

Interference to WHA-DT from WMTV-DT CP
and Proposed WMTV-DT CP

WHA-DT.C (20) Madison, WI
TV Incoming Interference Study
Signal Resolution: 1.5 km
Consider NTSC Taboo: Yes
KWX error points are considered to
be interference free coverage.
of radials computed for contours: 360
Contours calculated using 8 radial HAAT.
LR Profile Spacing Increment: 0.1 km
Interference considered within the
reference station's noise limited contour.
Threshold for reception: 39.357

Study Date: 2/23/2004
TV Database Date: 02-07-04

Population Database: 2000 US Census (SF1)

Percentages calculated using a baseline population of 1,094,376.

Stations which cause interference:

| Call Letters | H Units | Population | % | Area (sq. km) |
|---------------|---------|------------|-------|---------------|
| KWKB (20-) | 684 | 1492 | 0.136 | 125.41 |
| WYCC.C (20Z) | 2680 | 5983 | 0.547 | 180.63 |
| WICS (20+) | 115 | 296 | 0.027 | 14.25 |
| WOTV-D (20) | 0 | 0 | 0.000 | 2.00 |
| KSMQ-D.C (20) | 969 | 2094 | 0.191 | 163.80 |
| WMTV-D.C (19) | 487 | 1252 | 0.114 | 84.47 |
| WHRMTV (20+) | 3454 | 6338 | 0.579 | 436.41 |
| WHATV (21-) | 83 | 189 | 0.017 | 24.14 |
| WOTV-D (20) | 0 | 0 | 0.000 | 2.00 |
| WMTV-D (19) | 487 | 1252 | 0.114 | 84.47 |
| WMTV-DTP (19) | 662 | 1688 | 0.154 | 106.59 |

Masking Summary:

| Call Letters | Total Interference | | Unique Interference | |
|---------------|--------------------|-------|---------------------|-------|
| | Population | % | Population | % |
| KWKB (20-) | 1492 | 0.136 | 407 | 0.037 |
| WYCC.C (20Z) | 5983 | 0.547 | 3010 | 0.275 |
| WICS (20+) | 296 | 0.027 | 0 | 0.000 |
| WOTV-D (20) | 0 | 0.000 | 0 | 0.000 |
| KSMQ-D.C (20) | 2094 | 0.191 | 207 | 0.019 |
| WMTV-D.C (19) | 1252 | 0.114 | 0 | 0.000 |
| WHRMTV (20+) | 6338 | 0.579 | 2888 | 0.264 |
| WHATV (21-) | 189 | 0.017 | 4 | 0.000 |
| WOTV-D (20) | 0 | 0.000 | 0 | 0.000 |
| WMTV-D (19) | 1252 | 0.114 | 0 | 0.000 |

WMTV-DTP (19) 1688 0.154 44 0.004

Stations considered which do not cause interference:

WOTV-D (20)
WXOWTV (19+)
WIWB-D.C (21)
WOTV-D (20)
KSMQTV-D (20)

Stations which were not considered:

WHATV-D (20)

| Call Letters | City | State | Dist | Bear |
|---------------|--------------|-------|-------|-------|
| KWKB (20-) | Iowa City | IA | 210.4 | 226.0 |
| WYCC.C (20Z) | Chicago | IL | 203.0 | 128.6 |
| WICS (20+) | Springfield | IL | 361.1 | 179.0 |
| WOTV-D (20) | Battle Creek | MI | 336.8 | 97.8 |
| KSMQ-D.C (20) | Austin | MN | 251.1 | 286.1 |
| WMTV-D.C (19) | Madison | WI | 4.0 | 98.1 |
| WXOWTV (19+) | Lacrosse | WI | 170.2 | 300.0 |
| WHRMTV (20+) | Wausau | WI | 207.6 | 356.6 |
| WHATV (21-) | Madison | WI | 0.0 | 0.0 |
| WIWB-D.C (21) | Suring | WI | 189.3 | 40.9 |
| WOTV-D (20) | BATTLE CREEK | MI | 336.8 | 97.8 |
| KSMQTV-D (20) | AUSTIN | MN | 289.3 | 285.0 |
| WMTV-D (19) | MADISON | WI | 4.0 | 98.1 |
| WHATV-D (20) | MADISON | WI | 0.0 | 0.0 |
| WMTV-DTP (19) | Madison | WI | 4.0 | 98.1 |

Totals for WHA-DT.C (20)

| | | |
|-------------------------------|-----------|--------------------|
| Calculation Area Population: | 1,096,664 | (22062.6 sq. km) |
| Not Affected by Terrain Loss: | 1,094,376 | (21908.6 sq. km) |
| Total NTSC Interference: | 10,145 | (610.0 sq. km) |
| DTV Only Interference: | 1,710 | (120.6 sq. km) |
| Total DTV Interference: | 3,407 | (268.4 sq. km) |
| Interfered Population: | 11,855 | (730.6 sq. km) |
| Interference Free: | 1,082,521 | (21177.9 sq. km) |

Percent Interference: 1.08

| | | |
|-----------------------------|-----------|------------------|
| Terrain Blocked Population: | 2,288 | (154.0 sq. km) |
| Contour Area Population: | 1,097,385 | |