CP	New York, NY	45	17,770,721	0	0
*WVIT(TV) BLCT-19791113LC	Lic.	New Britain, CT	30	4,025,421	8,495	0.21
WEWB-TV BPCT-20020213AAL	CP	Schenectady, NY	45	1,128,057	151	0.01
WEWB-TV BLCT-19850114KJ	Lic.	Schenectady, NY	45	1,069,731	157	0.02
WUVN-DT BMPCDT-20011011AAU	CP	Hartford, CT	46	3,462,335	0	0
WUVN-DT BDSTA-20021204ABC	STA	Hartford, CT	46	1,976,676	0	0
WEKW-TV BMLET-19901018KE	Lic.	Keene, NH	52	151,990	54	0.04
WMEA-DT BLEDT-20021017AAR	Lic.	Biddeford, ME	45	624,839	0	0
WOLF-DT BPCDT-19980825KI	CP	Hazleton, PA	45	2,194,731	0	0
WOLF-DT BPRM-20000413AAD	PRM	Hazleton, PA	45	2,194,731	0	0

*In this Longley-Rice study we used a cell size of 1 kilometer and an increment spacing of 0.1 kilometers.

