

TECHNICAL EXHIBIT
APPLICATION FOR DTV CONSTRUCTION PERMIT
IN SUPPORT OF ITS POST-TRANSITION FACILITY
STATION WAFB-DT (FACILITY ID 1498)
BATON ROUGE, LOUISIANA

MAY 2, 2008

CH 9 0.105 KW 511 M

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Technical Narrative {Up To 5-Mile Waiver Request}

This Technical Exhibit supports an application for digital television (DTV) station WAFB-DT for its post-transition DTV operation at Baton Rouge, Louisiana. This application requests a construction permit (CP) for a digital television operation on channel 9 using its existing, analog, licensed, non-directional antenna.

Proposed Facilities

Station WAFB-DT proposes to operate DTV channel 9, with a non-directional antenna effective radiated power (ERP) of 0.105 kilowatt and antenna height above average terrain (HAAT) of 511 meters (former HAAT has been updated per OET-69 software). The transmitter site coordinates are:

30° 21' 58" North Latitude
91° 12' 47" West Longitude

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

Figure 3 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 0.105 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 Baton Rouge. The Baton Rouge city limits were derived from information contained in the 2000 U.S. Census of Population and Housing.

Population Served

The herein proposed WAFB-DT facility is predicted to serve 858,562 persons, post-transition, based upon the 2000 Census. WAFB-DT's associated Appendix B facility is predicted to serve 847,359 persons. Therefore, the herein proposed WAFB-DT facility would serve more than 100% of WAFB-DT's Appendix B population.

Allocation Considerations

Since the proposed WAFB-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 WAFB-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 4.

Radiofrequency Electromagnetic Field Exposure

The proposed WAFB-DT facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The

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.

radiation center for the proposed DTV antenna is located 510 meters above ground level with an ERP of 0.105 kW. A conservative downward relative field value of 0.2 was assumed for the existing RCA TW-15A9P antenna (see Figure 2). The calculated power density at a point 2 meters above ground level will not exceed 0.0001 mW/cm^2 . This is less than 5% of the FCC's recommended limit of 0.2 mW/cm^2 for channel 9 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 WAFB-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

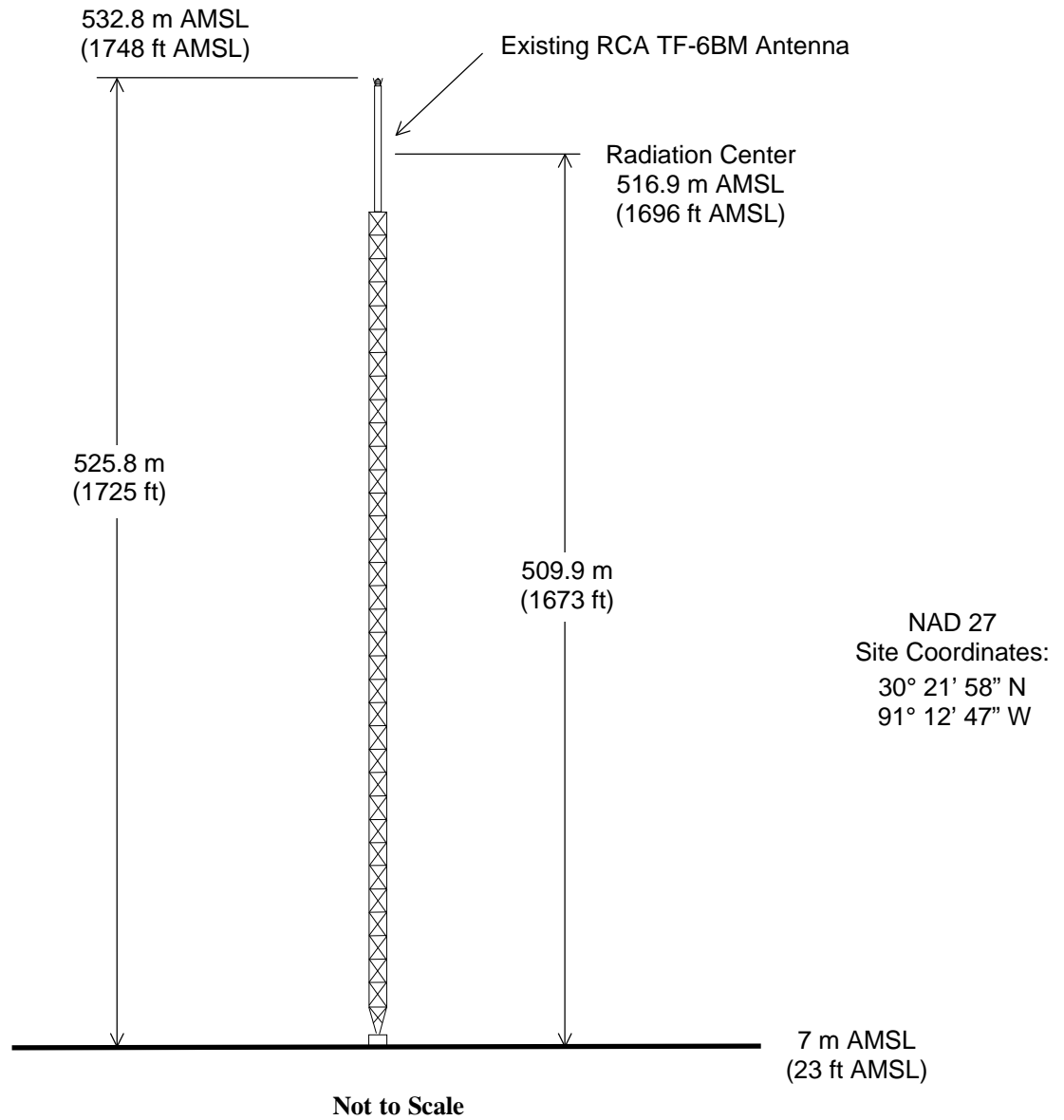
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000
JON@DLR.COM

May 2, 2008

Figure 1



Registration No. 1020497



ANTENNA AND SUPPORTING STRUCTURE

STATION WAFB-DT
BATON ROUGE, LOUISIANA
CH 9 0.105 KW 511 M

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

ELEVATION PATTERN

RMS Gain at Main Lobe	15.30 (11.85 dB)	Beam Tilt	0.50 deg
RMS Gain at Horizontal	14.40 (11.58 dB)	Frequency	189.00 MHz
Calculated / Measured	Calculated	Drawing #	050-90

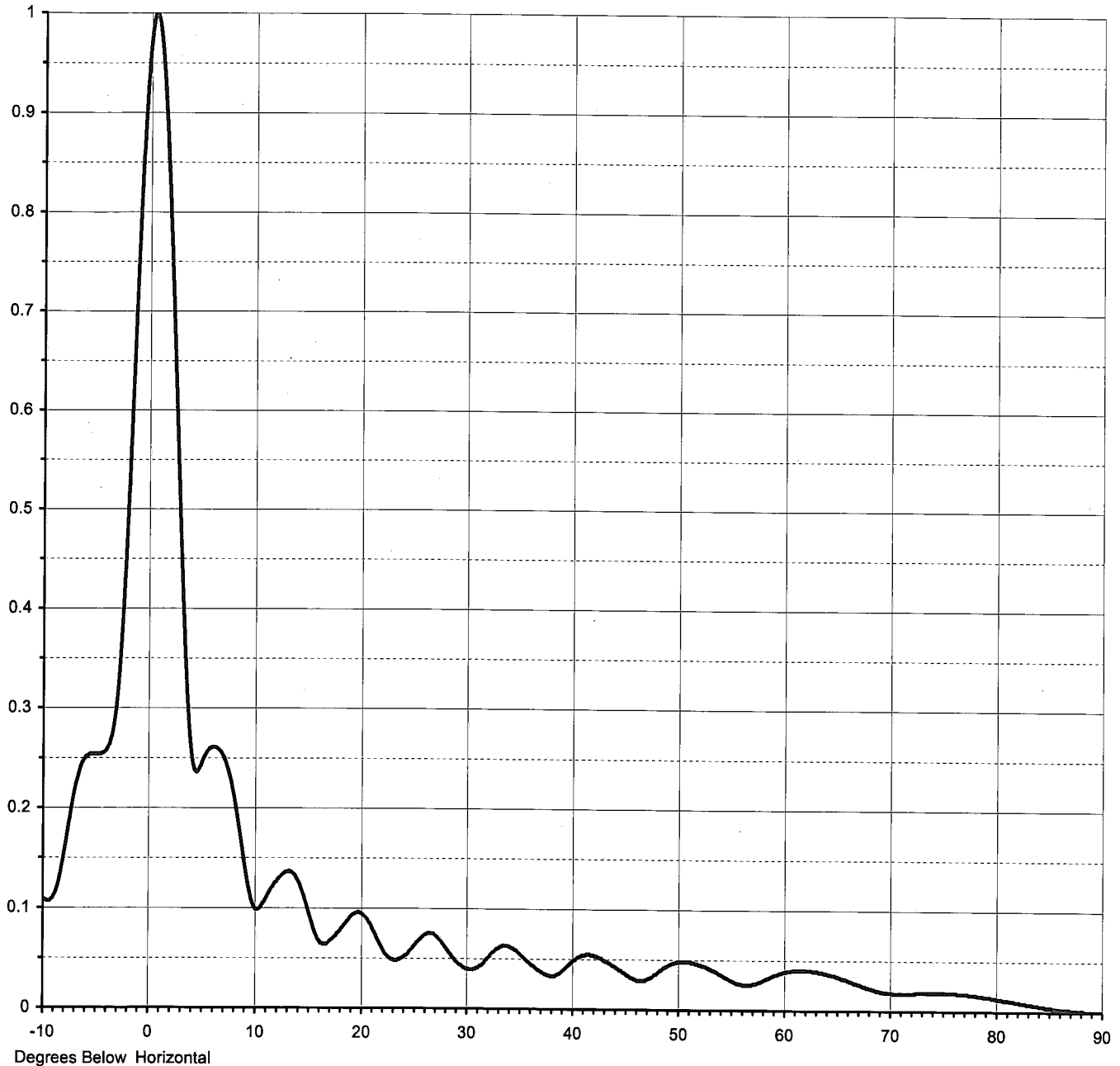


Figure 3



PREDICTED COVERAGE CONTOURS

STATION WAFB-DT
BATON ROUGE, LOUISIANA
CH 9 0.105 kW 511

du Treil, Lundin & Rackley, Inc Sarasota, Florida

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: 11:21:59

Record Selected for Analysis

WAFB USERRECORD-01 BATON ROUGE LA US
Channel 09 ERP 0.105 kW HAAT 511. m RCAMSL 00517 m
Latitude 030-21-58 Longitude 0091-12-47
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	0.105	507.7	70.3
45.0	0.105	504.4	70.0
90.0	0.105	509.9	70.4
135.0	0.105	512.2	70.6
180.0	0.105	513.3	70.6
225.0	0.105	514.7	70.7
270.0	0.105	514.3	70.7
315.0	0.105	512.2	70.6

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	Proposed Station Call	City/State	ARN
09	WAFB	BATON ROUGE LA	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
08	KNOE-TV	MONROE LA	219.2	LIC	BDTV	-0688
08	WVUE	NEW ORLEANS LA	129.8	LIC	BDTV	-0691
09	WALA-TV	MOBILE AL	328.9	LIC	BDTV	-0043
09	KTRE	LUFKIN TX	361.6	LIC	BDTV	-1581
10	KLFY-TV	LAFAYETTE LA	102.8	LIC	BDTV	-0680

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application Ref. No.
08	KNOE-TV	MONROE LA	BDTV -0688

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
07	KPLC	LAKE CHARLES LA	218.8	LIC	BDTV -0684
07	WLBT	JACKSON MS	158.8	LIC	BDTV -0897
08	KAIT	JONESBORO AR	423.5	LIC	BDTV -0076
08	WVUE	NEW ORLEANS LA	320.8	LIC	BDTV -0691
08	WTVA	TUPELO MS	329.9	LIC	BDTV -0912
09	WAFB	BATON ROUGE LA	219.2	APP	USERRECORD-01

Proposal causes no interference

%%%

Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application Ref. No.
08	WVUE	NEW ORLEANS LA	BDTV -0691

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
08	KNOE-TV	MONROE LA	320.8	LIC	BDTV -0688
09	WALA-TV	MOBILE AL	221.9	LIC	BDTV -0043
09	WAFB	BATON ROUGE LA	129.8	APP	USERRECORD-01

Proposal causes no interference

%%%

Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application Ref. No.
09	WALA-TV	MOBILE AL	BDTV -0043

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
08	WVUE	NEW ORLEANS LA	221.9	LIC	BDTV -0691
09	WJSU-TV	ANNISTON AL	349.5	LIC	BDTV -0019
09	WPGX	PANAMA CITY FL	219.2	LIC	BDTV -0354
09	WTVM	COLUMBUS GA	338.9	LIC	BDTV -0406
10	WDIQ	DOZIER AL	164.8	LIC	BDTV -0029
09	WAFB	BATON ROUGE LA	328.9	APP	USERRECORD-01

Proposal causes no interference

%%%

Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
09	KTRE	LUFKIN TX	BDTV -1581

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
08	KUHT	HOUSTON TX	215.5	LIC	BDTV -1554
09	KFWD	FORT WORTH TX	242.1	LIC	BDTV -1542

09	KLRN	SAN ANTONIO TX	412.5	LIC	BDTV	-1598
09	KCEN-TV	TEMPLE TX	230.3	LIC	BDTV	-1609
09	WAFB	BATON ROUGE LA	361.6	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
10	KLFY-TV	LAFAYETTE LA	BDTV -0680

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
10	KETZ	EL DORADO AR	306.4	LIC	BDTV -0065
11	KAQY	COLUMBIA LA	192.9	LIC	BDTV -0678
11	WYES-TV	NEW ORLEANS LA	228.0	LIC	BDTV -0692
09	WAFB	BATON ROUGE LA	102.8	APP	USERRECORD-01

Total scenarios = 1

Result key: 1

Scenario 1 Affected station 5

Before Analysis

Results for: 10A LA LAFAYETTE BDTV 0680 LIC
HAAT 507.0 m, ATV ERP 17.2 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1189526	39365.1
not affected by terrain losses	1189311	39349.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	22373	36.1
lost to ATV IX only	22373	36.1
lost to all IX	22373	36.1

Potential Interfering Stations Included in above Scenario 1

9A LA BATON ROUGE BDTV 0673 LIC

After Analysis

Results for: 10A LA LAFAYETTE BDTV 0680 LIC
HAAT 507.0 m, ATV ERP 17.2 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1189526	39365.1
not affected by terrain losses	1189311	39349.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	20378	28.1
lost to ATV IX only	20378	28.1
lost to all IX	20378	28.1

Potential Interfering Stations Included in above Scenario 1

9A LA BATON ROUGE USERRECORD01 APP

Percent new IX = -0.1710%

Worst case new IX -0.1710% Scenario 1

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
09	WAFB	BATON ROUGE LA	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
08	KNOE-TV	MONROE LA	219.2	LIC	BDTV	-0688
08	WVUE	NEW ORLEANS LA	129.8	LIC	BDTV	-0691
09	WALA-TV	MOBILE AL	328.9	LIC	BDTV	-0043
09	KTRE	LUFKIN TX	361.6	LIC	BDTV	-1581
10	KLFY-TV	LAFAYETTE LA	102.8	LIC	BDTV	-0680

Total scenarios = 1

Result key: 2
Scenario 1 Affected station 6
Before Analysis

Results for: 9A LA BATON ROUGE USERRECORD01 APP
HAAT 511.0 m, ATV ERP 0.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	868401	15585.7
not affected by terrain losses	868401	15585.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	9839	180.4
lost to ATV IX only	9839	180.4
lost to all IX	9839	180.4

Potential Interfering Stations Included in above Scenario 1

9A AL MOBILE	BDTV	0043	LIC
10A LA LAFAYETTE	BDTV	0680	LIC

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