

# WDEF-DT, Chattanooga, TN, OET-69 Post-Transition Interference Analysis

Percent allowed new interference: 0.500  
Percent allowed new interference to Class A: 0.500  
Census data selected 2000

Post Transition Data Base Selected  
/export/home/cdbb/tvdb.sff\_G  
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Record Selected for Analysis

WDEFDT USERRECORD-01 CHATTANOOGA TN US  
Channel 12 ERP 6. kW HAAT 420. m RCAMSL 00767 m  
Latitude 035-08-06 Longitude 0085-19-25  
Status APP Zone 2 Border  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	6.000	207.2	83.3
45.0	6.000	533.0	104.7
90.0	6.000	538.0	105.0
135.0	6.000	546.3	105.5
180.0	6.000	548.1	105.6
225.0	6.000	481.3	101.0
270.0	6.000	266.0	86.9
315.0	6.000	244.0	85.8

Evaluation toward Class A Stations

Contour overlap to Class A station  
WFEM-LP 12 HEISKELL, ETC. TN USERRECORD02

Class A Evaluation Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

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## WDEF-DT, Chattanooga, TN, OET-69 Post-Transition Interference Analysis

## Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
12	WDEFDT	CHATTANOOGA TN	USERRECORD01

### Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	WSFA	MONTGOMERY AL	359.8	CP MOD	BMPCDT	-20040519ADX
12	WRDW-TV	AUGUSTA GA	372.8	CP	BDTV	-00000101
12	WYMT-TV	HAZARD KY	298.9	LIC	BLCDT	-20040109ACY
12	WMAE-TV	BOONEVILLE MS	316.8	CP	BPEDT	-20000501AHZ
13	WVTM-TV	BIRMINGHAM AL	227.4	CP	BDTV	-00000128
13	WRCB-TV	CHATTANOOGA TN	3.0	CP	BPCDT	-20010502AAO
12	WFEM-LP	HEISKELL, ETC. TN	157.2	APP	USERRECORD-02	

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## Analysis of Interference to Affected Station 1

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	WSFA	MONTGOMERY AL	BMPCDT	-20040519ADX

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	WFXL	ALBANY GA	229.1	CP	BPCDT	-20000427ABX
12	WMAE-TV	BOONEVILLE MS	383.9	CP	BPEDT	-20000501AHZ
12	WJTV	JACKSON MS	400.4	CP	BPCDT	-19991025AEF
13	WVTM-TV	BIRMINGHAM AL	178.7	CP	BDTV	-00000128
13	WMBB	PANAMA CITY FL	194.7	CP	BPCDT	-19991026ABS
12	WDEFDT	CHATTANOOGA TN	359.8	APP	USERRECORD-01	

Total scenarios = 1

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Result key:      1
Scenario        1 Affected station      1
Before Analysis
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Results for: 12A AL MONTGOMERY                      BMPCDT              20040519ADX    CP  
         HAAT 507.0 m, ATV ERP 24.9 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	801208	32633.3
not affected by terrain losses	792172	31815.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3823	199.5
lost to ATV IX only	3823	199.5
lost to all IX	3823	199.5

Potential Interfering Stations Included in above Scenario 1

12A GA ALBANY BPCDT 20000427ABX CP  
12A TN CHATTANOOGA **DIGITAL ALLOTMENT RECORD**

## After Analysis

Results for: 12A AL MONTGOMERY                      BMPCDT              20040519ADX    CP  
         HAAT 507.0 m, ATV ERP    24.9 kW

# WDEF-DT, Chattanooga, TN, OET-69 Post-Transition Interference Analysis

	POPULATION	AREA (sq km)
within Noise Limited Contour	801208	32633.3
not affected by terrain losses	792172	31815.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3564	179.6
lost to ATV IX only	3564	179.6
lost to all IX	3564	179.6

Potential Interfering Stations Included in above Scenario 1

12A GA ALBANY	BPCDT	20000427ABX	CP
12A TN CHATTANOOGA	USERRECORD01		APP

Percent new IX = -0.0329%

Worst case new IX -0.0329% Scenario 1

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## Analysis of Interference to Affected Station 2

### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	WRDW-TV	AUGUSTA GA	BDTV	-00000101

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
11	WTOG-TV	SAVANNAH GA	157.4	LIC	BLCDDT	-20020501AAO
12	WFXL	ALBANY GA	298.7	CP	BPCDT	-20000427ABX
13	WMAZ-TV	MACON GA	175.6	CP	BFRCTT	-20050811ABV
12	WDEFDTAP	CHATTANOOGA TN	372.8	APP	USERRECORD-01	

Proposal causes no interference

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## Analysis of Interference to Affected Station 3

### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	WYMT-TV	HAZARD KY	BLCDDT	-20040109ACY

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
11	WJHL-TV	JOHNSON CITY TN	125.7	CP	BPCDT	-19991025ADN
12	WKRC-TV	CINCINNATI OH	242.8	CP	BDTV	-00000102
12	WMFD-TV	MANSFIELD OH	399.8	CP	BPCDT	-20040526ABT
12	WBOYTV	CLARKSBURG WV	340.6	LIC	BLCT	-860107KG
13	WKYT-TV	LEXINGTON KY	142.9	LIC	BLCDDT	-20021025AAO
13	WLOS	ASHEVILLE NC	200.2	CP	BFRCTT	-20050812AAI
13	WOWK-TV	HUNTINGTON WV	168.9	CP	BFRCTT	-20050815ABI
12	WDEFDT	CHATTANOOGA TN	298.9	APP	USERRECORD-01	

Total scenarios = 1

Result key: 3  
Scenario 1 Affected station 3  
Before Analysis

# WDEF-DT, Chattanooga, TN, OET-69 Post-Transition Interference Analysis

Results for: 12A KY HAZARD BLCDT 20040109ACY LIC

HAAT 398.0 m, ATV ERP 50.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	1176860	40403.4
not affected by terrain losses	862679	33646.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	69034	1486.4
lost to ATV IX only	69034	1486.4
lost to all IX	69034	1486.4

Potential Interfering Stations Included in above Scenario 1

11A TN JOHNSON CITY	BPCDT	19991025ADN	CP
12A OH CINCINNATI	BDTV	00000102	CP
12A WV CLARKSBURG	BLCT	860107KG	LIC
13A KY LEXINGTON	BLCDT	20021025AAO	LIC
13A WV HUNTINGTON	BFRCT	20050815ABI	CP
12A TN CHATTANOOGA	<b>DIGITAL ALLOTMENT RECORD</b>		

After Analysis

Results for: 12A KY HAZARD BLCDT 20040109ACY LIC

HAAT 398.0 m, ATV ERP 50.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	1176860	40403.4
not affected by terrain losses	862679	33646.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	67046	1398.5
lost to ATV IX only	67046	1398.5
lost to all IX	67046	1398.5

Potential Interfering Stations Included in above Scenario 1

11A TN JOHNSON CITY	BPCDT	19991025ADN	CP
12A OH CINCINNATI	BDTV	00000102	CP
12A WV CLARKSBURG	BLCT	860107KG	LIC
13A KY LEXINGTON	BLCDT	20021025AAO	LIC
13A WV HUNTINGTON	BFRCT	20050815ABI	CP
12A TN CHATTANOOGA	USERRECORD01		APP

Percent new IX = -0.2505%

Worst case new IX -0.2505% Scenario 1

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
12	WMAE-TV	BOONEVILLE MS	BPEDT -20000501AHZ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
12	WSFA	MONTGOMERY AL	383.9	CP MOD	BMPCDT -20040519ADX
12	KTHV	LITTLE ROCK AR	342.7	CP	BPCDT -19991020ABU
12	KFVS-TV	CAPE GIRARDEAU MO	314.4	LIC	BLCDT -20020423AAA
12	WJTV	JACKSON MS	310.2	CP	BPCDT -19991025AEF
13	WVTM-TV	BIRMINGHAM AL	222.4	CP	BDTV -00000128
13	WHBQ-TV	MEMPHIS TN	114.5	CP	BDTV -00000129

# WDEF-DT, Chattanooga, TN, OET-69 Post-Transition Interference Analysis

12 WDEFDT CHATTANOOGA TN 316.8 APP USERRECORD-01

Total scenarios = 1

Result key: 4  
Scenario 1 Affected station 4  
Before Analysis

Results for: 12A MS BOONEVILLE BPEDT 20000501AHZ CP  
HAAT 227.0 m, ATV ERP 5.9 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	446056	22087.2
not affected by terrain losses	430923	21104.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	12312	656.3
lost to ATV IX only	12312	656.3
lost to all IX	12312	656.3

Potential Interfering Stations Included in above Scenario 1

12A AR LITTLE ROCK	BPCDT	19991020ABU	CP
12A MO CAPE GIRARDEAU	BLCDT	20020423AAA	LIC
12A MS JACKSON	BPCDT	19991025AEF	CP
13A TN MEMPHIS	BDTV	00000129	CP
12A TN CHATTANOOGA	<b>DIGITAL ALLOTMENT RECORD</b>		

After Analysis

Results for: 12A MS BOONEVILLE BPEDT 20000501AHZ CP  
HAAT 227.0 m, ATV ERP 5.9 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	446056	22087.2
not affected by terrain losses	430923	21104.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	12312	656.3
lost to ATV IX only	12312	656.3
lost to all IX	12312	656.3

Potential Interfering Stations Included in above Scenario 1

12A AR LITTLE ROCK	BPCDT	19991020ABU	CP
12A MO CAPE GIRARDEAU	BLCDT	20020423AAA	LIC
12A MS JACKSON	BPCDT	19991025AEF	CP
13A TN MEMPHIS	BDTV	00000129	CP
12A TN CHATTANOOGA	USERRECORD01		APP

Percent new IX = 0.0000%

Worst case new IX 0.0000% Scenario 1

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	WVTM-TV	BIRMINGHAM AL	BDTV -00000128

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
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# WDEF-DT, Chattanooga, TN, OET-69 Post-Transition Interference Analysis

12	WSFA	MONTGOMERY AL	178.7	CP MOD	BMPCDT	-20040519ADX
12	WMAE-TV	BOONEVILLE MS	222.4	CP	BPEDT	-20000501AHZ
13	WMBB	PANAMA CITY FL	373.2	CP	BPCDT	-19991026ABS
13	WMAZ-TV	MACON GA	312.3	CP	BFRCT	-20050811ABV
13	WBKO	BOWLING GREEN KY	398.6	CP	BDTV	-00000122
13	WLOX	BILOXI MS	375.9	LIC	BLCDT	-20030205ACM
13	WLOS	ASHEVILLE NC	428.1	CP	BFRCT	-20050812AAI
13	WRCB-TV	CHATTANOOGA TN	230.2	CP	BPCDT	-20010502AAO
13	WHBQ-TV	MEMPHIS TN	336.6	CP	BDTV	-00000129
12	WDEFDT	CHATTANOOGA TN	227.4	APP	USERRECORD-01	

Proposal causes no interference

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## Analysis of Interference to Affected Station 6

### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
13	WRCB-TV	CHATTANOOGA TN	BPCDT	-20010502AAO

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
13	WVTM-TV	BIRMINGHAM AL	230.2	CP	BDTV	-00000128
13	WMAZ-TV	MACON GA	312.8	CP	BFRCT	-20050811ABV
13	WBKO	BOWLING GREEN KY	234.3	CP	BDTV	-00000122
13	WKYT-TV	LEXINGTON KY	330.1	LIC	BLCDT	-20021025AAO
13	WLOS	ASHEVILLE NC	233.8	CP	BFRCT	-20050812AAI
13	WHBQ-TV	MEMPHIS TN	411.6	CP	BDTV	-00000129
12	WDEFDT	CHATTANOOGA TN	3.0	APP	USERRECORD-01	

Total scenarios = 1

Result key: 5

Scenario 1 Affected station 6

Before Analysis

Results for: 13A TN CHATTANOOGA BPCDT 20010502AAO CP

HAAT 335.0 m, ATV ERP 34.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1259185	28512.6
not affected by terrain losses	1104926	23540.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	36479	1153.8
lost to ATV IX only	36479	1153.8
lost to all IX	36479	1153.8

Potential Interfering Stations Included in above Scenario 1

13A AL BIRMINGHAM	BDTV	00000128	CP
13A GA MACON	BFRCT	20050811ABV	CP
13A KY BOWLING GREEN	BDTV	00000122	CP
13A KY LEXINGTON	BLCDT	20021025AAO	LIC
13A NC ASHEVILLE	BFRCT	20050812AAI	CP
12A TN CHATTANOOGA	<b>DIGITAL ALLOTMENT RECORD</b>		

After Analysis

Results for: 13A TN CHATTANOOGA BPCDT 20010502AAO CP

HAAT 335.0 m, ATV ERP 34.8 kW

POPULATION	AREA (sq km)
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# WDEF-DT, Chattanooga, TN, OET-69 Post-Transition Interference Analysis

within Noise Limited Contour	1259185	28512.6
not affected by terrain losses	1104926	23540.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	35877	1121.8
lost to ATV IX only	35877	1121.8
lost to all IX	35877	1121.8

Potential Interfering Stations Included in above Scenario 1

13A AL BIRMINGHAM	BDTV	00000128	CP
13A GA MACON	BFRCT	20050811ABV	CP
13A KY BOWLING GREEN	BDTV	00000122	CP
13A KY LEXINGTON	BLCDT	20021025AAO	LIC
13A NC ASHEVILLE	BFRCT	20050812AAI	CP
12A TN CHATTANOOGA	USERRECORD01		APP

Percent new IX = -0.0563%

Worst case new IX -0.0563% Scenario 1

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## Analysis of Interference to Affected Station 7

### Analysis of current record

Channel	Call	City/State	Application Ref. No.
12	WFEM-LP	HEISKELL, ETC. TN	USERRECORD-02

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
12	WRDW-TV	AUGUSTA GA	356.8	CP	BDTV -00000101
12	WYMT-TV	HAZARD KY	145.5	LIC	BLCDT -20040109ACY
12	WKRC-TV	CINCINNATI OH	340.9	CP	BDTV -00000102
12	WDEF-TV	CHATTANOOGA TN	157.2	CP	BPCDT -19991025ACX
12	WDEFDT	CHATTANOOGA TN	157.2	APP	USERRECORD-01

Total scenarios = 1

Result key: 6

Scenario 1 Affected station 7

Before Analysis

Results for: 12N TN HEISKELL, ETC. USERRECORD02 APP

	POPULATION	AREA (sq km)
within Noise Limited Contour	18207	120.2
not affected by terrain losses	16073	116.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1570	8.0
lost to all IX	1570	8.0

Potential Interfering Stations Included in above Scenario 1

12A KY HAZARD	BLCDT	20040109ACY	LIC
12A TN CHATTANOOGA	<b>DIGITAL ALLOTMENT RECORD</b>		

After Analysis

Results for: 12N TN HEISKELL, ETC. USERRECORD02 APP

	POPULATION	AREA (sq km)
within Noise Limited Contour	18207	120.2

# WDEF-DT, Chattanooga, TN, OET-69 Post-Transition Interference Analysis

not affected by terrain losses	16073	116.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	761	4.0
lost to all IX	761	4.0

Potential Interfering Stations Included in above Scenario 1

12A KY HAZARD	BLCDT	20040109ACY	LIC
12A TN CHATTANOOGA	USERRECORD01		APP

Percent new IX = -4.4433%

Worst case new IX -4.4433% Scenario 1

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Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application Ref. No.
12	WDEFDT	CHATTANOOGA TN	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
12	WSFA	MONTGOMERY AL	359.8	CP MOD	BMPCDT -20040519ADX
12	WRDW-TV	AUGUSTA GA	372.8	CP	BDTV -00000101
12	WYMT-TV	HAZARD KY	298.9	LIC	BLCDT -20040109ACY
12	WMAE-TV	BOONEVILLE MS	316.8	CP	BPEDT -20000501AHZ
13	WVTM-TV	BIRMINGHAM AL	227.4	CP	BDTV -00000128
13	WRCB-TV	CHATTANOOGA TN	3.0	CP	BPCDT -20010502AAO

Total scenarios = 1

Result key: 7

Scenario 1 Affected station 8

Before Analysis

Results for: 12A TN CHATTANOOGA USERRECORD01 APP  
HAAT 420.0 m, ATV ERP 6.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1306175	29862.6
not affected by terrain losses	1123422	24404.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	16616	613.1
lost to ATV IX only	16616	613.1
lost to all IX	16616	613.1

Potential Interfering Stations Included in above Scenario 1

12A AL MONTGOMERY	BMPCDT	20040519ADX	CP
12A GA AUGUSTA	BDTV	00000101	CP
12A KY HAZARD	BLCDT	20040109ACY	LIC
12A MS BOONEVILLE	BPEDT	20000501AHZ	CP
13A TN CHATTANOOGA	BPCDT	20010502AAO	CP

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