

TECHNICAL EXHIBIT
APPLICATION FOR DTV CONSTRUCTION PERMIT
IN SUPPORT OF ITS POST-TRANSITION FACILITY
STATION WSFA-DT (FACILITY ID 13993)
MONTGOMERY, ALABAMA

MAY 2, 2008

CH 12 1.16 KW 598 M

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Technical Narrative {Up To 5-Mile Waiver Request}

This Technical Exhibit supports an application for digital television (DTV) station WSFA-DT for its post-transition DTV operation at Montgomery, Alabama. This application requests a construction permit (CP) for a digital television operation on channel 12 using its existing, analog, licensed, non-directional antenna.

Proposed Facilities

Station WSFA-DT proposes to operate DTV channel 12, with a non-directional antenna effective radiated power (ERP) of 1.16 kilowatt and antenna height above average terrain (HAAT) of 598 meters (former HAAT has been updated per OET-69 software). The transmitter site coordinates are:

31° 58' 28" North Latitude
86° 09' 44" West Longitude

A sketch of antenna and pertinent elevations are included as Figure 1. The antenna structure registration number is 1020497.

Figure 2 is a map showing the DTV predicted coverage contours as well as the associated analog Grade B and Appendix B allotment coverage contours. For each noise-limited contour, 360-radials and a 3-second digitized terrain database were employed. A 5-mile buffer has been added to the Appendix B allotment coverage contour. The predicted 1.16 kW, 36 dBu contour will not extend more than 5 miles beyond the Appendix B contour at any location.

The proposed 43 dBu contour will encompass all of Montgomery. The Montgomery city limits were derived from information contained in the 2000 U.S. Census of Population and Housing.

Population Served

The herein proposed WSFA-DT facility is predicted to serve 645,393 persons, post-transition, based upon the 2000 Census. WSFA-DT's associated Appendix B facility is predicted to serve 788,349 persons. Therefore, the herein proposed WSFA-DT facility would serve 82% of WSFA-DT's Appendix B population. Use of the existing analog antenna will not permit more than 82% replication of the Appendix B facilities without an increase in ERP (which will result in more than a 5 mile extension of the Appendix B noise-limited contour).

Allocation Considerations

Since the proposed WSFA-DT ERP exceeds the Commission's *Appendix B* allocated maximum effective radiated power in some azimuthal directions¹, a waiver of the current freeze on filing DTV maximization applications is hereby requested. The proposed facilities would (1) create a contour that does not extend more than 5 miles in any direction beyond the Appendix B contour and (2) not create more than 0.5% new interference to any other station.

In support of this waiver request, an allocation study was completed to ensure no prohibited interference would occur. The proposed WSFA-DT operation meets the FCC's post-transition interference standards to pertinent Class A and DTV allotments using the procedures outlined in the FCC's OET-69 Bulletin and a 2 kilometer grid cell size. The results of the interference analyses are summarized in Figure 3.

Radiofrequency Electromagnetic Field Exposure

¹ See Seventh Report And Order And Eighth Further Notice Of Proposed Rule Making in the Matter of Advanced Television Systems and their Impact Upon the Existing Television Broadcast Service, MB Docket 87-268, Released August 6, 2007; Adopted August 1, 2007.

The proposed WSFA-DT facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 577 meters above ground level with an ERP of 1.16 kW. A conservative downward relative field value of 1.0 was assumed for the existing RCA TW-12A12 antenna. The calculated power density at a point 2 meters above ground level will not exceed 0.0002 mW/cm^2 . This is less than 5% of the FCC's recommended limit of 0.2 mW/cm^2 for channel 12 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the station is at reduced power or shut down. The proposed WSFA-DT operation appears to be otherwise categorically excluded from environmental processing.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.



Jonathan N. Edwards

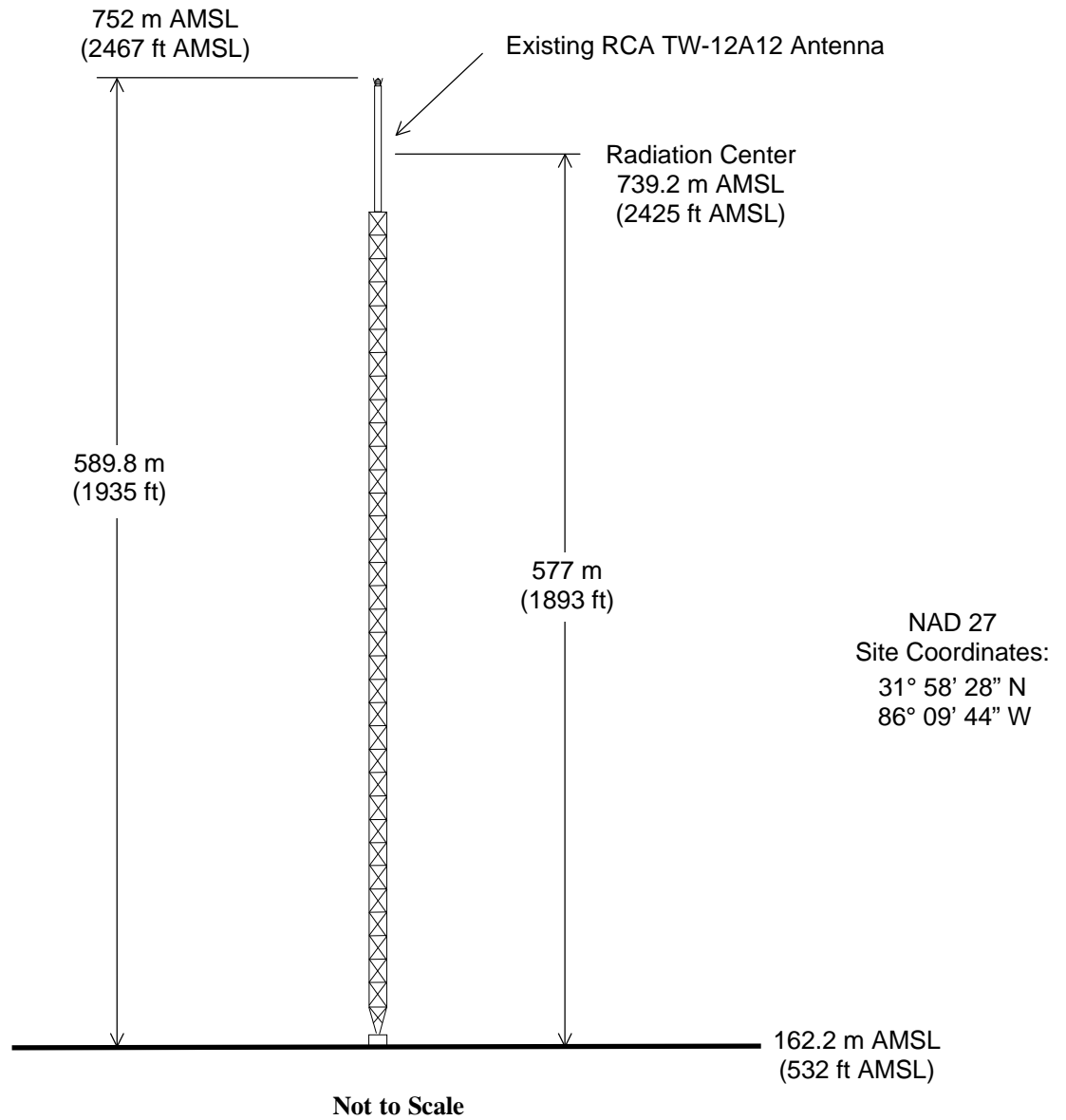
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000
JON@DLR.COM

May 2, 2008

Figure 1



Registration No. 1036432

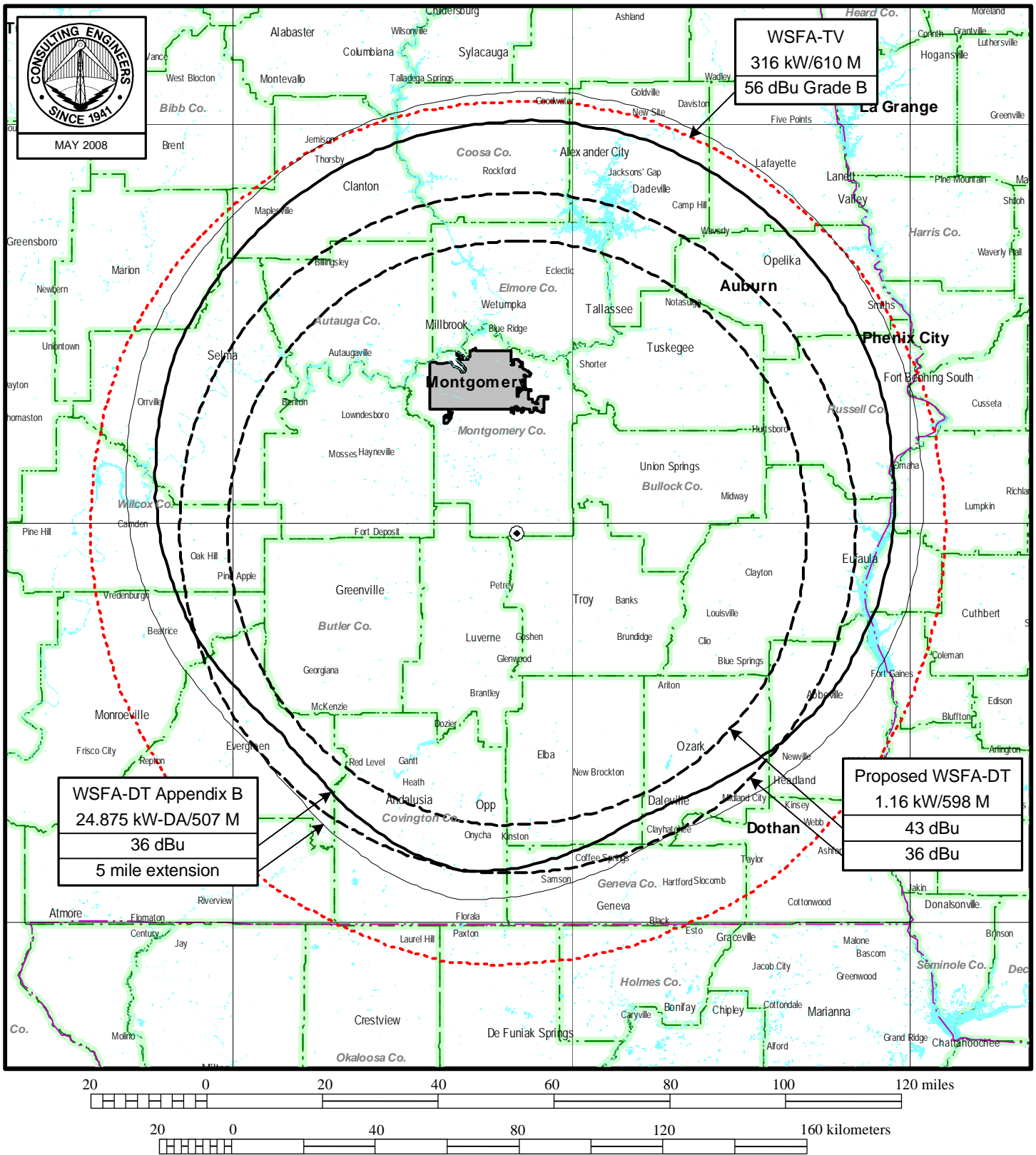


ANTENNA AND SUPPORTING STRUCTURE

STATION WSFA-DT
MONTGOMERY, ALABAMA
CH 12 1.16 KW 598 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



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/cdbs/tvdb.sff_B

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 05-02-2008 Time: 15:06:37

Record Selected for Analysis

WSFA USERRECORD-01 MONTGOMERY AL US
Channel 12 ERP 1.16 kW HAAT 598. m RCAMSL 00739 m
Latitude 031-58-28 Longitude 0086-09-44
Status APP Zone 3 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	1.160	609.1	94.7
45.0	1.160	600.2	94.4
90.0	1.160	591.5	94.2
135.0	1.160	591.5	94.2
180.0	1.160	601.4	94.5
225.0	1.160	596.2	94.3
270.0	1.160	584.4	93.9
315.0	1.160	612.1	94.8

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

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

Start of Interference Analysis

Channel	Call	City/State	ARN
12	WSFA	MONTGOMERY AL	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	WFXL	ALBANY GA	229.1	LIC	BDTV	-0385
12	WMAE-TV	BOONEVILLE MS	383.9	LIC	BDTV	-0886
12	WJTV	JACKSON MS	400.4	LIC	BDTV	-0898
12	WDEF-TV	CHATTANOOGA TN	359.8	LIC	BDTV	-1444
13	WVTM-TV	BIRMINGHAM AL	178.7	LIC	BDTV	-0022
13	WMBB	PANAMA CITY FL	194.7	LIC	BDTV	-0355

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	WFXL	ALBANY GA	BDTV	-0385

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	WTVT	TAMPA FL	420.7	LIC	BDTV	-0372
12	WRDW-TV	AUGUSTA GA	298.7	LIC	BDTV	-0397
13	WMBB	PANAMA CITY FL	182.0	LIC	BDTV	-0355
13	WMAZ-TV	MACON GA	160.6	LIC	BDTV	-0414
12	WSFA	MONTGOMERY AL	229.1	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1

Scenario 1 Affected station 1
Before Analysis

Results for: 12A GA ALBANY BDTV 0385 LIC

HAAT 287.0 m, ATV ERP 60.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	765080	29597.4
not affected by terrain losses	751096	29327.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5046	462.6
lost to ATV IX only	5046	462.6
lost to all IX	5046	462.6

Potential Interfering Stations Included in above Scenario 1

12A AL MONTGOMERY	BDTV	0049	LIC
12A GA AUGUSTA	BDTV	0397	LIC

After Analysis

Results for: 12A GA ALBANY BDTV 0385 LIC

HAAT 287.0 m, ATV ERP 60.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	765080	29597.4
not affected by terrain losses	751096	29327.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5036	458.6
lost to ATV IX only	5036	458.6
lost to all IX	5036	458.6

Potential Interfering Stations Included in above Scenario 1

12A GA AUGUSTA	BDTV	0397	LIC
12A AL MONTGOMERY	USERRECORD01		APP

Percent new IX = -0.0013%

Worst case new IX -0.0013% 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	WMAE-TV	BOONEVILLE MS	BDTV	-0886

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KTHV	LITTLE ROCK AR	342.7	LIC	BDTV	-0080

12	KFVS-TV	CAPE GIRARDEAU MO	314.4	LIC	BDTV	-0848
12	WJTV	JACKSON MS	310.2	LIC	BDTV	-0898
12	WDEF-TV	CHATTANOOGA TN	316.8	LIC	BDTV	-1444
13	WVTM-TV	BIRMINGHAM AL	222.4	LIC	BDTV	-0022
13	WHBQ-TV	MEMPHIS TN	114.5	LIC	BDTV	-1469
12	WSFA	MONTGOMERY AL	383.9	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	WJTV	JACKSON MS	BDTV	-0898

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
11	KAQY	COLUMBIA LA	169.0	LIC	BDTV	-0678
11	WTOK-TV	MERIDIAN MS	161.3	LIC	BDTV	-0905
12	KTHV	LITTLE ROCK AR	344.3	LIC	BDTV	-0080
12	WMAE-TV	BOONEVILLE MS	310.2	LIC	BDTV	-0886
12	KBMT	BEAUMONT TX	401.9	LIC	BDTV	-1503
13	WBRZ-TV	BATON ROUGE LA	228.7	LIC	BDTV	-0674
13	KLTM-TV	MONROE LA	156.7	LIC	BDTV	-0689
13	WLOX	BILOXI MS	209.6	LIC	BDTV	-0884
12	WSFA	MONTGOMERY AL	400.4	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	WDEF-TV	CHATTANOOGA TN	BDTV	-1444

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	WRDW-TV	AUGUSTA GA	372.8	LIC	BDTV	-0397
12	WYMT-TV	HAZARD KY	298.9	LIC	BDTV	-0643
12	WMAE-TV	BOONEVILLE MS	316.8	LIC	BDTV	-0886
13	WVTM-TV	BIRMINGHAM AL	227.4	LIC	BDTV	-0022
13	WRCB-TV	CHATTANOOGA TN	3.0	LIC	BDTV	-1445
12	WSFA	MONTGOMERY AL	359.8	APP	USERRECORD-01	

Total scenarios = 1

Result key: 2

Scenario 1 Affected station 4

Before Analysis

Results for: 12A TN CHATTANOOGA BDTV 1444 LIC
HAAT 376.0 m, ATV ERP 20.3 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1383634	32486.3
not affected by terrain losses	1192465	26421.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	20989	677.4
lost to ATV IX only	20989	677.4
lost to all IX	20989	677.4

Potential Interfering Stations Included in above Scenario 1

12A AL MONTGOMERY BDTV 0049 LIC

12A GA AUGUSTA	BDTV	0397	LIC
12A KY HAZARD	BDTV	0643	LIC
12A MS BOONEVILLE	BDTV	0886	LIC
13A TN CHATTANOOGA	BDTV	1445	LIC

After Analysis

Results for: 12A TN CHATTANOOGA BDTV 1444 LIC
 HAAT 376.0 m, ATV ERP 20.3 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1383634	32486.3
not affected by terrain losses	1192465	26421.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	13142	481.0
lost to ATV IX only	13142	481.0
lost to all IX	13142	481.0

Potential Interfering Stations Included in above Scenario 1

12A GA AUGUSTA	BDTV	0397	LIC
12A KY HAZARD	BDTV	0643	LIC
12A MS BOONEVILLE	BDTV	0886	LIC
13A TN CHATTANOOGA	BDTV	1445	LIC
12A AL MONTGOMERY	USERRECORD01		APP

Percent new IX = -0.6698%
 Worst case new IX -0.6698% 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	-0022

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	WMAE-TV	BOONEVILLE MS	222.4	LIC	BDTV	-0886
12	WDEF-TV	CHATTANOOGA TN	227.4	LIC	BDTV	-1444
13	WMBB	PANAMA CITY FL	373.2	LIC	BDTV	-0355
13	WMAZ-TV	MACON GA	312.3	LIC	BDTV	-0414
13	WBKO	BOWLING GREEN KY	398.6	LIC	BDTV	-0634
13	WLOX	BILOXI MS	375.9	LIC	BDTV	-0884
13	WLOS	ASHEVILLE NC	428.1	LIC	BDTV	-0941
13	WRCB-TV	CHATTANOOGA TN	230.2	LIC	BDTV	-1445
13	WHBQ-TV	MEMPHIS TN	336.6	LIC	BDTV	-1469
12	WSFA	MONTGOMERY AL	178.7	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	WMBB	PANAMA CITY FL	BDTV	-0355

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	WFXL	ALBANY GA	182.0	LIC	BDTV	-0385
13	WVTM-TV	BIRMINGHAM AL	373.2	LIC	BDTV	-0022
13	WTLV	JACKSONVILLE FL	368.3	LIC	BDTV	-0314
13	WEDU	TAMPA FL	413.1	LIC	BDTV	-0373
13	WMAZ-TV	MACON GA	318.3	LIC	BDTV	-0414

13 WLOX BILOXI MS 356.6 LIC BDTV -0884
12 WSFA MONTGOMERY AL 194.7 APP USERRECORD-01
Proposal causes no interference

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application Ref. No.
12	WSFA	MONTGOMERY AL	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
12	WFXL	ALBANY GA	229.1	LIC	BDTV -0385
12	WMAE-TV	BOONEVILLE MS	383.9	LIC	BDTV -0886
12	WJTV	JACKSON MS	400.4	LIC	BDTV -0898
12	WDEF-TV	CHATTANOOGA TN	359.8	LIC	BDTV -1444
13	WVTM-TV	BIRMINGHAM AL	178.7	LIC	BDTV -0022
13	WMBB	PANAMA CITY FL	194.7	LIC	BDTV -0355

Total scenarios = 1

Result key: 3
Scenario 1 Affected station 7
Before Analysis

Results for: 12A AL MONTGOMERY USERRECORD01 APP
HAAT 598.0 m, ATV ERP 1.2 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	650279	27970.5
not affected by terrain losses	646430	27391.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1037	175.8
lost to ATV IX only	1037	175.8
lost to all IX	1037	175.8

Potential Interfering Stations Included in above Scenario 1

12A GA ALBANY	BDTV	0385	LIC
12A TN CHATTANOOGA	BDTV	1444	LIC

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