

INTERFERENCE ANALYSIS

Digital television station WZDX-DT, Channel 41, Huntsville, Alabama, has a construction permit, BPCDT-19991027AAT, authorizing a maximum ERP of 360 kW, using a directional antenna with a center of radiation at 574 meters above average terrain, located on Green Mountain, Alabama, at 34° 38' 00" North latitude and 86° 30' 47" West Longitude. In this modification of construction permit, the station proposes to use a Dielectric directional antenna, lower its center of radiation to 517.9 meters above average terrain, increase its ERP to 400 kW, and move 11.6 km bearing 350° to Monte Sano Mountain. The station proposes to locate its antenna on an existing tower, FCC registration number 1041008, at 34° 44' 12" North latitude and 86° 31' 59" West longitude. A showing of interference analysis for non-checklist applications is required by the Sixth Report and Order, Second Memorandum Opinion and Order, and as stated in the Additional Application Processing Guidelines for Digital Television.

The software employed for this interference analysis is Probe II, published by V-Soft Communications. The software complies with the methodology described in OET Bulletin 69, but due to the differences in computer operating systems, can produce results that differ slightly from those produced by the FCC's software application(s). For purposes of calculating the percentage of new incoming interference, a Baseline Interference Population was established as detailed below for each of the stations predicted to receive interference.

The signal resolution for the interference studies described below was 1 km. Where applicable, NTSC taboos were considered. KWX error points were considered as interference free coverage. Stations were evaluated within their noise limited contours, calculated on 72 radials. The HAAT calculations were based on 8 evenly spaced radials. The three arc second database was used, and the profile spacing increment was 0.1 km. The OET Bulletin 69 vertical pattern was used.

OUTGOING INTERFERENCE STUDY

An outgoing interference analysis was performed to identify stations that are predicted to receive interference from the proposed improvements to WZDX-DT. The FCC database in effect on May 22, 2002 was searched to identify all stations that must be analyzed based on proximity to WZDX-DT. The outgoing interference study was conducted considering masked interference as new interference. This provides a worst-case prediction of outgoing interference, making certain any stations that might receive interference appear in the study. All full power analog licenses and construction permits, Class A licenses and construction permits, and DTV licenses, construction permits and allotments were evaluated to determine the impact of the proposed minor modification. To further identify the effects of the proposed changes, the table below indicates the predicted interference to all other station presented by the station identified in BPCDT-19991027AAT and that presented by the station identified in the instant application.

Interfered Station	WZDX-DT Construction Permit Interfered Population	WZDX-DT Modification of CP Interfered Population
W38BQ (Class A TV)	17	0
WJSU-TV (License)	2016	6886
WIIQ-TV (License)	0	19
WIAT-TV (License)	754	1661
WPXH-TV (License)	57	0
WAFF-TV (License)	10	0
WATC-DT (CP)	4150	4685
WBUY-DT (CP)	2273	748
WDSI-DT (CP)	1708	1167
WSJK-DT (CP)	3555	585
WFLI-DT (CP)	978	763
WATC-DT (Allotment)	7565	5506
WBUY-DT (Allotment)	587	9
WDSI-DT (Allotment)	1063	603
WSJK-DT (Allotment)	3261	122
WFLI-DT (Allotment)	1225	296

Of the stations evaluated, only four are predicted to receive more interference from the proposed WZDX-DT.

INCOMING INTERFERENCE STUDIES

Incoming interference studies were performed on all stations predicted to receive interference to confirm that the interference presented by WZDX-DT meets the FCC definition for de minimis interference. Two studies were conducted on each station predicted to receive interference from the proposed WZDX-DT. The first study considers interference presented to the station by all authorized facilities (i.e. licenses, CPs, allotments), thus establishing the existing interference-free population baseline. The second study includes WZDX-DT as identified in the instant application. The difference in interfered population between the two studies is the new interference. For DTV stations, the baseline population used is the lesser of the population reached by their construction permit, or the population reached by their allotment, thus showing the worst-case percentage.

WJSU-TV - License, NTSC Channel 40-, Anniston, Alabama:

WJSU-TV receives more than the maximum permissible 10% interference from all sources, so it is necessary to evaluate the NTSC only interference to establish a baseline with no DTV stations.

Totals for WJSUTV (40-) From All Analog Interference Sources

Calculation Area Population:	1,421,049	(26201.1 sq. km)
Not Affected by Terrain Loss:	1,369,385	(23525.4 sq. km)
Total NTSC Interference:	169,898	(1896.4 sq. km)
DTV Only Interference:	0	(0.0 sq. km)
Total DTV Interference:	0	(0.0 sq. km)
Interfered Population:	169,898	(1896.5 sq. km)
Interference Free:	1,199,487	(21629.0 sq. km)
Percent Interference:	12.41	
Terrain Blocked Population:	51,664	(2675.7 sq. km)
Contour Area Population:	1,421,538	

**Totals for WJSUTV (40-) All Interference Sources Except Proposed WZDX-DT
(Baseline Interference)**

Calculation Area Population:	1,421,049	(26201.1 sq. km)
Not Affected by Terrain Loss:	1,369,385	(23525.4 sq. km)
Total NTSC Interference:	169,898	(1896.4 sq. km)
DTV Only Interference:	7,606	(284.7 sq. km)
Total DTV Interference:	39,571	(637.3 sq. km)
Interfered Population:	177,504	(2181.1 sq. km)
Interference Free:	1,191,881	(21344.3 sq. km)
Percent Interference:	14.80	
Terrain Blocked Population:	51,664	(2675.7 sq. km)
Contour Area Population:	1,421,538	

Totals for WJSUTV (40-) All Interference Sources Including Proposed WZDX-DT

Calculation Area Population:	1,421,049	(26201.1 sq. km)
Not Affected by Terrain Loss:	1,369,385	(23525.4 sq. km)
Total NTSC Interference:	169,898	(1896.4 sq. km)
DTV Only Interference:	7,606	(284.7 sq. km)
Total DTV Interference:	40,737	(669.5 sq. km)
Interfered Population:	177,504	(2181.1 sq. km)
Interference Free:	1,191,881	(21344.3 sq. km)
Percent Interference:	14.80	
Terrain Blocked Population:	51,664	(2675.7 sq. km)
Contour Area Population:	1,421,538	

WJSU-TV is predicted to receive interference to 12.41% of its population not affected from existing NTSC sources. WJSU-TV is predicted to receive interference to 14.80% of its population from authorized NTSC and DTV sources. The net increase due to DTV interference is 2.39%, without the proposed WZDX-DT. WJSU-TV is predicted to receive interference to 14.80% of its population from all sources including WZDX-DT as identified in the instant application. **The proposed WZDX-DT will NOT present any new interference to WJSU-TV.**

WIIQ-TV – License, NTSC Channel 41, Demopolis, Alabama:

Totals for WIIQ (41Z) **All Interference Sources Except Proposed WZDX-DT**
(Baseline Interference)

Calculation Area Population:	120,636	(	15173.0	sq. km)
Not Affected by Terrain Loss:	119,287	(	14979.6	sq. km)
Total NTSC Interference:	0	(	0.0	sq. km)
DTV Only Interference:	4,711	(	702.6	sq. km)
Total DTV Interference:	4,711	(	702.6	sq. km)
Interfered Population:	4,711	(	702.6	sq. km)
Interference Free:	114,576	(	14277.0	sq. km)
Percent Interference:	3.95			
Terrain Blocked Population:	1,349	(	193.4	sq. km)
Contour Area Population:	120,741			

Totals for WIIQ (41Z) **All Interference Sources Including Proposed WZDX-DT**

Calculation Area Population:	120,636	(	15173.0	sq. km)
Not Affected by Terrain Loss:	119,287	(	14979.6	sq. km)
Total NTSC Interference:	0	(	0.0	sq. km)
DTV Only Interference:	4,730	(	703.6	sq. km)
Total DTV Interference:	4,730	(	703.6	sq. km)
Interfered Population:	4,730	(	703.6	sq. km)
Interference Free:	114,557	(	14276.0	sq. km)
Percent Interference:	3.97			
Terrain Blocked Population:	1,349	(	193.4	sq. km)
Contour Area Population:	120,741			

WIIQ-TV is predicted to receive interference to 3.95% of its population from authorized NTSC and DTV sources. WIIQ-TV is predicted to receive interference to 3.97% of its population from all sources including WZDX-DT as identified in the instant application. The new interference presented to WIIQ-TV is .02%, which is rounded to 0% in accordance with the rounding statement in the additional application guidelines. **The proposed WZDX-DT will NOT present any new interference to WIIQ-TV.**

WIAT-TV – License, NTSC Channel 42, Birmingham, Alabama:

Totals for WIAT (42+) All Interference Sources Except Proposed WZDX-DT
(Baseline Interference)

Calculation Area Population:	1,349,898	(27306.2 sq. km)
Not Affected by Terrain Loss:	1,310,302	(25523.0 sq. km)
Total NTSC Interference:	37,372	(1427.5 sq. km)
DTV Only Interference:	37,063	(872.3 sq. km)
Total DTV Interference:	43,563	(1126.4 sq. km)
Interfered Population:	74,435	(2299.8 sq. km)
Interference Free:	1,235,867	(23223.2 sq. km)

Percent Interference: 5.68

Terrain Blocked Population:	39,596	(1783.2 sq. km)
Contour Area Population:	1,351,543	

Totals for WIAT (42+) All Interference Sources Including Proposed WZDX-DT

Calculation Area Population:	1,349,898	(27306.2 sq. km)
Not Affected by Terrain Loss:	1,310,302	(25523.0 sq. km)
Total NTSC Interference:	37,372	(1427.5 sq. km)
DTV Only Interference:	37,205	(878.3 sq. km)
Total DTV Interference:	43,705	(1133.4 sq. km)
Interfered Population:	74,577	(2305.8 sq. km)
Interference Free:	1,235,725	(23217.2 sq. km)

Percent Interference: 5.69

Terrain Blocked Population:	39,596	(1783.2 sq. km)
Contour Area Population:	1,351,543	

WIAT-TV is predicted to receive interference to 5.68% of its population from authorized NTSC and DTV sources. WIAT-TV is predicted to receive interference to 5.69% of its population from all sources including WZDX-DT as identified in the instant application. The new interference presented to WIAT-TV is .01%, which is rounded to 0% in accordance with the rounding statement in the additional application guidelines. **The proposed WZDX-DT will NOT present any new interference to WIAT-TV.**

WATC-DT, DTV Channel 41, Atlanta, Georgia:

WATC-DT maximized its facilities and now reaches a larger population than allotted. In compliance with FCC guidelines for population percentage calculations, the smaller baseline population identified in the interference study performed on the allotment is used for all calculations.

WATC-DT Allotment, DTV Channel 41, Atlanta, Georgia:

Totals for WATC-DT Allotment (41) All Interference Sources Except Proposed WZDX-DT (Baseline Interference)

Calculation Area Population:	2,678,222	(11582.1 sq. km)
Not Affected by Terrain Loss:	2,661,859	(10973.5 sq. km)
Total NTSC Interference:	11,530	(182.0 sq. km)
DTV Only Interference:	5,026	(73.8 sq. km)
Total DTV Interference:	8,779	(134.4 sq. km)
Interfered Population:	16,556	(255.8 sq. km)
Interference Free:	2,645,303	(10717.7 sq. km)
Percent Interference:	0.62	
Terrain Blocked Population:	16,363	(608.6 sq. km)
Contour Area Population:	2,678,738	

Totals for WATC-DT Allotment (41) All Interference Sources Including Proposed WZDX-DT

Calculation Area Population:	2,678,222	(11582.1 sq. km)
Not Affected by Terrain Loss:	2,661,859	(10973.5 sq. km)
Total NTSC Interference:	11,530	(182.0 sq. km)
DTV Only Interference:	5,427	(87.0 sq. km)
Total DTV Interference:	9,352	(153.6 sq. km)
Interfered Population:	16,957	(269.0 sq. km)
Interference Free:	2,644,902	(10704.5 sq. km)
Percent Interference:	0.64	
Terrain Blocked Population:	16,363	(608.6 sq. km)
Contour Area Population:	2,678,738	

The allotment for WATC-DT is predicted to receive interference to 0.62% of its population from authorized NTSC and DTV sources. The allotment for WATC-DT is predicted to receive interference to 0.64% of its population from all sources including WZDX-DT as identified in the instant application. The new interference presented to the allotment for WATC-DT is .02%, which is rounded to 0% in accordance with the rounding statement in the additional application guidelines. **The proposed WZDX-DT will NOT present any new interference to WATC-DT as allotted.**

WATC-DT Construction Permit, DTV Channel 41, Atlanta, Georgia:

**Totals for WATC-DT CP (41) All Interference Sources Except Proposed WZDX-DT
(Baseline Interference)**

Calculation Area Population:	3,173,576	(21729.4 sq. km)
Not Affected by Terrain Loss:	3,158,167	(21016.7 sq. km)
Total NTSC Interference:	12,731	(349.4 sq. km)
DTV Only Interference:	11,038	(316.0 sq. km)
Total DTV Interference:	16,938	(428.8 sq. km)
Interfered Population:	23,769	(665.4 sq. km)
Interference Free:	3,134,398	(20351.3 sq. km)

Percent Interference (Using 2,661,859 allotment baseline): 0.89

Terrain Blocked Population:	15,409	(712.7 sq. km)
Contour Area Population:	3,173,908	

Totals for WATC-D.C (41) All Interference Sources Including Proposed WZDX-DT

Calculation Area Population:	3,173,576	(21729.4 sq. km)
Not Affected by Terrain Loss:	3,158,167	(21016.7 sq. km)
Total NTSC Interference:	12,731	(349.4 sq. km)
DTV Only Interference:	11,873	(336.2 sq. km)
Total DTV Interference:	18,109	(453.1 sq. km)
Interfered Population:	24,604	(685.6 sq. km)
Interference Free:	3,133,563	(20331.1 sq. km)

Percent Interference (Using 2,661,859 allotment baseline): 0.92

Terrain Blocked Population:	15,409	(712.7 sq. km)
Contour Area Population:	3,173,908	

The construction permit for WATC-DT is predicted to receive interference to 0.89% of its allotted population from authorized NTSC and DTV sources. The construction permit for WATC-DT is predicted to receive interference to 0.92% of its allotted population from all sources including WZDX-DT as identified in the instant application. The new interference presented to WATC-DT is 0.03%. **The proposed WZDX-DT will NOT present more than de minimis new interference to WATC-DT as described in its construction permit.**

WBUY-DT, DTV Channel 41, Holly Springs, Mississippi

WBUY-DT maximized its facilities and now reaches a larger population than allotted. In compliance with FCC guidelines for population percentage calculations, the smaller baseline population identified in the interference study performed on the allotment is used for all calculations.

WBUY-DT - Allotment, DTV Channel 41, Holly Springs, Mississippi

Totals for WBUY-DT Allotment (41) All Interference Sources Except Proposed WZDX-DT (Baseline Interference)

Calculation Area Population:	1,025,806	(10040.5 sq. km)
Not Affected by Terrain Loss:	1,025,040	(9952.2 sq. km)
Total NTSC Interference:	7	(9.0 sq. km)
DTV Only Interference:	606	(34.2 sq. km)
Total DTV Interference:	606	(40.2 sq. km)
Interfered Population:	613	(43.2 sq. km)
Interference Free:	1,024,427	(9908.9 sq. km)
Percent Interference:	0.06	
Terrain Blocked Population:	766	(88.3 sq. km)
Contour Area Population:	1,025,857	

Totals for WBUY-DT Allotment (41) All Interference Sources Including Proposed WZDX-DT

Calculation Area Population:	1,025,806	(10040.5 sq. km)
Not Affected by Terrain Loss:	1,025,040	(9952.2 sq. km)
Total NTSC Interference:	7	(9.0 sq. km)
DTV Only Interference:	606	(34.2 sq. km)
Total DTV Interference:	613	(41.2 sq. km)
Interfered Population:	613	(43.2 sq. km)
Interference Free:	1,024,427	(9908.9 sq. km)
Percent Interference:	0.06	
Terrain Blocked Population:	766	(88.3 sq. km)
Contour Area Population:	1,025,857	

The allotment for WBUY-DT is predicted to receive interference to 0.06% of its population from authorized NTSC and DTV sources. The allotment for WBUY-DT is predicted to receive interference to 0.06% of its population from all sources including WZDX-DT as identified in the instant application. **The proposed WZDX-DT will NOT present any new interference to WBUY-DT as allotted.**

WBUY-DT Construction Permit, DTV Channel 41, Holly Springs, Mississippi

The baseline population of 1,025,040 people established in the allotment study is used to calculate interference percentages for the construction permit.

**Totals for WBUY-DT CP (41) All Interference Sources Except Proposed WZDX-DT
(Baseline Interference)**

Calculation Area Population:	1,127,343	(16121.9 sq. km)
Not Affected by Terrain Loss:	1,124,063	(15911.7 sq. km)
Total NTSC Interference:	243	(17.1 sq. km)
DTV Only Interference:	2,338	(134.1 sq. km)
Total DTV Interference:	2,565	(150.1 sq. km)
Interfered Population:	2,581	(151.1 sq. km)
Interference Free:	1,121,482	(15760.6 sq. km)

Percent Interference (Using 1,025,040 allotment baseline): 0.25

Terrain Blocked Population:	3,280	(210.2 sq. km)
Contour Area Population:	1,129,238	

Totals for WBUY-DT CP (41) All Interference Sources Including Proposed WZDX-DT

Calculation Area Population:	1,127,343	(16121.9 sq. km)
Not Affected by Terrain Loss:	1,124,063	(15911.7 sq. km)
Total NTSC Interference:	243	(17.1 sq. km)
DTV Only Interference:	2,338	(134.1 sq. km)
Total DTV Interference:	2,565	(150.1 sq. km)
Interfered Population:	2,581	(151.1 sq. km)
Interference Free:	1,121,482	(15760.6 sq. km)

Percent Interference(Using 1,025,040 allotment baseline): 0.25

Terrain Blocked Population:	3,280	(210.2 sq. km)
Contour Area Population:	1,129,238	

The construction permit for WBUY-DT is predicted to receive interference to 0.25% of its population from authorized NTSC and DTV sources. The construction permit for WBUY-DT is predicted to receive interference to 0.25% of its population from all sources including WZDX-DT as identified in the instant application. **The proposed WZDX-DT will NOT present any new interference to WBUY-DT as identified in its construction permit.**

WDSI-DT, DTV Channel 40, Chattanooga, Tennessee

WDSI-DT maximized its facilities and now reaches a larger population than allotted. In compliance with FCC guidelines for population percentage calculations, the smaller baseline population identified in the interference study performed on the allotment is used for all calculations.

WDSI-DT - Allotment, DTV Channel 40, Chattanooga, Tennessee

Totals for WDSI-DT Allotment (40)	All Interference Sources Except Proposed WZDX-DT (Baseline Interference)	
Calculation Area Population:	808,586	(17737.5 sq. km)
Not Affected by Terrain Loss:	744,053	(14944.3 sq. km)
Total NTSC Interference:	19,407	(626.5 sq. km)
DTV Only Interference:	689	(25.0 sq. km)
Total DTV Interference:	1,387	(104.0 sq. km)
Interfered Population:	20,096	(651.6 sq. km)
Interference Free:	723,957	(14292.8 sq. km)
Percent Interference:	2.70	
Terrain Blocked Population:	64,533	(2793.2 sq. km)
Contour Area Population:	809,447	

Totals for WDSI-DT Allotment (40)	All Interference Sources Including Proposed WZDX-DT	
Calculation Area Population:	808,586	(17737.5 sq. km)
Not Affected by Terrain Loss:	744,053	(14944.3 sq. km)
Total NTSC Interference:	19,407	(626.5 sq. km)
DTV Only Interference:	689	(29.0 sq. km)
Total DTV Interference:	1,398	(110.0 sq. km)
Interfered Population:	20,096	(655.5 sq. km)
Interference Free:	723,957	(14288.8 sq. km)
Percent Interference:	2.70	
Terrain Blocked Population:	64,533	(2793.2 sq. km)
Contour Area Population:	809,447	

The allotment for WDSI-DT is predicted to receive interference to 2.70% of its population from authorized NTSC and DTV sources. The allotment for WDSI-DT is predicted to receive interference to 2.70% of its population from all sources including WZDX-DT as identified in the instant application. **The proposed WZDX-DT will NOT present any new interference to WDSI-DT as allotted.**

WDSI-DT Construction Permit, DTV Channel 40, Chattanooga, Tennessee

The baseline population of 744,053 people established in the allotment study is used to calculate interference percentages for the construction permit.

**Totals for WDSI-DT CP (40) All Interference Sources Except Proposed WZDX-DT
(Baseline Interference)**

Calculation Area Population:	976,473	(	25723.0 sq. km)
Not Affected by Terrain Loss:	875,015	(	21607.6 sq. km)
Total NTSC Interference:	25,180	(	878.8 sq. km)
DTV Only Interference:	946	(	79.3 sq. km)
Total DTV Interference:	2,337	(	154.5 sq. km)
Interfered Population:	26,126	(	958.1 sq. km)
Interference Free:	848,889	(	20649.5 sq. km)

Percent Interference (Using 744,053 Allotment Baseline): 3.51

Terrain Blocked Population:	101,458	(	4115.4 sq. km)
Contour Area Population:	976,273		

Totals for WDSI-DT CP (40) All Interference Sources Including Proposed WZDX-DT

Calculation Area Population:	976,473	(	25723.0 sq. km)
Not Affected by Terrain Loss:	875,015	(	21607.6 sq. km)
Total NTSC Interference:	25,180	(	878.8 sq. km)
DTV Only Interference:	972	(	83.3 sq. km)
Total DTV Interference:	2,416	(	166.5 sq. km)
Interfered Population:	26,152	(	962.1 sq. km)
Interference Free:	848,863	(	20645.5 sq. km)

Percent Interference (Using 744,053 Allotment Baseline): 3.51

Terrain Blocked Population:	101,458	(	4115.4 sq. km)
Contour Area Population:	976,273		

The construction permit for WDSI-DT is predicted to receive interference to 3.51% of its population from authorized NTSC and DTV sources. The construction permit for WDSI-DT is predicted to receive interference to 3.51% of its population from all sources including WZDX-DT as identified in the instant application. **The proposed WZDX-DT will NOT present any new interference to WDSI-DT as identified in its construction permit.**

WSJK-DT, DTV Channel 41, Sneedville, Tennessee

WSJK-DT elected to construct smaller facilities than allotted and now reaches a smaller population. The allotment and construction permits are evaluated using their respective terrain adjusted populations.

WSJK-DT - Allotment, DTV Channel 41, Sneedville, Tennessee

Totals for WSJK-DT Allotment (41) All Interference Sources Except Proposed WZDX-DT (Baseline Interference)

Calculation Area Population:	1,905,758	(42157.0 sq. km)
Not Affected by Terrain Loss:	1,633,374	(36460.5 sq. km)
Total NTSC Interference:	2,480	(94.7 sq. km)
DTV Only Interference:	17,330	(400.1 sq. km)
Total DTV Interference:	18,258	(437.2 sq. km)
Interfered Population:	19,810	(494.8 sq. km)
Interference Free:	1,613,564	(35965.7 sq. km)
Percent Interference:	1.21	
Terrain Blocked Population:	272,384	(5696.5 sq. km)
Contour Area Population:	1,908,859	

Totals for WSJK-DT Allotment (41) All Interference Sources Including Proposed WZDX-DT

Calculation Area Population:	1,905,758	(42157.0 sq. km)
Not Affected by Terrain Loss:	1,633,374	(36460.5 sq. km)
Total NTSC Interference:	2,480	(94.7 sq. km)
DTV Only Interference:	17,330	(400.1 sq. km)
Total DTV Interference:	18,258	(437.2 sq. km)
Interfered Population:	19,810	(494.8 sq. km)
Interference Free:	1,613,564	(35965.7 sq. km)
Percent Interference:	1.21	
Terrain Blocked Population:	272,384	(5696.5 sq. km)
Contour Area Population:	1,908,859	

The allotment for WSJK-DT is predicted to receive interference to 1.21% of its population from authorized NTSC and DTV sources. The allotment for WSJK-DT is predicted to receive interference to 1.21% of its population from all sources including WZDX-DT as identified in the instant application. **The proposed WZDX-DT will NOT present any new interference to WSJK-DT as allotted.**

WSJK-DT Construction Permit, DTV Channel 41, Sneedville, Tennessee

The baseline population of 1,633,374 people established in the allotment study is larger than the population covered by this smaller facility; therefore, the smaller terrain corrected population of 1,449,399 is used to calculate interference percentages for the construction permit.

**Totals for WSJK-DT CP (41) All Interference Sources Except Proposed WZDX-DT
(Baseline Interference)**

Calculation Area Population:	1,676,427	(35088.8 sq. km)
Not Affected by Terrain Loss:	1,449,399	(30850.7 sq. km)
Total NTSC Interference:	856	(53.7 sq. km)
DTV Only Interference:	14,590	(255.2 sq. km)
Total DTV Interference:	14,964	(276.7 sq. km)
Interfered Population:	15,446	(308.9 sq. km)
Interference Free:	1,433,953	(30541.8 sq. km)
Percent Interference:	1.07	
Terrain Blocked Population:	227,028	(4238.1 sq. km)
Contour Area Population:	1,677,047	

Totals for WSJK-DT CP (41) All Interference Sources Including Proposed WZDX-DT

Calculation Area Population:	1,676,427	(35088.8 sq. km)
Not Affected by Terrain Loss:	1,449,399	(30850.7 sq. km)
Total NTSC Interference:	856	(53.7 sq. km)
DTV Only Interference:	14,590	(255.2 sq. km)
Total DTV Interference:	14,964	(276.7 sq. km)
Interfered Population:	15,446	(308.9 sq. km)
Interference Free:	1,433,953	(30541.8 sq. km)
Percent Interference:	1.07	
Terrain Blocked Population:	227,028	(4238.1 sq. km)
Contour Area Population:	1,677,047	

The construction permit for WSJK-DT is predicted to receive interference to 1.07% of its population from authorized NTSC and DTV sources. The construction permit for WSJK-DT is predicted to receive interference to 1.07% of its population from all sources including WZDX-DT as identified in the instant application. **The proposed WZDX-DT will NOT present any new interference to WSJK-DT as identified in its construction permit.**

WFLI-DT, DTV Channel 42, Cleveland, Tennessee

WFLI-DT maximized its facilities and now reaches a larger population than allotted. In compliance with FCC guidelines for population percentage calculations, the smaller baseline population identified in the interference study performed on the allotment is used for all calculations.

WFLI-DT - Allotment, DTV Channel 42, Cleveland, Tennessee

Totals for WFLI-DT Allotment (42)	All Interference Sources Except Proposed WZDX-DT (Baseline Interference)	
Calculation Area Population:	827,310	(16038.0 sq. km)
Not Affected by Terrain Loss:	742,556	(13425.0 sq. km)
Total NTSC Interference:	13,360	(325.9 sq. km)
DTV Only Interference:	1,532	(49.2 sq. km)
Total DTV Interference:	1,995	(92.4 sq. km)
Interfered Population:	14,892	(375.1 sq. km)
Interference Free:	727,664	(13049.9 sq. km)
Percent Interference:	2.01	
Terrain Blocked Population:	84,754	(2613.0 sq. km)
Contour Area Population:	828,517	

Totals for WFLI-DT Allotment (42)	All Interference Sources Including Proposed WZDX-DT	
Calculation Area Population:	827,310	(16038.0 sq. km)
Not Affected by Terrain Loss:	742,556	(13425.0 sq. km)
Total NTSC Interference:	13,360	(325.9 sq. km)
DTV Only Interference:	1,532	(50.2 sq. km)
Total DTV Interference:	1,995	(94.4 sq. km)
Interfered Population:	14,892	(376.1 sq. km)
Interference Free:	727,664	(13048.9 sq. km)
Percent Interference:	2.01	
Terrain Blocked Population:	84,754	(2613.0 sq. km)
Contour Area Population:	828,517	

The allotment for WFLI-DT is predicted to receive interference to 2.01% of its population from authorized NTSC and DTV sources. The allotment for WFLI-DT is predicted to receive interference to 2.01% of its population from all sources including WZDX-DT as identified in the instant application. **The proposed WZDX-DT will NOT present any new interference to WFLI-DT as allotted.**

WFLI-DT Construction Permit, DTV Channel 42, Cleveland, Tennessee

The baseline population of 742,556 people established in the allotment study is used to calculate interference percentages for the construction permit.

**Totals for WFLI-DT CP (42) All Interference Sources Except Proposed WZDX-DT
(Baseline Interference)**

Calculation Area Population:	1,017,731	(26669.5 sq. km)
Not Affected by Terrain Loss:	900,139	(22525.7 sq. km)
Total NTSC Interference:	20,665	(591.8 sq. km)
DTV Only Interference:	950	(58.3 sq. km)
Total DTV Interference:	1,320	(83.4 sq. km)
Interfered Population:	21,615	(650.1 sq. km)
Interference Free:	878,524	(21875.6 sq. km)

Percent Interference: 2.91

Terrain Blocked Population:	117,592	(4143.8 sq. km)
Contour Area Population:	1,016,253	

Totals for WFLI-DT CP (42) All Interference Sources Including Proposed WZDX-DT

Calculation Area Population:	1,017,731	(26669.5 sq. km)
Not Affected by Terrain Loss:	900,139	(22525.7 sq. km)
Total NTSC Interference:	20,665	(591.8 sq. km)
DTV Only Interference:	960	(60.3 sq. km)
Total DTV Interference:	1,426	(90.4 sq. km)
Interfered Population:	21,625	(652.1 sq. km)
Interference Free:	878,514	(21873.6 sq. km)

Percent Interference: 2.91

Terrain Blocked Population:	117,592	(4143.8 sq. km)
Contour Area Population:	1,016,253	

The construction permit for WFLI-DT is predicted to receive interference to 2.91% of its population from authorized NTSC and DTV sources. The construction permit for WFLI-DT is predicted to receive interference to 2.91% of its population from all sources including WZDX-DT as identified in the instant application. **The proposed WZDX-DT will NOT present any new interference to WFLI-DT as identified in its construction permit.**

SUMMARY

The facilities described in the instant application do not present more than de minimis interference to any authorized NTSC, DTV or Class A television station.

The preceding statements, data, and the studies referenced herein were prepared by me, and are true and accurate to the best of my knowledge and belief.



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