

*Before the Federal Communications Commission  
Washington, D.C. 20554*

In the Matter of: )  
 )  
Advanced Television Services and ) MB Docket No. 87-268  
Their Impact upon the Existing )  
Television Broadcast Service )

Directed to: The Commission

**SUPPLEMENT TO COMMENTS**

The Board of Trustees of The University of Alabama (“University”), licensee of Television Station WUOA(TV), Channel 23, Tuscaloosa, Alabama, by its attorneys, hereby respectfully supplements its Comments, filed February 26, 2007, in response to the Commission’s *Seventh Further Notice of Proposed Rule Making*, FCC 06-150, released October 20, 2006 (“*SFNPRM*”), to propose a superior post-transition DTV channel allotment. With respect thereto, the following is stated:

1. WUOA is licensed to operate on analog Channel 23, and it has no companion digital channel assigned to it. As the Commission has previously recognized, such single channel, analog-only stations present a special case in the certification and final channel designation process. As a result of its status, at the time of filing certifications on FCC Form 381, the station’s former licensee certified that it did not have a DTV channel allotment, and would operate its post-transition DTV station based on its currently authorized NTSC license or construction permit. Based on its certification, the Commission allotted DTV facilities for an operation on Channel 23 with 50 kW ERP and 266 meters HAAT using a directional TV antenna. The data in the draft DTV Table of Allotments thus reflects replication facilities serving a population of 355,000 people in an area of 13,651 square kilometers.

2. In its Comments, however, University demonstrated that with a change in location, it would be possible to increase the station's Effective Radiated Power ("ERP") to 500 kW and its antenna height above average terrain ("HAAT") to 300 meters without causing impermissible interference. While University continues to believe that the modifications proposed in its Comments would serve the public interest, it has determined that a change to a different channel would provide significantly greater public interest benefits.

3. Specifically, University proposes herein that the final DTV channel allotted for WUOA be either Channel 6 or Channel 4 in lieu of its current analog Channel 23. WUOA could operate on either of the proposed channels with an ERP of 45 kW and a HAAT of 305 meters at a location of 33-27-45 N, 86-50-59 W without causing any impermissible interference.

4. An important consideration in the case of University, a state university, is the enormous economic savings which could be realized by the change to either Channel 6 or Channel 4 as proposed herein. Given that WUOA is a single-channel, analog-only station, it will be required to construct new DTV facilities by the time of DTV transition in February 2009. By its technical nature, equipment for a VHF channel is substantially less expensive to procure and install than is UHF equipment. University estimates that it could save approximately 50 percent on construction costs alone, up to \$1 million or more, if it is able to use either Channel 6 or Channel 4.<sup>1</sup> It must be remembered that University is, in fact, a public university, the resources of which are already stretched thin. Its funding is necessarily dependent upon the overall budget for the University system, and savings must be accomplished wherever possible. A savings of

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<sup>1</sup> This estimate is based upon the research and calculations of University's Chief Engineer. Also, cost savings in construction in WUOA's situation would be generally recognized in the industry.

the magnitude of \$1 million would clearly aid dramatically as University moves forward with the conversion of WUOA within the short time frame remaining before transition. The Commission has indicated recently that, at this point in time, its primary focus must be to ensure that DTV stations will be providing service on their final DTV channels by the “hard transition date” specified by Congress. *See, e.g., Third Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television*, FCC 07-70, released May 18, 2007 at ¶54. The monetary savings that would be realized by a change in post-transition channel as proposed herein would serve the purpose of ensuring that WUOA will be able to construct its permanent DTV facilities and institute service to the public prior to the transition date.

5. Moreover, additional substantial savings would be realized going forward with operation of a VHF as opposed to a UHF facility. The difference in electric power consumption alone would be considerable. The funds not expended on utility bills could then be available for use for University’s locally-produced programming, including its local newscasts, local sports, coverage of local special events, and local feature programs. The reduction in power output also would have environmentally beneficial effects.

6. Furthermore, this proposal would represent a more efficient use of spectrum, as it would allow the station to serve a larger area and greater population than those which could be served with the facilities specified in the draft DTV Table of Allotments. As set forth in University’s previous Comments, improved coverage within the market is important for the station’s continued viability, and the public would benefit from the increased availability of WUOA’s unique programming.

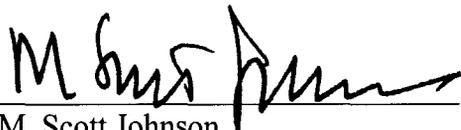
7. In sum, University proposes a change from its current analog allotment of Channel 23

to a final, post-transition DTV channel of either Channel 6 or Channel 4.<sup>2</sup> This proposed change will serve the public interest by providing substantial financial savings, while at the same time providing significantly improved coverage. The economic benefits will allow University to continue and expand its unique local programming in the market. Moreover, there are no countervailing detriments, as the allotment of either proposed channel fully complies with the Commission's technical rules and policies. No other changes to the draft DTV Table of Allotments would be required. Thus, a modification of the draft Table of Allotments as proposed herein would result in a more efficient distribution of DTV service and would also advance the DTV transition. Therefore, the public interest clearly dictates approval of the modifications proposed.

Respectfully submitted,

BOARD OF TRUSTEES OF THE  
UNIVERSITY OF ALABAMA

By:

  
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June 1, 2007

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<sup>2</sup> In the event that the Commission is unwilling to assign Channel 6 or Channel 4 as requested herein, University requests that Channel 6 or Channel 4 be assigned on a replication basis at its current site.

ENGINEERING STATEMENT  
IN SUPPORT OF COMMENTS OF  
THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ALABAMA  
SEVENTH FURTHER NOTICE OF PROPOSED RULE MAKING  
MB DOCKET NO. 87-268  
MAY 2007

This engineering statement has been prepared on behalf of The Board of Trustees of the University of Alabama, licensee of station WUOA-TV, Tuscaloosa, Alabama and is in support of comments in the Seventh Further Notice Of Proposed Rule Making to the FCC proceeding in MB Docket No, 87-268.

At present, WUOA-TV operates on analog Channel 23 (524-530 MHz) with 890 kW effective radiated power (ERP) and 266 meters antenna height above average terrain (HAAT) using a directional TV antenna. The geographic coordinates (NAD-27) of the license site are as follows: N 33° 03' 15", W 87° 32' 57".

In 2004 by filing the FCC Form 381, the previous licensee certified that it does not have a DTV channel allotment, and will operate its post-transition DTV station based on its currently authorized NTSC license or construction permit. Based on its certification the Commission allotted DTV facilities for an operation on Channel 23 with 50 kW ERP and 266 meters HAAT using a directional TV antenna. Since WUOA-TV is a single-channel analog only TV station it is requesting modification of its allotted DTV facilities, which are based on its certification, in accordance with paragraph 28 of the Seventh Further Notice of Proposed Rule making in MB Docket No. 87-268.

Notwithstanding previous comments in this proceeding, due to potential interference issues with a Class A station and economical considerations, WUOA-DT now respectfully requests the Commission to modify the proposed Appendix B Proposed DTV Table of Allotments Information to reflect either of the following:

Facility ID: 77496  
State and City: AL, Tuscaloosa  
NTSC Channel: 23  
DTV:

Channel: 6  
Maximum ERP (kW): 45  
HAAT (m): 305  
Antenna ID: Non-Directional  
Latitude: 332745  
Longitude: 865059  
Area (sq. km): 45679  
Population (thousand): 2016  
Percent Interference Received: 0.013

or

Facility ID: 77496  
State and City: AL, Tuscaloosa  
NTSC Channel: 23

DTV:

Channel: 4  
Maximum ERP (kW): 45  
HAAT (m): 305  
Antenna ID: Non-Directional  
Latitude: 332745  
Longitude: 865059  
Area (sq. km): 45985  
Population (thousand): 2029  
Percent Interference Received: 0

The proposed WUOA-DT facilities will not exceed the “Maximum allowable ERP and antenna height for DTV stations on Channels 2-6, zones II or III” in accordance with Section 73.622 of the Commission’s Rules. In addition, station WUOA-TV, licensed to Tuscaloosa, in Tuscaloosa County is located in the Birmingham Nielsen Designated Market Area. Its current site is in the southern portion of the DMA and the current allotted facilities only provide service to approximately 22 percent of the population when compared to the average population served by the other nine stations within the Birmingham DMA. The proposed allotment is more centrally located within Birmingham and provides more comprehensive coverage of the DMA.

FCC OET Bulletin 69 Study

Electromagnetic interference studies were conducted according to the FCC OET Bulletin 69 to determine whether the proposed facilities would result in interference in excess of 0.1% to any licensee's existing "tentative channel designations" (TCDs). The FCC OET Bulletin 69 study was conducted for cell sizes 2 km/side and 1 km terrain interval.

The results of the FCC OET Bulletin 69 interference study are attached as Figures 1 and 2 and indicate that the proposed low band VHF (Channel 4 or 6) DTV operation would not cause harmful interference to more than 0.1% population to any licensee's existing "tentative channel designations" (TCDs). Additionally, WUOA-DT will accept any interference from those TCDs already approved.

Principal Community Coverage

The predicted 35 dBu contour for the proposed WUOA-DT operation on Channels 4 or 6 with 45 kW maximum ERP and 305 meters HAAT using a non-directional antenna would cover 100% of Tuscaloosa, Alabama as indicated in the attached map (Figure 3)..

16 May 2007

S. K. Khanna  
Professional Engineer  
District of Columbia 8057

Census data selected 2000  
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 05-11-2007 Time: 17: 32: 35

Record Selected for Analysis

WJOA-DT USERRECORD-01 TUSCALOOSA AL US  
Channel 04 ERP 45. kW HAAT 305. m RCAMSL 00490 m  
Latitude 033-27-45 Longitude 0086-50-59  
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)	28.0 dBu F(50, 90) (km)
0.0	45.000	325.7	124.4
45.0	45.000	305.5	123.0
90.0	45.000	272.9	120.4
135.0	45.000	307.7	123.2
180.0	45.000	284.4	121.3
225.0	45.000	301.9	122.7
270.0	45.000	319.3	124.0
315.0	45.000	324.4	124.3

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

No spacing violations found to other full service stations

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet 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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Start of Interference Analysis

Channel	Proposed Station	ARN
04	Call WUOA-DT City/State TUSCALOOSA AL	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
%%%						

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
04	WUOA-DT	TUSCALOOSA AL	USERRECORD-01	

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
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Total scenarios = 1

Result key: 1  
Scenario 1 Affected station 1  
Before Analysis

Results for: 4A AL TUSCALOOSA USERRECORD01 APP  
HAAT 305.0 m, ATV ERP 45.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2067072	47497.0
not affected by terrain losses	2029743	45985.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

Census data selected 2000  
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 05-11-2007 Time: 17: 22: 17

Record Selected for Analysis

WJOA-DT USERRECORD-01 TUSCALOOSA AL US  
Channel 06 ERP 45. kW HAAT 305. m RCAMSL 00490 m  
Latitude 033-27-45 Longitude 0086-50-59  
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)	28.0 dBu F(50, 90) (km)
0.0	45.000	325.7	124.4
45.0	45.000	305.5	123.0
90.0	45.000	272.9	120.4
135.0	45.000	307.7	123.2
180.0	45.000	284.4	121.3
225.0	45.000	301.9	122.7
270.0	45.000	319.3	124.0
315.0	45.000	324.4	124.3

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

No spacing violations found to other full service stations

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet 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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Start of Interference Analysis

Channel	Proposed Station	ARN
06	Call City/State WUOA-DT TUSCALOOSA AL	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
06	WABW-TV	PELHAM GA	414.0	CP MOD	BMPEdT	-20020923ABD
06	WCES-TV	WRENS GA	424.3	CP MOD	BMPEdT	-20020923ABB

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
06	WABW-TV	PELHAM GA	BMPEdT	-20020923ABD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
06	WCES-TV	WRENS GA	327.3	CP MOD	BMPEdT	-20020923ABB
06	WUOA-DT	TUSCALOOSA AL	414.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
06	WCES-TV	WRENS GA	BMPEdT	-20020923ABB

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
06	WABW-TV	PELHAM GA	327.3	CP MOD	BMPEdT	-20020923ABD
06	WUOA-DT	TUSCALOOSA AL	424.3	APP	USERRECORD-01	

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
06	WUOA-DT	TUSCALOOSA AL	USERRECORD-01	

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
06	WABW-TV	PELHAM GA	414.0	CP MOD	BMPEDT	-20020923ABD
06	WCES-TV	WRENS GA	424.3	CP MOD	BMPEDT	-20020923ABB

Total scenarios = 1

Result key: 1  
 Scenario 1 Affected station 3  
 Before Analysis

Results for: 6A AL TUSCALOOSA USERRECORD01 APP  
 HAAT 305.0 m, ATV ERP 45.0 kW

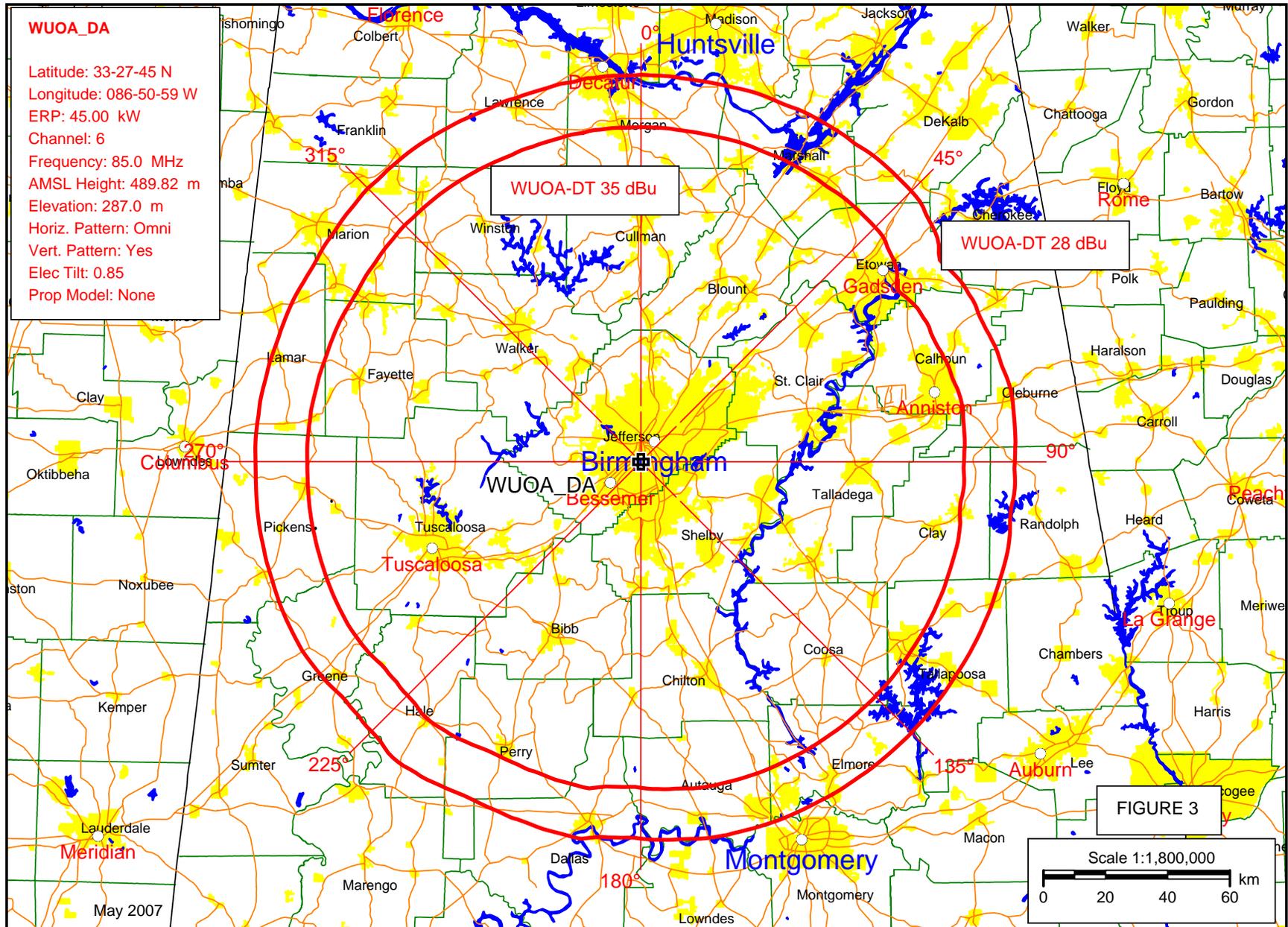
	POPULATION	AREA (sq km)
within Noise Limited Contour	2067072	47497.0
not affected by terrain losses	2016683	45678.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	272	8.1
lost to ATV IX only	272	8.1
lost to all IX	272	8.1

Potential Interfering Stations Included in above Scenario 1

6A GA PELHAM BMPEDT 20020923ABD CP

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WUOA-DT Proposed Low Band VHF Operation Showing the Computed 28 dBu and 35 dBu Contours From The WYSF Site with 45 kW and 305 Meters HAAT