



(REFERENCE COPY - Not for submission)

# DTV Engineering STA Application

File Number: **0000105855** | Submit Date: **02/11/2020** | Call Sign: **WAFF** | Facility ID: **591** | FRN: **0018223693** | State: **Alabama** | City: **HUNTSVILLE**  
 Service: **DTV** | Purpose: **Engineering STA** | Status: **Granted** | Status Date: **02/21/2020** | Expiration Date: |  
 Filing Status: **InActive**

**General Information**

Section	Question	Response
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**Fees, Waivers, and Exemptions**

Section	Question	Response
<b>Fees</b>	Is the applicant exempt from FCC application Fees?	No
	Indicate reason for fee exemption:	
<b>Waivers</b>	Does this filing request a waiver of the Commission's rule(s)?	No
	Total number of rule sections involved in this waiver request:	

Application Type	Fee Code	Fee Amount
Engineering STA	MGT	\$200.00
<b>Total</b>		<b>\$200.00</b>

**Applicant  
Information**

**Applicant Name, Type, and Contact Information**

<b>Applicant</b>	<b>Address</b>	<b>Phone</b>	<b>Email</b>	<b>Applicant Type</b>
<b>GRAY TELEVISION LICENSEE, LLC Applicant</b> Doing Business As: GRAY TELEVISION LICENSEE, LLC	Robert Folliard 4370 PEACHTREE ROAD, NE ATLANTA, GA 30319 United States	+1 (256) 564- 5649	allfclms@gray. tv	Other

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**Authorization Holder Name**

Check box if the Authorization Holder name is being updated because of the sale (or transfer of control) of the Authorization(s) to another party and for which proper Commission approval has not been received or proper notification provided.

**Contact  
Representatives  
(3)**

Contact Name	Address	Phone	Email	Contact Type
<b>P.E. Joseph M. Davis Burke</b> Chesapeake RF Consultants, LLC	David Burke 207 Old Dominion Road Yorktown, VA 23692 United States	+1 (703) 650- 9600	test@fcc.gov	Technical Representative
<b>P.E. Joseph M. Davis M. Davis , P.E. .</b> Chesapeake RF Consultants, LLC	207 Old Dominion Road Yorktown, VA 23692 United States	+1 (703) 650- 9600	Joseph.Davis@RF- consultants.com	Technical Representative
<b>Joan Stewart Stewart</b> Wiley Rein LLP	Joan Stewart 1776 K Street NW WASHINGTON, DC 20006 United States	+1 (202) 719- 7438	jstewart@wileyrein.com	Legal Representative

**Channel and  
Facility  
Information**

<b>Section</b>	<b>Question</b>	<b>Response</b>
<b>Proposed Community of License</b>	Facility ID	591
	State	Alabama
	City	HUNTSVILLE
	DTV Channel	48
	Designated Market Area	Huntsville-Decatur (Flor)
<b>Facility Type</b>	Facility Type	Commercial
	Station Type	Main
<b>Zone</b>	Zone	2

**Antenna Location Data**

Section	Question	Response
<b>Antenna Structure Registration</b>	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1204889
<b>Coordinates (NAD83)</b>	Latitude	34° 42' 39.3" N+
	Longitude	086° 32' 07.0" W-
	Structure Type	GTOWER-Guyed Structure Used for Communication Purposes
	Overall Structure Height	465.1 meters
	Support Structure Height	447.1 meters
	Ground Elevation (AMSL)	351.2 meters
<b>Antenna Data</b>	Height of Radiation Center Above Ground Level	392.3 meters
	Height of Radiation Center Above Average Terrain	516.4 meters
	Height of Radiation Center Above Mean Sea Level	743.5 meters
	Effective Radiated Power	16.9 kW

**Antenna  
Technical Data**

Section	Question	Response
<b>Antenna Type</b>	Antenna Type	Directional Custom
	Do you have an Antenna ID?	No
	Antenna ID	1006405
<b>Antenna Manufacturer and Model</b>	Manufacturer:	DIE
	Model	TFU-8WB C160
	Rotation	285 degrees
	Electrical Beam Tilt	1.05
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Horizontal
<b>DTV and DTS: Elevation Pattern</b>	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
	Uploaded file for elevation antenna (or radiation) pattern data	

**Directional Antenna Relative Field Values (Pre-rotated Pattern)**

Degree	Value	Degree	Value	Degree	Value	Degree	Value
0	0.974	90	0.840	180	0.571	270	0.827
10	0.959	100	0.802	190	0.507	280	0.883
20	0.931	110	0.763	200	0.345	290	0.947
30	0.928	120	0.687	210	0.218	300	0.988
40	0.958	130	0.546	220	0.346	310	0.989
50	0.993	140	0.351	230	0.541	320	0.956
60	0.996	150	0.221	240	0.681	330	0.927
70	0.958	160	0.344	250	0.755	340	0.931
80	0.896	170	0.506	260	0.791	350	0.959

**Additional Azimuths**

Degree	V <sub>A</sub>
56	1.000
305	0.994

**Certification**

Section	Question	Response
<p><b>General Certification Statements</b></p>	<p>The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by authorization or otherwise, and requests an Authorization in accordance with this application (See Section 304 of the Communications Act of 1934, as amended.).</p>	
	<p>The Applicant certifies that neither the Applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. §862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR . See §1.2002(b) of the rules, 47 CFR §1.2002(b), for the definition of "party to the application" as used in this certification §1.2002 (c). The Applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.</p>	
<p><b>Authorized Party to Sign</b></p>	<p><b>FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID</b></p> <p>Upon grant of this application, the Authorization Holder may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in automatic cancellation of the Authorization. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of Authorization requested in this application.</p> <p>WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).</p>	
	<p>I certify that this application includes all required and relevant attachments.</p>	<p>Yes</p>
	<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>Robert Folliard Folliard</b>  <i>Assistant Secretary</i></p> <p>02/11/2020</p>

## Attachments

File Name	Uploaded By	Attachment Type	Description
<u>WAFF STA request for interim antenna ENG 02-11-2020.pdf</u>	Applicant	All Purpose	WAFF STA engineering exhibits

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