



(REFERENCE COPY - Not for submission)

Amendment to a Modification of a DTV Station Construction Permit Application

File Number: **0000059355** | Submit Date: **09/04/2018** | Call Sign: **WNUV** | Facility ID: **7933** | FRN: **0003778909** | State: **Maryland** | City: **BALTIMORE**

Service: **DTV** | Purpose: **Minor Modification Amendment 0000034499** | Status: **Review** | Status Date: **09/04/2018** | Filing Status: **Active**

General Information

Section	Question	Response
Attachments	Are attachments (other than associated schedules) being filed with this application?	Yes

Fees, Waivers, and Exemptions

Section	Question	Response
Fees	Is the applicant exempt from FCC application Fees?	No
	Indicate reason for fee exemption:	
	Is the applicant exempt from FCC regulatory Fees?	No
Waivers	Does this filing request a waiver of the Commission's rule(s)?	No
	Total number of rule sections involved in this waiver request:	
	Are the frequencies or parameters requested in this filing covered by grandfathered privileges, previously approved by waiver, or functionally integrated with an existing station?	No

Applicant
Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
BALTIMORE (WNUV-TV) LICENSEE, INC. Doing Business As: BALTIMORE (WNUV-TV) LICENSEE, INC.	Lisa Asher 2000 WEST 41ST STREET BALTIMORE, MD 21211 United States	+1 (410) 662-9688	LAsher@cunninghambroadcasting. com	Corporation

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
(4)

Contact Name	Address	Phone	Email	Contact Type
Paul A. Cicelski , ESQ . Lerman Senter PLLC	Paul A. Cicelski, ESQ. 2001 L Street NW Suite 400 WASHINGTON, DC 20036 United States	+1 (202) 416-6756	pcicelski@lermansenter. com	Legal Representative
Scott R. Flick , Esq . <i>FCC Counsel</i> PILLSBURY WINTHROP SHAW PITTMAN LLP	1200 SEVENTEENTH STREET, NW WASHINGTON, DC 20036 United States	+1 (202) 663-8167	scott.flick@pillsburylaw. com	Legal Representative
William J. Getz <i>Consulting Engineer</i> Carl T. Jones Corporation	7901 Yarnwood Ct Springfield, VA 22153 United States	+1 (703) 569-7704	wgetz@ctjc.com	Technical Representative
John E. Hidle , PE . <i>Consulting Engineer</i> Carl T Jones Corporation	John E. Hidle, PE 7901 Yarnwood Court Springfield, VA 22153 United States	+1 (703) 569-7704	jhidle@ctjc.com	Technical Representative

Alien Ownership

Question	Response
1) Is the applicant a foreign government or the representative of any foreign government as specified in Section 310(a) of the Communications Act?	No
2) Is the applicant an alien or the representative of an alien? (Section 310(b)(1))	No
3) Is the applicant a corporation, or non-corporate entity, that is organized under the laws of any foreign government? (Section 310(b)(2))	No
4) Is the applicant an entity of which more than one-fifth of the capital stock, or other equity or voting interest, is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any entity organized under the laws of a foreign country? (Section 310(b)(3))	No
5) Is the applicant directly or indirectly controlled by any other entity of which more than one-fourth of the capital stock, or other equity or voting interest, is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any entity organized under the laws of a foreign country? (Section 310(b)(4))	No
6) Has the applicant received a declaratory ruling(s) under Section 310(b)(4) of the Communications Act?	
6a) Enter the citation of the applicable declaratory ruling by DA/FCC number, FCC Record citation, release date, or any other identifying information.	
7) Has there been any change in the applicant's foreign ownership since issuance of the declaratory ruling(s) cited in response to Question 6?	
7a) Enter the File or Docket Number of the Petition for Declaratory Ruling that the applicant has filed for its foreign ownership in connection with this application pursuant to Section 310(b)(4) of the Communications Act. It is not necessary to file a request for a foreign ownership declaratory ruling if the applicant attaches a showing that the requested authorization(s) is exempt from the provisions of Section 310(b)(4).	
8) Does the applicant certify that it is in compliance with the terms and conditions of the foreign ownership declaratory ruling(s) cited in response to Question 6?	
9) In connection with this application, is the applicant filing a foreign ownership Petition for Declaratory Ruling pursuant to Section 310(b)(4) of the Communications Act?	

Basic Qualifying Questions

Section	Question	Response
Revoked Application	Has the Applicant or any party to this application had any FCC station Authorization revoked or had any application for an initial, modification or renewal of FCC station Authorization denied by the Commission?	No
State or Federal Convictions	Has the Applicant or any party to this application, or any party directly or indirectly controlling the Applicant, ever been convicted of a felony by any state or federal court?	No

Channel and Facility Information

Section	Question	Response
Proposed Community of License	Facility ID	7933
	State	Maryland
	City	BALTIMORE
	DTV Channel	25
Facility Type	Facility Type	Commercial
	Station Type	Main
Zone	Zone	1

Antenna Location Data

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1044237
Coordinates (NAD83)	Latitude	39° 20' 10.4" N+
	Longitude	076° 38' 57.9" W-
	Structure Type	GTOWER-Guyed Structure Used for Communication Purposes
	Overall Structure Height	390.1 meters
	Support Structure Height	389.2 meters
	Ground Elevation (AMSL)	82.0 meters
Antenna Data	Height of Radiation Center Above Ground Level	374.8 meters
	Height of Radiation Center Above Average Terrain	372.8 meters
	Height of Radiation Center Above Mean Sea Level	456.8 meters
	Effective Radiated Power	750 kW

Antenna
Technical Data

Section	Question	Response
Antenna Type	Antenna Type	Directional Custom
	Do you have an Antenna ID?	No
	Antenna ID	1004084
Antenna Manufacturer and Model	Manufacturer:	DIE
	Model	TUD-C5SP-10/36SPH-1-B
	Rotation	30 degrees
	Electrical Beam Tilt	0.9
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Horizontal
DTV and DTS: Elevation Pattern	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	V _A (Authorized Value)	Degree	V _A (Authorized Value)	Degree	V _A (Authorized Value)	Degree	V _A (Authorized Value)
0	.392	90	.518	180	1.0	270	.864
10	.362	100	.588	190	.929	280	.908
20	.356	110	.585	200	.862	290	.959
30	.396	120	.669	210	.918	300	.874
40	.403	130	.842	220	.930	310	.700
50	.362	140	.955	230	.866	320	.599
60	.357	150	.924	240	.908	330	.593
70	.386	160	.862	250	.997	340	.537
80	.427	170	.929	260	.951	350	.441

Additional Azimuths

Degree	V _A
252	1.0
16	.352

**Parties to the
Application (0)**

Information not provided.

Attributable Interest

Section	Question	Response
Equity and Financial Interests	Applicant certifies that equity and financial interests not set forth by the applicant parties are non-attributable.	
Other Authorizations	Does the applicant or any party to the application have an attributable interest in any other broadcast station(s).	
Multiple Ownership	Is the applicant or any party to the application the holder of an attributable radio or television joint sales agreement or an attributable radio or television time brokerage agreement in the same market as the station subject to this application?	No
	Applicant certifies that the proposed facility complies with the Commission's multiple ownership rules and cross-ownership rules.	Yes
	Applicant certifies that the proposed facility: (a) does not present an issue under the Commission's policies relating to media interests of immediate family members; (b) complies with the Commission's polices relating to future ownership interests; (c) complies with the Commission's restrictions relating to the insulation and non-participation of non-party investors and creditors	Yes
	Does the Applicant claim status as an "eligible entity," that is, an entity that qualifies as a small business under the Small Business Administration's size standards for its industry grouping (as set forth in 13 C.F.R. § 121-201), and holds: (a) 30 percent or more of the stock or partnership interests and more than 50 percent of the voting power of the corporation or partnership that will own the media outlet; or (b) 15 percent or more of the stock or partnership interests and more than 50 percent of the voting power of the corporation or partnership that will own the media outlet, provided that no other person or entity owns or controls more than 25 percent of the outstanding stock or partnership interests; or (c) more than 50 percent of the voting power of the corporation that will own the media outlet (if such corporation is a publicly traded company)?	No

Construction
Permit
Certifications

Section	Question	Response
Post-Incentive Auction Expedited Processing	It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.	Yes
	It will operate post-incentive auction facilities that do not expand the noise-limited service contour in any direction beyond that established by the post-incentive auction channel reassignment public notice.	No
	It will operate post-incentive auction facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the post-incentive auction channel reassignment public notice.	Yes
	The antenna structure to be used by this facility has been registered by the Commission and will not require re-registration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely affect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.	Yes
Environmental Effect	Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? (See Section 1.1306 of 47 C.F.R.)	No
Broadcast Facility	The proposed facility complies with the applicable engineering standards and assignment requirements of 47 C. F.R. Sections 73.616, 73.622(i), 73.623(e), 73.625, 73.1030, and 73.1125.	Yes

Legal
Certifications

Section	Question	Response
Character Issues	<p>Applicant certifies that neither applicant nor any party to the application has or had any interest in, or connection with:</p> <p>(a) any broadcast application in any proceeding where character issues were left in unresolved or were resolved adversely against the applicant or party to the application; or</p> <p>(b) any pending broadcast application in which character issues have been raised.</p>	
Adverse Findings	<p>Has the Applicant or any party to this application had an adverse finding or an adverse final action taken by any court or administrative body in a civil or criminal proceeding brought under any law related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?</p>	
Program Service Certification	<p>Applicant certifies that it is cognizant of and will comply with its obligations as a Commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area.</p>	
Local Public Notice	<p>Applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580.</p>	
Auction Authorization	<p>Is the applicant submitting an application to obtain a construction permit as a result of winning an auction?</p>	
Equal Employment Opportunity (EEO)	<p>If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report.</p>	

Certification

Section	Question	Response
General Certification Statements	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.).	
	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.	
Authorized Party to Sign	FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID 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. 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).	
	I certify that this application includes all required and relevant attachments.	Yes
	I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.	Lisa Asher <i>Secretary</i> 09/04/2018

Attachments

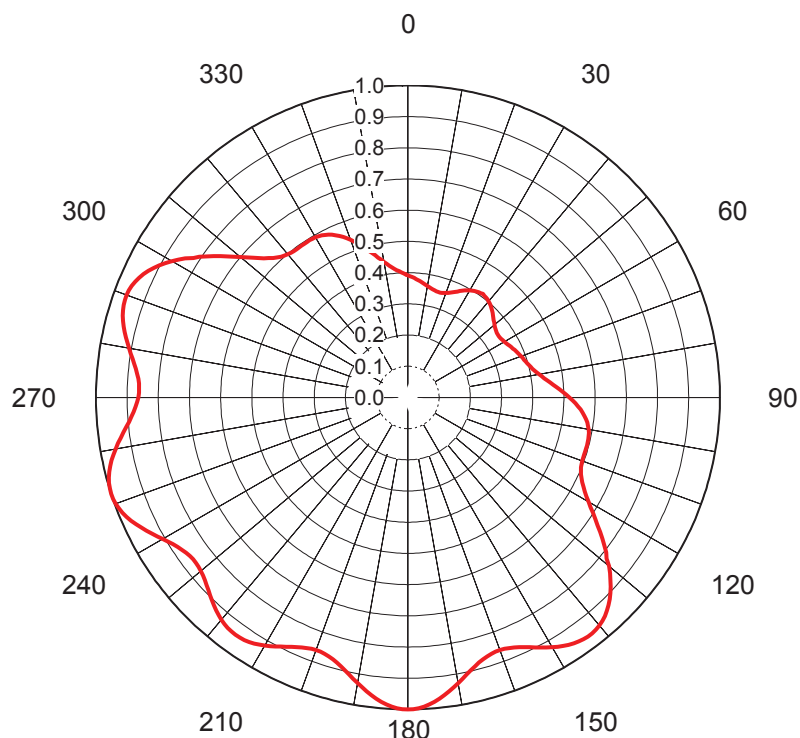
File Name	Uploaded By	Attachment Type	Description
<u>Multiple Ownership Exhibit.pdf</u>	Applicant	Attributable Interest	WNUV - Multiple Ownership Exhibit
<u>WNUV - Antenna Exhibit -6-20-2017 .pdf</u>	Applicant	Antenna Technical Data	WNUV - antenna exhibits for TUD antenna
<u>WNUV - Ch 25 - Form 2100 DA Amendment Comprehensive Technical Document - 7-17-2018.pdf</u>	Applicant	Amendment	WNUV - Form 2100 Amendment Comprehensive Technical Document - July 17, 2018
<u>WNUV - Ch 25 - Form 2100 schedule A Technical Document - 9-4-2018.pdf</u>	Applicant	Amendment	WNUV - Application to amend modification of CP File # 59355
<u>WNUV - Ch 25 - Form 2100 schedule A Technical Statement - 8-31-2018-A3.pdf</u>	Applicant	Construction Permit Certifications	WNUV Form 2100, Schedule A, application for minor modification of CP to substitute antenna model.
<u>WNUV - Rad Haz Compliance Statement - 6-20-2017.pdf</u>	Applicant	Construction Permit Certifications	WNUV - Environmental and Radio Frequency Radiation Safety compliance statement
<u>WNUV - Rad Haz Compliance Statement - 7-17-2018.pdf</u>	Applicant	Construction Permit Certifications	WNUV Environmental and Radio Frequency Radiation Safety Compliance Statement
<u>WNUV - Rad Haz Compliance Statement - 9-4-2018.pdf</u>	Applicant	Construction Permit Certifications	WNUV Environmental and Radio Frequency Radiation Safety Compliance Statement.

FCC Form 2100, Schedule A
Multiple Ownership

The applicant, by this application, certifies that the proposed facilities comply with the FCC's attribution and multiple ownership rules. This construction permit application, if granted, will not alter the ownership of any broadcast stations.

AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-70043**
 Date **24-Mar-17**
 Call Letters **WNUV**
 Channel **25**
 Frequency **539 MHz**
 Antenna Type **TUD-C5SP-10/36SPH-1-B**
 Gain **1.84 (2.65dB)**
 Calculated



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.392	36	0.410	72	0.392	108	0.594	144	0.958	180	1.000	216	0.940	252	1.000	288	0.958
1	0.389	37	0.408	73	0.395	109	0.594	145	0.955	181	0.999	217	0.940	253	0.999	289	0.959
2	0.386	38	0.407	74	0.398	110	0.595	146	0.951	182	0.997	218	0.938	254	0.997	290	0.959
3	0.383	39	0.405	75	0.401	111	0.596	147	0.946	183	0.992	219	0.934	255	0.992	291	0.958
4	0.380	40	0.403	76	0.405	112	0.599	148	0.939	184	0.987	220	0.930	256	0.987	292	0.955
5	0.378	41	0.400	77	0.410	113	0.602	149	0.932	185	0.979	221	0.925	257	0.979	293	0.950
6	0.375	42	0.396	78	0.415	114	0.607	150	0.924	186	0.971	222	0.918	258	0.971	294	0.943
7	0.371	43	0.392	79	0.420	115	0.614	151	0.916	187	0.962	223	0.911	259	0.962	295	0.935
8	0.368	44	0.388	80	0.427	116	0.622	152	0.908	188	0.951	224	0.904	260	0.951	296	0.926
9	0.365	45	0.384	81	0.434	117	0.631	153	0.899	189	0.941	225	0.897	261	0.941	297	0.915
10	0.362	46	0.379	82	0.441	118	0.642	154	0.891	190	0.929	226	0.889	262	0.929	298	0.902
11	0.360	47	0.375	83	0.449	119	0.655	155	0.883	191	0.918	227	0.882	263	0.918	299	0.889
12	0.357	48	0.370	84	0.458	120	0.669	156	0.877	192	0.908	228	0.876	264	0.908	300	0.874
13	0.355	49	0.366	85	0.468	121	0.684	157	0.871	193	0.897	229	0.870	265	0.897	301	0.858
14	0.353	50	0.362	86	0.477	122	0.700	158	0.866	194	0.888	230	0.866	266	0.888	302	0.842
15	0.352	51	0.359	87	0.487	123	0.716	159	0.863	195	0.880	231	0.863	267	0.880	303	0.820
16	0.352	52	0.356	88	0.498	124	0.734	160	0.862	196	0.873	232	0.862	268	0.873	304	0.807
17	0.352	53	0.354	89	0.508	125	0.752	161	0.862	197	0.868	233	0.862	269	0.868	305	0.788
18	0.353	54	0.353	90	0.518	126	0.770	162	0.864	198	0.864	234	0.864	270	0.864	306	0.770
19	0.354	55	0.352	91	0.528	127	0.788	163	0.868	199	0.862	235	0.868	271	0.862	307	0.752
20	0.356	56	0.352	92	0.537	128	0.807	164	0.873	200	0.862	236	0.873	272	0.862	308	0.734
21	0.359	57	0.352	93	0.546	129	0.820	165	0.880	201	0.863	237	0.880	273	0.863	309	0.716
22	0.362	58	0.353	94	0.555	130	0.842	166	0.888	202	0.866	238	0.888	274	0.866	310	0.700
23	0.366	59	0.355	95	0.562	131	0.858	167	0.897	203	0.870	239	0.897	275	0.871	311	0.684
24	0.370	60	0.357	96	0.569	132	0.874	168	0.908	204	0.876	240	0.908	276	0.877	312	0.669
25	0.375	61	0.360	97	0.575	133	0.889	169	0.918	205	0.882	241	0.918	277	0.883	313	0.655
26	0.379	62	0.362	98	0.581	134	0.902	170	0.929	206	0.889	242	0.929	278	0.891	314	0.642
27	0.384	63	0.365	99	0.585	135	0.915	171	0.941	207	0.897	243	0.941	279	0.899	315	0.631
28	0.388	64	0.368	100	0.588	136	0.926	172	0.951	208	0.904	244	0.951	280	0.908	316	0.622
29	0.392	65	0.371	101	0.591	137	0.935	173	0.962	209	0.911	245	0.962	281	0.916	317	0.614
30	0.396	66	0.375	102	0.593	138	0.943	174	0.971	210	0.918	246	0.971	282	0.924	318	0.607
31	0.400	67	0.378	103	0.594	139	0.950	175	0.979	211	0.925	247	0.979	283	0.932	319	0.602
32	0.403	68	0.380	104	0.594	140	0.955	176	0.987	212	0.930	248	0.987	284	0.939	320	0.599
33	0.405	69	0.383	105	0.594	141	0.958	177	0.992	213	0.934	249	0.992	285	0.946	321	0.596
34	0.407	70	0.386	106	0.594	142	0.959	178	0.997	214	0.938	250	0.997	286	0.951	322	0.595
35	0.408	71	0.389	107	0.594	143	0.959	179	0.999	215	0.940	251	0.999	287	0.955	323	0.594

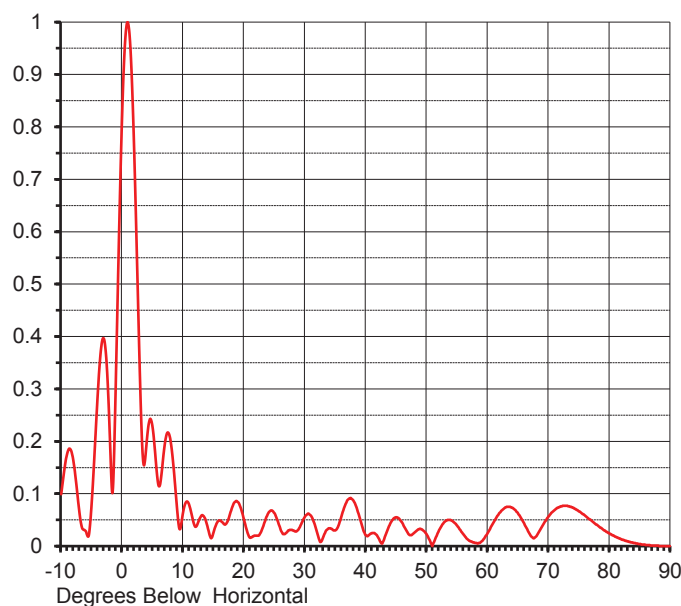
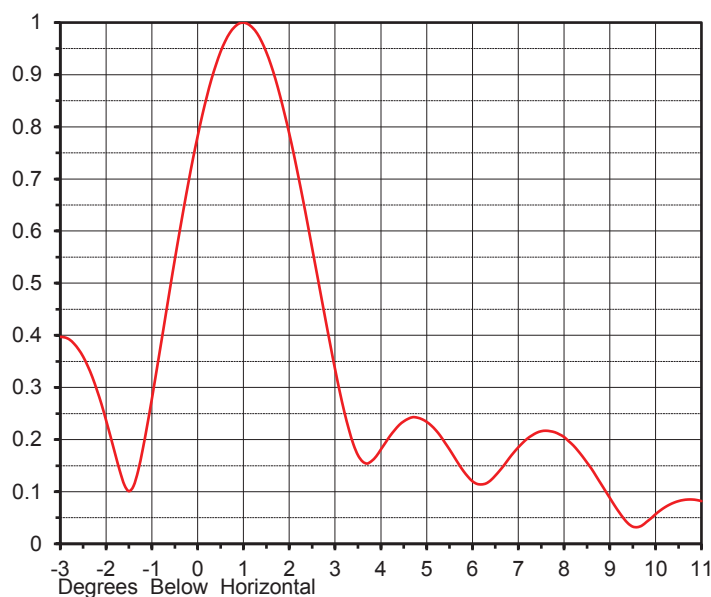
This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.

ELEVATION PATTERN

Proposal No. **C-70043**
 Date **24-Mar-17**
 Call Letters **WNUV**
 Channel **25**
 Frequency **539 MHz**
 Antenna Type **TUD-C5SP-10/36SPH-1-B**

RMS Directivity at Main Lobe **20.3 (13.07 dB)**
 RMS Directivity at Horizontal **13.7 (11.37 dB)**
Calculated

Beam Tilt **0.90 deg**
 Pattern Number **10U203090**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.099	10.0	0.064	30.0	0.056	50.0	0.022	70.0	0.057
-9.0	0.177	11.0	0.079	31.0	0.058	51.0	0.003	71.0	0.069
-8.0	0.163	12.0	0.037	32.0	0.026	52.0	0.030	72.0	0.076
-7.0	0.064	13.0	0.058	33.0	0.017	53.0	0.047	73.0	0.077
-6.0	0.029	14.0	0.038	34.0	0.034	54.0	0.049	74.0	0.073
-5.0	0.081	15.0	0.026	35.0	0.030	55.0	0.039	75.0	0.066
-4.0	0.290	16.0	0.049	36.0	0.057	56.0	0.023	76.0	0.058
-3.0	0.396	17.0	0.042	37.0	0.088	57.0	0.010	77.0	0.049
-2.0	0.205	18.0	0.072	38.0	0.086	58.0	0.006	78.0	0.040
-1.0	0.331	19.0	0.084	39.0	0.054	59.0	0.009	79.0	0.031
0.0	0.822	20.0	0.051	40.0	0.021	60.0	0.025	80.0	0.024
1.0	0.997	21.0	0.016	41.0	0.025	61.0	0.046	81.0	0.018
2.0	0.747	22.0	0.020	42.0	0.017	62.0	0.064	82.0	0.013
3.0	0.293	23.0	0.033	43.0	0.013	63.0	0.074	83.0	0.009
4.0	0.194	24.0	0.063	44.0	0.043	64.0	0.073	84.0	0.006
5.0	0.227	25.0	0.063	45.0	0.055	65.0	0.062	85.0	0.004
6.0	0.115	26.0	0.032	46.0	0.044	66.0	0.043	86.0	0.002
7.0	0.194	27.0	0.026	47.0	0.023	67.0	0.021	87.0	0.001
8.0	0.197	28.0	0.030	48.0	0.026	68.0	0.019	88.0	0.001
9.0	0.074	29.0	0.033	49.0	0.033	69.0	0.039	89.0	0.000
								90.0	0.000

This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN AMENDMENT TO
APPLICATION FILE # 0000034499
FOR A MINOR MODIFICATION OF A
POST REPACK CONSTRUCTION PERMIT
FILE # 0000027773
WNUV - BALTIMORE, MARYLAND
APPLICATION FILE # 0000034499
DTV - CH. 25 - 920 kW - 381 m HAAT**

Prepared for: BALTIMORE (WNUV-TV) LICENSEE, INC.

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, License No. 7418, and in the State of New York, License No. 63418.

GENERAL

This office has been authorized by BALTIMORE (WNUV-TV) LICENSEE, INC., licensee of WNUV channel 40, facility ID number 7933, licensed to Baltimore, Maryland, to prepare this statement, FCC Form 2100, Schedule A, its technical sections, and the associated exhibits in support of an amendment to an application for a minor modification of its post re-assignment construction permit, file # 0000027773, that authorizes WNUV to use channel 25 for its post-reassignment broadcasting. The instant application proposes to change ERP to 920 kW, to substitute a directional antenna and to update its allocation study, while using a 2 km cell and a 0.2 km increment, thereby eliminating unacceptable interference to any other pertinent facility. No other changes are proposed.

DIRECTIONAL ANTENNA

The applicant proposes to substitute a Dielectric model TFU-16GTH/VP-R O6SP elliptically polarized directional transmitting antenna with its center of radiation located at a height above ground of 383.6 meters, and a height above average terrain of 381 meters. The antenna manufacturer's horizontal plane azimuth radiation pattern for the horizontally polarized component is shown and tabulated in exhibit 2. The manufacturer's horizontal plane azimuth radiation pattern for the vertically polarized component is shown and tabulated in Exhibit 3. The manufacturer's vertical plane elevation radiation pattern, illustrating the antenna's radiation characteristics above and below the horizontal plane is shown and tabulated in Exhibit 4.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.625(b) of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), proposed Effective Radiated Power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, was determined using the NED Three Second US Terrain Database as permitted in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. Exhibit 1 shows the predicted Noise Limited (39.85 dBu) contour, and the principal community (48 dBu) contour. The 48 dBu contour completely encompasses the principal community of license, Baltimore, Maryland.

ALLOCATION CONSIDERATIONS

Post-Transition DTV Considerations

A study was performed, using the FCC's software, *tvstudy*, v. 2.2.5, while using a 2 km cell and a 0.2 km increment, to determine if the instant application for an amendment to an application for construction permit is predicted to cause new prohibited interference to post reassignment DTV stations, construction permits, DTV allotments or Class A DTV stations. The study results, shown in Appendix B, indicate that the instant application for construction permit is predicted to cause no new interference exceeding 0.5% to the populations served by any post reassignment DTV station, construction permit, allotment or Class A DTV stations.

International DTV Considerations

The WNUV site is located 432.8 kilometers from the nearest point on the US-Canadian border. Canadian DTV facilities are included in the study, however no Canadian facility was predicted to be affected by the instant proposal. (See Appendix B)

BLANKETING AND INTERMODULATION INTERFERENCE

Other broadcast and non-broadcast facilities are either co-located with, or located within 10 km of the proposed WNUV site. The applicant does recognize its responsibility to remedy complaints of interference that might result from this proposal in accordance with applicable Rules.

RADIO FREQUENCY IMPACT

The FCC's guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986) and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, LLC (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The guidelines define a maximum permissible exposure (MPE) level for occupational or "controlled" situations, and for "uncontrolled" environments that apply in all other cases that might affect the general public. The FCC Office of Engineering and Technology's technical bulletin No. 65 entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (Edition 97-01, August 1997), provides assistance to determine whether FCC-regulated transmitting facilities, operations or devices comply with guidelines for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. OET Bulletin No. 65 contains the technical information necessary to evaluate compliance with the FCC's policies and guidelines.

The Maximum Permitted Exposure (MPE) level for broadcast facilities that operate on a frequency between 30 MHz and 300 MHz is 200 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) for an "uncontrolled" environment, and is 1000 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) for a "controlled" environment. For broadcast facilities that operate on a frequency between 300 MHz and 1500 MHz, primarily UHF TV stations, is determined for an "uncontrolled" environment by dividing the operating frequency in MHz by 1.5, and for a "controlled" environment by dividing the operating frequency in MHz by 0.3.

STATEMENT OF JOHN E. HIDLE, P.E.
WNUV - Baltimore, Maryland
PAGE 5

The predicted emissions of WNUV must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WNUV, which will operate on television Channel 25 (536-542 MHz), the MPE is 359.33 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an "uncontrolled" environment and 1,796.7 $\mu\text{W}/\text{cm}^2$ in a "controlled" environment. The proposed WNUV facility will operate with a maximum ERP of 920 kW from an elliptically polarized directional transmitting antenna with a centerline height of 383.6 meters above ground level (AGL). Considering a conservative predicted vertical plane relative field factor of 0.300 the WNUV facility is predicted to produce a power density at two meters above ground level of 37.994 $\mu\text{W}/\text{cm}^2$, which is 10.57% of the FCC guideline value for an "uncontrolled" environment, and 2.114% of the FCC's guideline value for "controlled" environments. There are four other full-power DTV facilities, four LPFM facilities and three FM radio stations that are located at, or within relevant proximity of, the WNUV site. The total estimated percentage of the ANSI value at the proposed site, including the cumulative radiation from all authorizations located within the relevant proximity, is 54.16% of the limit applicable to "uncontrolled" environments, and 10.832% of the limit for "controlled" environments. (See Appendix A)

OCCUPATIONAL SAFETY

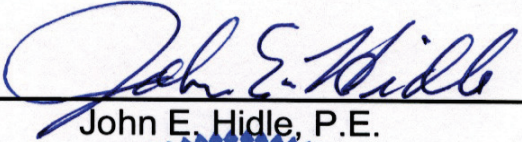
The licensee of WNUV is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WNUV antenna, and is committed to reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to personnel.

STATEMENT OF JOHN E. HIDLE, P.E.
WNUV - Baltimore, Maryland
PAGE 6

SUMMARY

It is herein submitted that the instant amendment to WNUV's application, file # 0000034499, for minor modification of its post-reassignment channel 25 construction permit, file # 0000027773, to change its ERP to 920 kW, to substitute a directional antenna and to update its allocation study, using a 2 km cell and a 0.2 km increment, thereby insuring the elimination of all unacceptable interference to any other pertinent facility, as described herein, complies with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement, FCC Form 2100, its technical sections, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: July 17, 2018


John E. Hidle, P.E.





PREDICTED COVERAGE CONTOURS

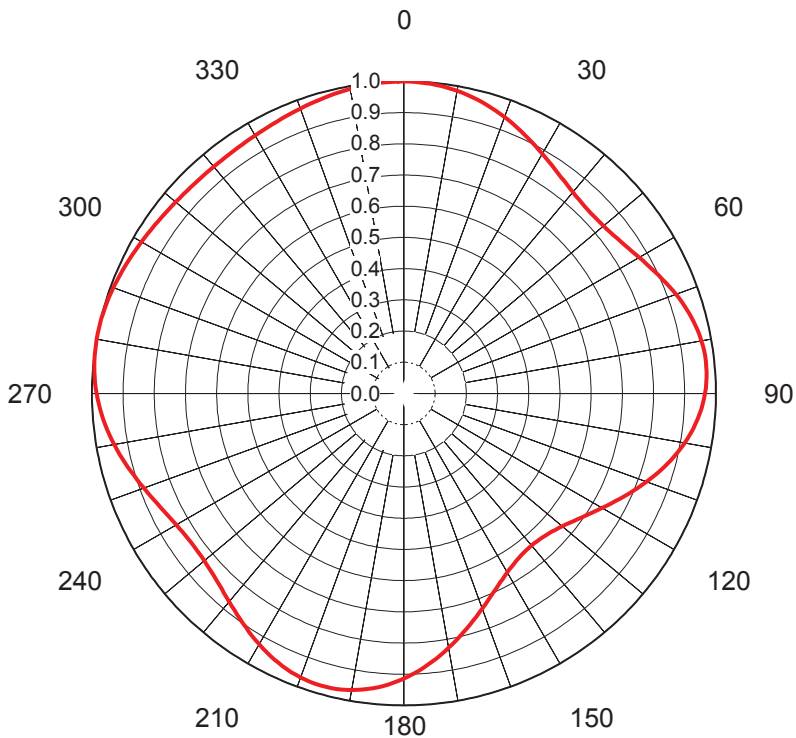
WNUV - BALTIMORE, MARYLAND
DTV Channel 25 - 920 kW ERP - 381 M HAAT
JULY, 2018

Predicted Noise Limited 39.85 dBu
F(50,90) Coverage Contour



Predicted Principal Community 48 dBu
F(50,90) Coverage Contour

AZIMUTH PATTERN Ex2 Horizontal Polarization

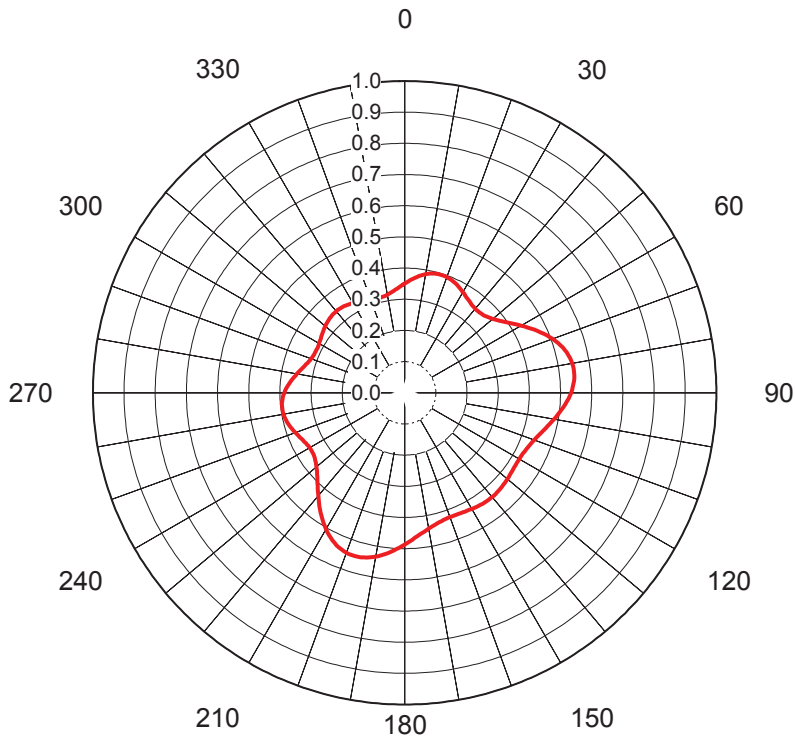


Proposal No. **C-71188**
 Date **12-Jul-18**
 Call Letters **WNUV**
 Channel **25**
 Frequency **539 MHz**
 Antenna Type **TFU-16GTH/VP-R O6SP**
 Gain **1.24 (0.93dB)**
 Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	1.000	36	0.857	72	0.939	108	0.847	144	0.641	180	0.914	216	0.894	252	0.898	288	0.994
1	1.000	37	0.853	73	0.944	109	0.837	145	0.643	181	0.921	217	0.888	253	0.904	289	0.993
2	0.999	38	0.849	74	0.948	110	0.828	146	0.646	182	0.928	218	0.882	254	0.910	290	0.991
3	0.998	39	0.846	75	0.953	111	0.818	147	0.649	183	0.934	219	0.877	255	0.915	291	0.989
4	0.997	40	0.843	76	0.957	112	0.809	148	0.653	184	0.940	220	0.871	256	0.921	292	0.987
5	0.996	41	0.840	77	0.960	113	0.799	149	0.658	185	0.945	221	0.866	257	0.927	293	0.985
6	0.994	42	0.837	78	0.963	114	0.789	150	0.663	186	0.950	222	0.861	258	0.932	294	0.984
7	0.992	43	0.836	79	0.966	115	0.780	151	0.668	187	0.955	223	0.857	259	0.938	295	0.982
8	0.990	44	0.834	80	0.969	116	0.770	152	0.674	188	0.959	224	0.852	260	0.943	296	0.979
9	0.988	45	0.833	81	0.970	117	0.761	153	0.680	189	0.962	225	0.848	261	0.948	297	0.977
10	0.985	46	0.833	82	0.972	118	0.752	154	0.687	190	0.965	226	0.845	262	0.953	298	0.975
11	0.982	47	0.832	83	0.973	119	0.743	155	0.694	191	0.968	227	0.842	263	0.958	299	0.973
12	0.978	48	0.833	84	0.973	120	0.734	156	0.701	192	0.970	228	0.839	264	0.962	300	0.971
13	0.975	49	0.834	85	0.973	121	0.725	157	0.709	193	0.972	229	0.837	265	0.967	301	0.969
14	0.971	50	0.835	86	0.973	122	0.717	158	0.717	194	0.973	230	0.835	266	0.971	302	0.967
15	0.967	51	0.837	87	0.972	123	0.709	159	0.725	195	0.973	231	0.834	267	0.975	303	0.966
16	0.962	52	0.839	88	0.970	124	0.701	160	0.734	196	0.973	232	0.833	268	0.978	304	0.964
17	0.958	53	0.842	89	0.968	125	0.694	161	0.743	197	0.973	233	0.832	269	0.982	305	0.962
18	0.953	54	0.845	90	0.965	126	0.687	162	0.752	198	0.972	234	0.833	270	0.985	306	0.960
19	0.948	55	0.848	91	0.962	127	0.680	163	0.761	199	0.970	235	0.833	271	0.988	307	0.959
20	0.943	56	0.852	92	0.959	128	0.674	164	0.770	200	0.969	236	0.834	272	0.990	308	0.957
21	0.938	57	0.857	93	0.955	129	0.668	165	0.780	201	0.966	237	0.836	273	0.992	309	0.956
22	0.932	58	0.861	94	0.950	130	0.663	166	0.789	202	0.963	238	0.837	274	0.994	310	0.955
23	0.927	59	0.866	95	0.945	131	0.658	167	0.799	203	0.960	239	0.840	275	0.996	311	0.954
24	0.921	60	0.871	96	0.940	132	0.653	168	0.809	204	0.957	240	0.843	276	0.997	312	0.952
25	0.915	61	0.876	97	0.934	133	0.649	169	0.818	205	0.953	241	0.846	277	0.998	313	0.952
26	0.910	62	0.882	98	0.928	134	0.646	170	0.828	206	0.948	242	0.849	278	0.999	314	0.951
27	0.904	63	0.888	99	0.921	135	0.643	171	0.837	207	0.944	243	0.853	279	1.000	315	0.950
28	0.898	64	0.894	100	0.914	136	0.641	172	0.847	208	0.939	244	0.857	280	1.000	316	0.949
29	0.893	65	0.899	101	0.906	137	0.639	173	0.856	209	0.934	245	0.862	281	1.000	317	0.949
30	0.887	66	0.905	102	0.899	138	0.638	174	0.865	210	0.928	246	0.866	282	1.000	318	0.949
31	0.882	67	0.911	103	0.891	139	0.637	175	0.874	211	0.923	247	0.871	283	0.999	319	0.949
32	0.876	68	0.917	104	0.882	140	0.637	176	0.882	212	0.917	248	0.876	284	0.999	320	0.948
33	0.871	69	0.923	105	0.874	141	0.637	177	0.891	213	0.911	249	0.882	285	0.998	321	0.949
34	0.866	70	0.928	106	0.865	142	0.638	178	0.899	214	0.905	250	0.887	286	0.997	322	0.949
35	0.862	71	0.934	107	0.856	143	0.639	179	0.906	215	0.899	251	0.893	287	0.996	323	0.949

This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.

AZIMUTH PATTERN Ex3 Vertical Polarization



Proposal No. **C-71188**
 Date **12-Jul-18**
 Call Letters **WNUV**
 Channel **25**
 Frequency **539 MHz**
 Antenna Type **TFU-16GTH/VP-R O6SP**
 Gain **1.73 (2.39dB)**
 Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.350	36	0.358	72	0.517	108	0.450	144	0.435	180	0.487	216	0.462	252	0.379	288	0.324
1	0.354	37	0.356	73	0.522	109	0.446	145	0.435	181	0.492	217	0.454	253	0.382	289	0.321
2	0.358	38	0.354	74	0.527	110	0.443	146	0.434	182	0.497	218	0.446	254	0.384	290	0.320
3	0.362	39	0.353	75	0.532	111	0.439	147	0.433	183	0.502	219	0.439	255	0.387	291	0.318
4	0.366	40	0.352	76	0.536	112	0.437	148	0.432	184	0.507	220	0.431	256	0.389	292	0.317
5	0.370	41	0.352	77	0.539	113	0.434	149	0.431	185	0.512	221	0.424	257	0.391	293	0.316
6	0.374	42	0.352	78	0.542	114	0.432	150	0.430	186	0.517	222	0.416	258	0.392	294	0.315
7	0.377	43	0.352	79	0.544	115	0.430	151	0.429	187	0.522	223	0.409	259	0.394	295	0.315
8	0.380	44	0.353	80	0.546	116	0.428	152	0.428	188	0.526	224	0.402	260	0.395	296	0.314
9	0.383	45	0.354	81	0.547	117	0.427	153	0.427	189	0.530	225	0.396	261	0.396	297	0.315
10	0.386	46	0.356	82	0.548	118	0.426	154	0.426	190	0.534	226	0.390	262	0.396	298	0.315
11	0.389	47	0.359	83	0.548	119	0.425	155	0.426	191	0.537	227	0.384	263	0.396	299	0.316
12	0.391	48	0.362	84	0.547	120	0.425	156	0.425	192	0.540	228	0.379	264	0.396	300	0.317
13	0.392	49	0.365	85	0.546	121	0.424	157	0.425	193	0.542	229	0.374	265	0.395	301	0.318
14	0.394	50	0.369	86	0.545	122	0.424	158	0.424	194	0.545	230	0.369	266	0.394	302	0.319
15	0.395	51	0.374	87	0.542	123	0.425	159	0.424	195	0.546	231	0.365	267	0.392	303	0.321
16	0.396	52	0.379	88	0.540	124	0.425	160	0.425	196	0.547	232	0.362	268	0.391	304	0.322
17	0.396	53	0.384	89	0.537	125	0.426	161	0.425	197	0.548	233	0.359	269	0.389	305	0.324
18	0.396	54	0.390	90	0.534	126	0.426	162	0.426	198	0.548	234	0.356	270	0.386	306	0.326
19	0.396	55	0.396	91	0.530	127	0.427	163	0.427	199	0.547	235	0.354	271	0.383	307	0.327
20	0.395	56	0.402	92	0.526	128	0.428	164	0.428	200	0.546	236	0.353	272	0.380	308	0.329
21	0.394	57	0.409	93	0.522	129	0.429	165	0.430	201	0.544	237	0.352	273	0.377	309	0.331
22	0.392	58	0.416	94	0.517	130	0.430	166	0.432	202	0.542	238	0.352	274	0.374	310	0.332
23	0.391	59	0.424	95	0.512	131	0.431	167	0.434	203	0.539	239	0.352	275	0.370	311	0.334
24	0.389	60	0.431	96	0.507	132	0.432	168	0.437	204	0.536	240	0.352	276	0.366	312	0.335
25	0.387	61	0.439	97	0.502	133	0.433	169	0.439	205	0.532	241	0.353	277	0.362	313	0.337
26	0.384	62	0.446	98	0.497	134	0.434	170	0.443	206	0.527	242	0.354	278	0.358	314	0.338
27	0.382	63	0.454	99	0.492	135	0.435	171	0.446	207	0.522	243	0.356	279	0.354	315	0.339
28	0.379	64	0.462	100	0.487	136	0.435	172	0.450	208	0.517	244	0.358	280	0.350	316	0.340
29	0.376	65	0.470	101	0.482	137	0.436	173	0.454	209	0.511	245	0.360	281	0.347	317	0.340
30	0.373	66	0.477	102	0.477	138	0.436	174	0.458	210	0.505	246	0.362	282	0.343	318	0.341
31	0.370	67	0.484	103	0.472	139	0.436	175	0.462	211	0.498	247	0.365	283	0.339	319	0.341
32	0.368	68	0.492	104	0.467	140	0.437	176	0.467	212	0.492	248	0.368	284	0.336	320	0.341
33	0.365	69	0.498	105	0.462	141	0.436	177	0.472	213	0.484	249	0.370	285	0.332	321	0.341
34	0.362	70	0.505	106	0.458	142	0.436	178	0.477	214	0.477	250	0.373	286	0.329	322	0.341
35	0.360	71	0.511	107	0.454	143	0.436	179	0.482	215	0.470	251	0.376	287	0.326	323	0.340

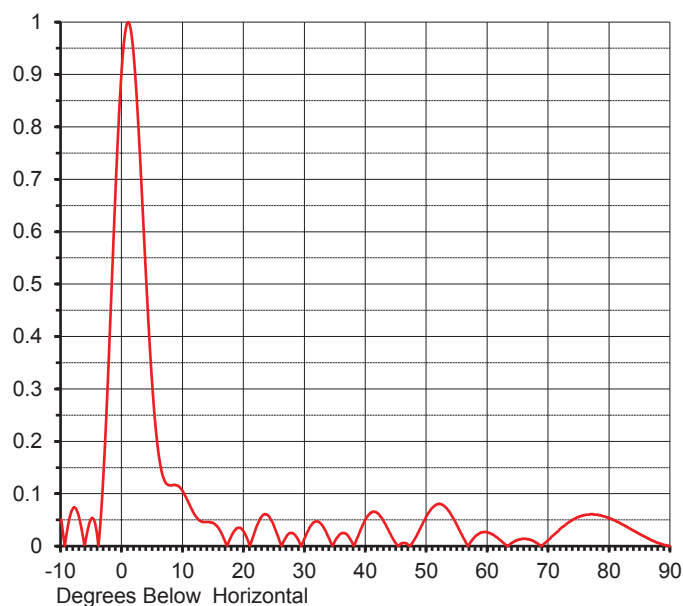
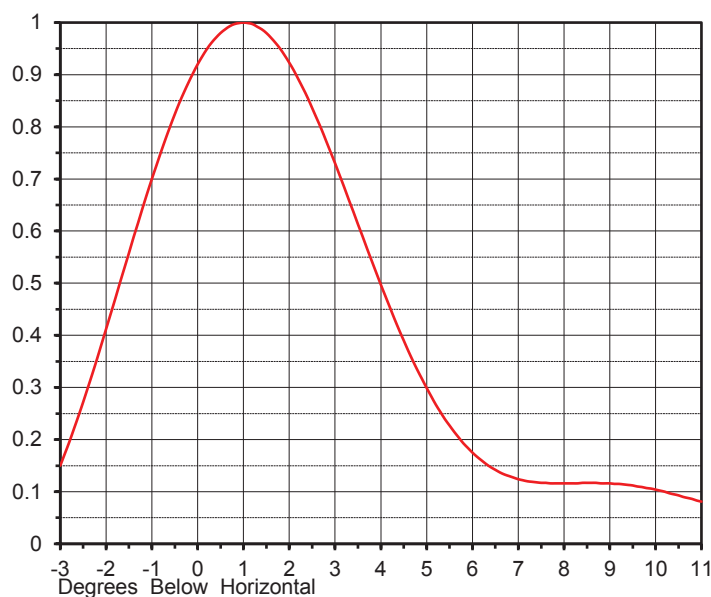
This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.

ELEVATION PATTERN

Proposal No. **C-71188**
 Date **12-Jul-18**
 Call Letters **WNUV**
 Channel **25**
 Frequency **539 MHz**
 Antenna Type **TFU-16GTH/VP-R O6SP**

RMS Directivity at Main Lobe **14.0 (11.46 dB)**
 RMS Directivity at Horizontal **11.8 (10.72 dB)**
Calculated

Beam Tilt **1.00 deg**
 Pattern Number **16G140100**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.051	10.0	0.104	30.0	0.016	50.0	0.058	70.0	0.012
-9.0	0.031	11.0	0.081	31.0	0.039	51.0	0.074	71.0	0.023
-8.0	0.073	12.0	0.058	32.0	0.047	52.0	0.081	72.0	0.034
-7.0	0.052	13.0	0.047	33.0	0.037	53.0	0.075	73.0	0.043
-6.0	0.010	14.0	0.046	34.0	0.014	54.0	0.060	74.0	0.051
-5.0	0.053	15.0	0.044	35.0	0.011	55.0	0.039	75.0	0.056
-4.0	0.012	16.0	0.031	36.0	0.024	56.0	0.016	76.0	0.059
-3.0	0.150	17.0	0.006	37.0	0.021	57.0	0.004	77.0	0.061
-2.0	0.412	18.0	0.021	38.0	0.001	58.0	0.019	78.0	0.060
-1.0	0.700	19.0	0.035	39.0	0.027	59.0	0.026	79.0	0.057
0.0	0.920	20.0	0.027	40.0	0.052	60.0	0.026	80.0	0.053
1.0	1.000	21.0	0.001	41.0	0.065	61.0	0.021	81.0	0.048
2.0	0.923	22.0	0.035	42.0	0.062	62.0	0.012	82.0	0.042
3.0	0.730	23.0	0.058	43.0	0.046	63.0	0.002	83.0	0.036
4.0	0.497	24.0	0.058	44.0	0.024	64.0	0.006	84.0	0.029
5.0	0.299	25.0	0.036	45.0	0.004	65.0	0.012	85.0	0.023
6.0	0.175	26.0	0.005	46.0	0.006	66.0	0.014	86.0	0.017
7.0	0.124	27.0	0.019	47.0	0.002	67.0	0.012	87.0	0.011
8.0	0.116	28.0	0.025	48.0	0.013	68.0	0.006	88.0	0.006
9.0	0.116	29.0	0.010	49.0	0.035	69.0	0.002	89.0	0.002
								90.0	0.000

This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.

APPENDIX A

SUMMARY OF RADIOFREQUENCY RADIATION STUDY

WNUV, Baltimore, MD
Channel 25, 920 kW, 381 m HAAT
July, 2018

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLAR- IZATION</u>	<u>ANTENNA HEIGHT</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>WORST-CASE PREDICTED POWER DENSITY ($\mu\text{W}/\text{cm}^2$)</u>	<u>FCC UNCONTROLLED LIMIT ($\mu\text{W}/\text{cm}^2$)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
WNUV	DT	25	539	H & V	383.6	920.000	0.300	37.994	359.33	10.57%
WBFF	DT	26	545	H	374.8	440.000	0.300	9.520	363.33	2.62%
WJZ-TV	DT	11	201	H & V	295	30.000	0.300	2.102	200.00	1.05%
WBAL-TV	DT	12	207	H & V	295	27.200	0.300	1.905	200.00	0.95%
WMAR-TV	DT	27	551	H & V	294.6	830.000	0.300	58.301	367.33	15.87%
WTIZ-LP	FM	228	93.5	H	152	0.004	1.000	0.006	200.00	0.00%
W248AO	FM	248	97.5	H	210	0.250	1.000	0.193	200.00	0.10%
WIYY	FM	250	97.9	H & V	275	13.500	1.000	12.104	200.00	6.05%
WLIF (AUX)	FM	270	101.9	H & V	273	2.600	1.000	2.366	200.00	1.18%
WZFT	FM	282	104.3	H & V	296	13.000	1.000	10.050	200.00	5.02%
WJZ-FM (AUX)	FM	289	105.7	H & V	273	0.430	1.000	0.391	200.00	0.20%
W291BA	FM	291	106.1	H & V	273	0.250	1.000	0.227	200.00	0.11%
WWMX (AUX)	FM	293	106.5	H & V	210	13.500	1.000	20.850	200.00	10.43%

TOTAL PERCENTAGE OF FCC GUIDELINE VALUE = 54.16%

* For television stations a very conservative vertical relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.



WNUV - BALTIMORE, MARYLAND Longley-Rice Interference Analysis July 2018

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: WNUV TFU16 2Xp2 920 B, Model: Longley-Rice
Start: 2018.07.16 11:25:29

Study created: 2018.07.16 11:25:28

Study build station data: LMS TV 2018-07-15

Proposal: WNUV D25 DT APP BALTIMORE, MD
File number: WNUV TFU16 2Xp2 920 B
Facility ID: 7933
Station data: User record
Record ID: 745
Country: U.S.
Zone: I

Search options:
Non-U.S. records included
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000026250	117.4 km
Yes	WDPB	D24	DT	APP	SEAFORD, DE	BLANK0000034446	117.4
No	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	276.1
No	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLANK0000035705	276.1
No	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	205.0
No	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLANK0000034754	144.1
No	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	144.1
No	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	219.0
Yes	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	71.3
No	WUNK-TV	D25	DT	CP	GREENVILLE, NC	BLANK0000025767	428.8
Yes	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	271.6
Yes	WSKA	D25	DT	CP	CORNING, NY	BLANK0000034484	313.9
No	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	427.4
No	WMHT	D25	DT	APP	SCHENECTADY, NY	BLANK0000035673	427.4
No	WTVU-CD	D25	DC	CP	SYRACUSE, NY	BLANK0000034939	415.7
Yes	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLANK0000034939	314.7
No	WLFB	D25	DT	CP	BLUEFIELD, WV	BLANK0000034862	465.6
Yes	WBFF	D26	DT	CP	BALTIMORE, MD	BLANK0000025699	0.0
No	WGPT	D26	DT	CP	OAKLAND, MD	BLANK0000034106	227.3
No	WQAV-CD	D26	DC	CP	GLASSBORO, NJ	BLANK0000034526	161.2
No	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	275.7
No	WHTJ	D26	DT	CP	CHARLOTTESVILLE, VA	BLANK0000034130	219.0
No	WAZT-CD	D26	DC	BL	WOODSTOCK, VA	BLANK0000034130	150.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D25
Latitude: 39 20 10.40 N (NAD83)
Longitude: 76 38 57.90 W
Height AMSL: 465.6 m
HAAT: 381.0 m
Peak ERP: 920 kW
Antenna: DIE TFU16GTH VPR 06SP 0.0 deg

Appendix B - Interference Analysis **WNUV - Baltimore, Maryland** **Channel 25 - 920 kW - Page 2**

Elev Pattn: Generic
Elec Tilt: 1.00

39.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	920 kW	363.8 m	104.6 km
45.0	648	366.3	101.6
90.0	857	421.4	109.2
135.0	389	455.1	104.2
180.0	769	433.8	109.2
225.0	669	352.9	100.8
270.0	893	337.0	101.9
315.0	833	314.8	99.2

Distance to Canadian border: 432.8 km

Distance to Mexican border: 2399.5 km

**Proposal is within coordination distance of FCC monitoring station

**Proposal exceeds field strength limit at FCC monitoring station

Conditions at FCC monitoring station: Laurel MD

Bearing: 217.9 degrees Distance: 24.1 km

ERP: 717 kW HAAT: 366.8 m Field strength: 94.6 dBu, 53.6 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 281.3 degrees Distance: 2433.3 km

Study cell size: 2.00 km

Profile point spacing: 0.20 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

Interference to BLANK0000026250 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000026250			
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	117.4 km		
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	117.4		
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	271.8		
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	157.6		
	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	215.4		
	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	141.8		
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
11523.9		594,332		11479.9		594,206	0.14 0.00		
Undesired				Total IX	Unique IX, before	Unique IX, after			
WNUV D25 DT BL				20.0	37	12.0	20		
WNUV D25 DT APP				48.0	110	28.0	37		
WRLH-TV D24 DT CP				4.0	17	0.0	0		
WDCO-CD D24 DC CP				32.0	106	24.0	89		
						12.0	33		

Interference to BLANK0000026250 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000026250	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	117.4 km
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	117.4
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	271.8
	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	157.6
	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	215.4

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 920 kW - Page 3

WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	141.8
Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
11523.9	594,332	11523.9	594,332	11475.9 594,204	11459.9 594,187	0.14 0.00
Undesired		Total IX		Unique IX, before	Unique IX, after	
WNUV D25 DT BL	20.0	37	12.0	20		
WNUV D25 DT APP	48.0	110			28.0 37	
WPHA-CD D24 DC CP	4.0	2	4.0	2	4.0 2	
WRLH-TV D24 DT CP	4.0	17	0.0	0	0.0 0	
WDCO-CD D24 DC CP	32.0	106	24.0	89	12.0 33	

Interference to BLANK0000034446 APP scenario 1

Desired:	Call WDPB	Chan D24	Svc DT	Status APP	City, State SEAFORD, DE	File Number BLANK0000034446	Distance		
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	117.4 km		
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	117.4		
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	271.8		
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	157.5		
	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	141.9		
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
13172.9	653,240	13172.9	653,240	13037.1	651,172	12941.3	648,153	0.73	0.46
Undesired				Total IX	Unique IX, before	Unique IX, after			
WNUV D25 DT BL		115.8	1,319	51.9	948				
WNUV D25 DT APP		231.6	5,087			147.7	3,967		
WDCO-CD D24 DC CP		83.9	1,120	20.0	749	0.0	0		

Interference to BLANK0000034446 APP scenario 2

Desired:	Call WDPB	Chan D24	Svc DT	Status APP	City, State SEAFORD, DE	File Number BLANK0000034446	Distance		
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	117.4 km		
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	117.4		
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	271.8		
	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	157.5		
	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	141.9		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
13172.9	653,240	13172.9		653,240	12921.7	633,971	12825.9	630,952	0.74 0.48
Undesired				Total IX		Unique IX, before		Unique IX, after	
WNUV D25 DT BL		115.8		1,319		51.9 948			
WNUV D25 DT APP		231.6		5,087				147.7 3,967	
WPHA-CD D24 DC CP		115.4		17,201		115.4 17,201		115.4 17,201	
WDCO-CD D24 DC CP		83.9		1,120		20.0 749		0.0 0	

Interference to BLANK0000034546 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	71.3 km
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	71.3
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000026250	141.8
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	346.5
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	215.0
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	214.3
	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	154.9
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 920 kW - Page 4

5805.2	4,808,309	5757.2	4,803,315	5469.9	4,680,233	5449.9	4,675,126	0.37	0.11
Undesired		Total IX		Unique IX, before		Unique IX, after			
WNUV D25 DT BL	163.6	107,881	79.8	53,995					
WNUV D25 DT APP	187.6	113,952			99.8	59,102			
WTAJ-TV D24 DT CP	12.0	575	0.0	0	0.0	0			
WRLH-TV D24 DT CP	207.5	69,087	111.8	14,626	107.8	13,662			

Interference to BLANK0000034546 CP scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546			
<hr/>									
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	71.3 km		
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	71.3		
	WDPB	D24	DT	APP	SEAFORD, DE	BLANK0000034446	141.9		
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	346.5		
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	215.0		
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	214.3		
	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	154.9		
<hr/>									
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
5805.2	4,808,309	5757.2	4,803,315	5465.9	4,680,056	5445.9	4,674,949	0.37	0.11

Undesired		Total IX		Unique IX, before		Unique IX, after	
WNUV D25 DT BL	163.6	107,881	79.8	53,995			
WNUV D25 DT APP	187.6	113,952			99.8	59,102	
WDPB D24 DT APP	16.0	780	4.0	177	4.0	177	
WTAJ-TV D24 DT CP	12.0	575	0.0	0	0.0	0	
WRLH-TV D24 DT CP	207.5	69,087	107.8	14,405	103.8	13,441	

Interference to BLANK0000054140 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140			
<hr/>									
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km		
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	271.6		
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	5.3		
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6		
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	212.6		
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2		
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6		
<hr/>									
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
25364.9	19,853,836	23971.7	19,614,553	23673.2	19,518,009	23420.0	19,491,287	1.07	0.14

Undesired		Total IX		Unique IX, before		Unique IX, after	
WNUV D25 DT BL	28.0	1,372	24.0	1,264			
WNUV D25 DT APP	297.4	31,378			277.2	27,986	
WNYE-TV D24 DT APP	12.1	5,145	0.0	0	0.0	0	
WMHT D25 DT CP	133.2	24,591	97.0	16,508	88.9	14,856	
WJAR D25 DT CP	125.2	56,420	97.0	48,445	97.0	48,445	
WFUT-DT D26 DT CP	48.2	22,244	32.2	17,099	32.2	17,099	

Interference to BLANK0000054140 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	

Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	271.6
	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLDT20071228ABM	5.3
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	212.6

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 920 kW - Page 5

WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2
WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25364.9 19,853,836	23971.7 19,614,553	23673.2 19,518,009	23420.0 19,491,287	1.07 0.14

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	28.0 1,372	24.0 1,264	
WNUV D25 DT APP	297.4 31,378		277.2 27,986
WNYE-TV D24 DT LIC	12.1 5,145	0.0 0	0.0 0
WMHT D25 DT CP	133.2 24,591	97.0 16,508	88.9 14,856
WJAR D25 DT CP	125.2 56,420	97.0 48,445	97.0 48,445
WFUT-DT D26 DT CP	48.2 22,244	32.2 17,099	32.2 17,099

Interference to BLANK0000054140 LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	271.6
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	5.3
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6
	WMHT	D25	DT	APP	SCHENECTADY, NY	BLANK0000035673	212.6
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25364.9 19,853,836	23971.7 19,614,553	23632.8 19,509,687	23383.6 19,483,463	1.05 0.13

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	28.0 1,372	24.0 1,264	
WNUV D25 DT APP	297.4 31,378		273.2 27,488
WNYE-TV D24 DT APP	12.1 5,145	0.0 0	0.0 0
WMHT D25 DT APP	177.7 35,850	137.5 24,830	125.3 22,680
WJAR D25 DT CP	125.2 56,420	93.0 45,508	93.0 45,508
WFUT-DT D26 DT CP	48.2 22,244	32.2 17,099	32.2 17,099

Interference to BLANK0000054140 LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	271.6
	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLEDT20071228ABM	5.3
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6
	WMHT	D25	DT	APP	SCHENECTADY, NY	BLANK0000035673	212.6
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25364.9 19,853,836	23971.7 19,614,553	23632.8 19,509,687	23383.6 19,483,463	1.05 0.13

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	28.0 1,372	24.0 1,264	
WNUV D25 DT APP	297.4 31,378		273.2 27,488
WNYE-TV D24 DT LIC	12.1 5,145	0.0 0	0.0 0
WMHT D25 DT APP	177.7 35,850	137.5 24,830	125.3 22,680
WJAR D25 DT CP	125.2 56,420	93.0 45,508	93.0 45,508
WFUT-DT D26 DT CP	48.2 22,244	32.2 17,099	32.2 17,099

Interference to BLANK0000034484 CP scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
------	------	-----	--------	-------------	-------------	----------

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 920 kW - Page 6

Desired:	WSKA	D25	DT	CP	CORNING, NY	BLANK0000034484	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	313.9 km
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	313.9
	WPXJ-TV	D24	DT	CP	BATAVIA, NY	BLANK0000034885	113.6
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	257.5
	WTVU-CD	D25	DC	CP	SYRACUSE, NY	BLANK0000034939	126.2
	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	306.3
	WGCE-CD	D26	DC	CP	ROCHESTER, NY	BLANK0000033855	117.9
	CBLFT-DT	D25	DT	LIC	TORONTO, ON	BLANKCANADA235	251.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
17350.1	546,588	15350.9	445,045	15094.0	441,298	15090.0	441,298	0.03	0.00
Undesired		Total IX		Unique IX, before		Unique IX, after			
WNUV D25 DT BL		0.0	0	0.0	0				
WNUV D25 DT APP		4.0	0			4.0	0		
WPXJ-TV D24 DT CP		44.2	622	16.1	100	16.1	100		
WMHT D25 DT CP		48.1	1,165	16.0	519	16.0	519		
WTVU-CD D25 DC CP		56.2	1,387	24.1	741	24.1	741		
KDKA-TV D25 DT LIC		100.5	495	92.4	457	92.4	457		
WGCE-CD D26 DC CP		8.0	67	4.0	0	4.0	0		
CBLFT-DT D25 DT LIC		80.3	1,431	40.1	754	40.1	754		

Interference to BLANK0000034484 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WSKA	D25	DT	CP	CORNING, NY	BLANK0000034484	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	313.9 km
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	313.9
	WPXJ-TV	D24	DT	CP	BATAVIA, NY	BLANK0000034885	113.6
	WMHT	D25	DT	APP	SCHENECTADY, NY	BLANK0000035673	257.5
	WTVU-CD	D25	DC	CP	SYRACUSE, NY	BLANK0000034939	126.2
	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	306.3
	WGCE-CD	D26	DC	CP	ROCHESTER, NY	BLANK0000033855	117.9
	CBLFT-DT	D25	DT	LIC	TORONTO, ON	BLANKCANADA235	251.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
17350.1	546,588	15350.9	445,045	15041.9	437,590	15037.8	437,590	0.03	0.00
Undesired		Total IX		Unique IX, before		Unique IX, after			
WNUV D25 DT BL		0.0	0	0.0	0				
WNUV D25 DT APP		4.0	0			4.0	0		
WPXJ-TV D24 DT CP		44.2	622	16.1	100	16.1	100		
WMHT D25 DT APP		116.3	5,145	68.1	4,227	68.1	4,227		
WTVU-CD D25 DC CP		56.2	1,387	8.1	469	8.1	469		
KDKA-TV D25 DT LIC		100.5	495	92.4	457	92.4	457		
WGCE-CD D26 DC CP		8.0	67	4.0	0	4.0	0		
CBLFT-DT D25 DT LIC		80.3	1,431	40.1	754	40.1	754		

Interference to BLCDT20041004ACS LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	314.7 km
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	314.7
	WEAO	D24	DT	CP	AKRON, OH	BLANK0000034293	150.8
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	133.5
	WXYZ-TV	D25	DT	CP	DETROIT, MI	BLANK0000034678	347.3
	WGPT	D26	DT	CP	OAKLAND, MD	BLANK0000034106	136.0
	WOSC-CD	D26	DC	CP	PITTSBURGH, PA	BLANK0000029678	7.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
31466.0	3,611,796	30277.0	3,503,139	30181.0	3,496,085	30148.9	3,493,207	0.11	0.08

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 920 kW - Page 7

Undesired		Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	12.0	507	12.0	507
WNUV D25 DT APP	44.1	3,385		44.1
WEAO D24 DT CP	8.0	131	0.0	0
WTAJ-TV D24 DT CP	12.0	244	12.0	244
WXYZ-TV D25 DT CP	68.0	6,227	60.0	6,096
WGPT D26 DT CP	4.0	76	4.0	76

Interference to BLANK0000025699 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WBFF	D26	DT	CP	BALTIMORE, MD	BLANK0000025699	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	0.0 km
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	0.0
	WGPT	D26	DT	CP	OAKLAND, MD	BLANK0000034106	227.3
	WQAV-CD	D26	DC	CP	GLASSBORO, NJ	BLANK0000034526	161.2
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	275.7
	WYLN-LP	D26+	DC	CP	HAZLETON, PA	BLANK0000034698	190.8
	WOSC-CD	D26	DC	CP	PITTSBURGH, PA	BLANK0000029678	308.4
	WHTJ	D26	DT	CP	CHARLOTTESVILLE, VA	BLANK0000034130	219.0
	WAZT-CD	D26	DC	BL	WOODSTOCK, VA	DTVBL168449	150.8
	WMAR-TV	D27	DT	CP	BALTIMORE, MD	BLANK0000026796	0.2
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
26237.3		8,523,983		25415.9		8,368,253	0.07
				24608.1		8,136,054	0.01
				24592.0		8,135,439	

Undesired		Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	0.0	0	0.0	0
WNUV D25 DT APP	20.1	1,367		16.1
WGPT D26 DT CP	12.1	658	4.0	126
WQAV-CD D26 DC CP	198.9	58,193	182.8	52,619
WFUT-DT D26 DT CP	40.3	12,947	8.1	1,060
WYLN-LP D26+ DC CP	20.2	2,042	0.0	0
WHTJ D26 DT CP	512.9	150,673	337.0	104,620
WAZT-CD D26 DC BL	255.7	62,807	91.9	26,461
WMAR-TV D27 DT CP	4.0	746	0.0	0

Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	
Undesireds:	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000026250	117.4 km
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	144.1
	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	71.3
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	271.6
	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	314.7
	WAZT-CD	D26	DC	BL	WOODSTOCK, VA	DTVBL168449	150.8
Service area		Terrain-limited		IX-free		Percent IX	
33915.2		10,035,250		32354.7		9,717,546	0.12
				32314.6		9,702,125	0.16

Undesired		Total IX	Unique IX	Prcnt Unique IX
WDCO-CD D24 DC CP	12.0	10,795	12.0	0.04
WWOR-TV D25 DT LIC	4.0	152	4.0	0.01
KDKA-TV D25 DT LIC	12.1	3,293	12.1	0.04
WAZT-CD D26 DC BL	11.9	1,181	11.9	0.04

Interference to proposal scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WNUV	D25	DT	APP	BALTIMORE, MD	WNUV TFU16 2Xp2 920 B	
Undesireds:	WDPB	D24	DT	APP	SEAFORD, DE	BLANK0000034446	117.4 km

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 920 kW - Page 8

WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	144.1
WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	71.3
WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	271.6
KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	314.7
WAZT-CD	D26	DC	BL	WOODSTOCK, VA	DTVBL168449	150.8

Service area		Terrain-limited		IX-free		Percent IX	
33915.2	10,035,250	32354.7	9,717,546	32254.5	9,698,626	0.31	0.19

Undesired		Total IX		Unique IX		Prcnt Unique IX	
WDPB D24 DT APP	60.2	3,499	60.2	3,499	0.19	0.04	
WDCO-CD D24 DC CP	12.0	10,795	12.0	10,795	0.04	0.11	
WWOR-TV D25 DT LIC	4.0	152	4.0	152	0.01	0.00	
KDKA-TV D25 DT LIC	12.1	3,293	12.1	3,293	0.04	0.03	
WAZT-CD D26 DC BL	11.9	1,181	11.9	1,181	0.04	0.01	



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION FOR
AN AMENDMENT TO APPLICATION FILE # 0000059355
FOR A MINOR MODIFICATION OF
POST REPACK CONSTRUCTION PERMIT
FILE # 0000034499
WNUV - BALTIMORE, MARYLAND
DTV - CH. 25 - 750 kW - 372.8 m HAAT**

Prepared for: BALTIMORE (WNUV-TV) LICENSEE, INC.

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, No. 7418, and in New York State, No. 63418.

GENERAL

This office has been authorized by BALTIMORE (WNUV-TV) LICENSEE, INC., licensee of WNUV, channel 40, facility ID number 7933, licensed to Baltimore, Maryland, to prepare this statement, FCC Form 2100, Schedule A, its technical sections, and the associated exhibits in support of an application for a minor modification of its construction permit, file # 0000034499, which authorizes WNUV to use DTV channel 25 for its post-reassignment broadcasting.

DISCUSSION

Since the applicant has been unable to install the antenna that is authorized in WNUV's construction permit, file # 0000034499, in a timely manner to permit the station's change over to channel 25, the instant application seeks a minor modification of WNUV's

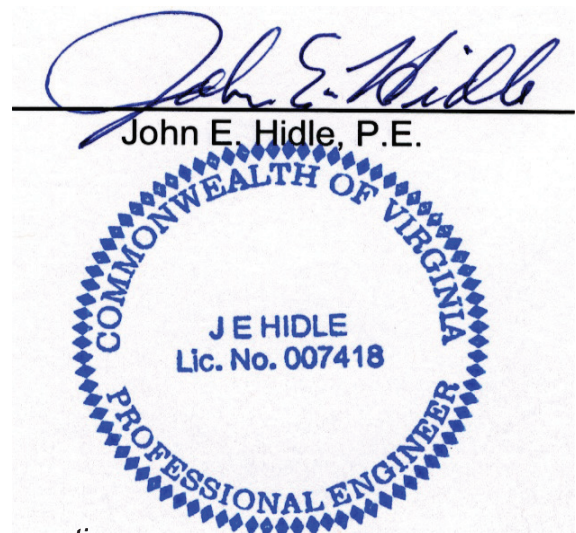
STATEMENT OF JOHN E. HIDLE, P.E.
WNUV - Baltimore, Maryland
PAGE 2

construction permit to permit the substitution of its existing panel antenna at its current HAAT of 372.8 meters. If necessary the applicant requests waiver of Section 73.1690, and any other pertinent rule, which would permit WNUV to commence broadcasting on its post repack channel 25. The amended ERP is 750 kW, which maintains the station's noise limited contour wholly within the currently authorized noise limited contour, and does not contribute any new interference to any other pertinent facility. Additionally, the current authorization requires that the field strength at the FCC's Laurel monitoring station must not exceed 77 mV/m, and is predicted to be only 48.3 mV/m. No other changes are sought.

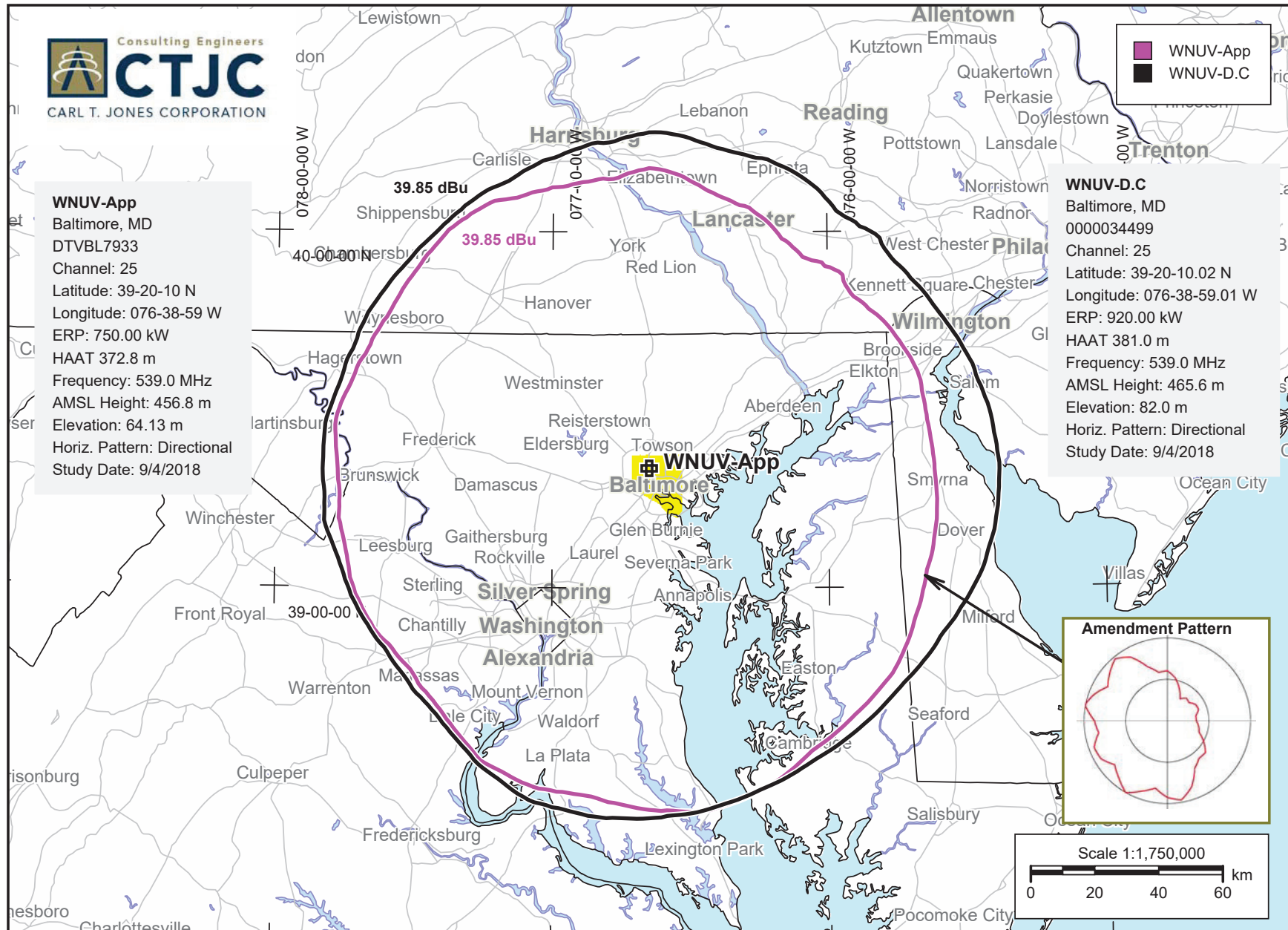
SUMMARY

It is submitted that the instant application for an amendment to file # 0000059355 for a minor modification of construction permit, file # 0000034499, which authorizes WNUV to broadcast on its post-repack DTV channel 25, and the applicant's waiver request, as described herein, complies with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement, FCC Form 2100, its technical sections, and attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: September 4, 2018



Amendment to Application for Modification of CP - WNUV-D 25 Baltimore, MD





WNUV - BALTIMORE, MARYLAND Longley-Rice Interference Analysis September 2018

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: WNUV 25 STA TUDC5SP 750K #2859, Model: Longley-Rice
Start: 2018.09.04 14:38:00

Study created: 2018.09.04 14:38:00

Study build station data: LMS TV 2018-09-03

Proposal: WNUV D25 DT STA BALTIMORE, MD
File number: WNUV 25 STA TUDC5SP 750K
Facility ID: 7933
Station data: User record
Record ID: 782
Country: U.S.
Zone: I

Search options:

Non-U.S. records included

Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	117.4 km
No	W24EM-D	D24	LD	CP	WYOMING, DE	BDISDTL20140610ACV	145.8
Yes	WWDD-LD	D24	LD	CP	HAVRE DE GRACE, MD	BLANK0000041691	77.6
No	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	276.1
No	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLEDT20071228ABM	276.1
No	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	205.0
No	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	144.1
No	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	144.1
No	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	130.0
No	W24CS-D	D24	LD	APP	READING, PA	BLANK0000059171	130.0
No	WHSV-TV	D24	LD	CP	HARRISONBURG, VA	BLANK0000054176	150.8
No	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	219.0
Yes	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	71.3
No	WASA-LD	D25	LD	LIC	Greenwich, CT	BLDTL20091222AQB	276.1
Yes	W42CK	D25+	LD	CP	HAGERSTOWN, MD	BLANK0000054340	101.8
No	WUNK-TV	D25	DT	CP	GREENVILLE, NC	BLANK0000025767	428.8
Yes	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	271.6
No	W25FA-D	D25	LD	LIC	West Orange, NJ	BLANK0000053181	259.9
No	WSKA	D25	DT	CP	CORNING, NY	BLANK0000034484	313.9
No	W25DY-D	D25	LD	LIC	MONTICELLO, NY	BLDTT20100506AEI	307.0
No	W26CE	D25	LD	CP	NEW YORK, NY	BDISDTL20100120ABI	370.6
No	WHSB-LP	D25z	LD	APP	ROCHESTER, NY	BLANK0000054586	429.4
No	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	427.4
No	WMHT	D25	DT	APP	SCHENECTADY, NY	BLANK0000035673	427.4
No	WTVU-CD	D25	DC	CP	SYRACUSE, NY	BLANK0000034939	415.7
No	WSSS-LP	N25z	TX	LIC	STEBENVILLE, OH	BLTTL19980506JD	355.1
Yes	W36DO-D	D25	LD	APP	DARBY, PA	BLANK0000051674	144.1
No	WWBP-LP	N25-	TX	LIC	FREEDOM, PA	BLTTL19990124JD	341.6
Yes	WTFX-TV	D25	LD	APP	PHILADELPHIA, PA	BLANK0000054623	171.0
Yes	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	314.7
No	WYOU	D25	LD	LIC	SCRANTON, PA	BLCDT20091211ACN	275.4
No	W25AQ-D	D25	LD	LIC	TOWANDA, PA	BLDTT20090727ADM	261.2
No	WVAD-LD	D25	LD	LIC	CHESAPEAKE, VA	BLDTL20121214ABD	282.6
No	WSVF-LP	N25+	TX	LIC	HARRISONBURG, VA	BLTTL20011107ABW	211.4
No	W25AA-D	D25	LD	LIC	ONANCOCK, VA	BLDTT20121127AMR	190.6
Yes	WWBK-LD	D25	LD	CP	RICHMOND, VA	BLANK0000051589	219.0
No	WLFB	D25	DT	CP	BLUEFIELD, WV	BLANK0000034862	465.6

Carl T. Jones Corporation

7901 Yarnwood Court, Springfield, Virginia 22153-2827 (703) 569-7704 Fax: (703) 569-6417

Appendix B - Interference Analysis **WNUV - Baltimore, Maryland** **Channel 25 - 750 kW - Page 2**

No	WBFF	D26	DT	CP	BALTIMORE, MD	BLANK0000025699	0.0
No	WGPT	D26	DT	CP	OAKLAND, MD	BLANK0000034106	227.3
No	WQAV-CD	D26	DC	CP	GLASSBORO, NJ	BLANK0000034526	161.2
No	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	275.7
No	W42DG-D	D26	LD	CP	STATE COLLEGE, PA	BLANK0000040781	186.4
No	WHTJ	D26	DT	CP	CHARLOTTESVILLE, VA	BLANK0000034130	219.0
No	WAZT-CD	D26	DC	BL	WOODSTOCK, VA	DTVBL168449	150.8
No	WEVD-LD	N27+	TX	LIC	DOVER, DE	BLTTL19870929IH	101.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D25
Latitude: 39 20 10.40 N (NAD83)
Longitude: 76 38 57.90 W
Height AMSL: 456.8 m
HAAT: 372.8 m
Peak ERP: 750 kW
Antenna: DIE-TUD-C5SP-10/36SPH-1-B (ID 106798) 0.0 deg
Elev Pattn: Generic
Elec Tilt: 0.75

39.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	272 kW	355.0 m	93.4 km
45.0	90.8	357.5	85.3
90.0	90.8	412.6	89.2
135.0	265	446.3	99.8
180.0	642	425.0	106.6
225.0	561	344.1	98.5
270.0	574	328.2	97.3
315.0	660	306.0	96.2

Database HAAT does not agree with computed HAAT

Database HAAT: 373 m Computed HAAT: 372 m

Distance to Canadian border: 432.8 km

Distance to Mexican border: 2399.5 km

****Proposal is within coordination distance of FCC monitoring station**

****Proposal exceeds field strength limit at FCC monitoring station**

Conditions at FCC monitoring station: Laurel MD

Bearing: 217.9 degrees Distance: 24.1 km

ERP: 641 kW HAAT: 358.0 m Field strength: 93.7 dBu, 48.3 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 281.3 degrees Distance: 2433.3 km

Study cell size: 2.00 km

Profile point spacing: 0.20 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

Interference to BLANK0000034446 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	117.4 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	117.4

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 750 kW - Page 3

WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	271.8
WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	157.5
WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	141.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
13172.9 653,240	13172.9 653,240	13037.1 651,172	13021.1 650,332	0.12 0.13

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	115.8 1,319	51.9 948	
WNUV D25 DT STA	139.8 2,171		67.9 1,788
WDCO-CD D24 DC CP	83.9 1,120	20.0 749	12.0 737

Interference to BLANK0000034446 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	117.4 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	117.4
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	271.8
	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	157.5
	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	141.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
13172.9 653,240	13172.9 653,240	12921.7 633,971	12905.7 633,131	0.12 0.13

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	115.8 1,319	51.9 948	
WNUV D25 DT STA	139.8 2,171		67.9 1,788
WPHA-CD D24 DC CP	115.4 17,201	115.4 17,201	115.4 17,201
WDCO-CD D24 DC CP	83.9 1,120	20.0 749	12.0 737

Interference to BLANK0000041691 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWDD-LD	D24	LD	CP	HAVRE DE GRACE, MD	BLANK0000041691	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	77.6 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	77.6
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	115.9
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	199.2
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	240.4
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	66.9
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	75.1

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1019.2 174,424	1007.3 173,031	928.0 162,602	928.0 162,602	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 235	0.0 0	
WNUV D25 DT STA	4.0 235		0.0 0
WDPB D24 DT CP	75.3 10,429	67.4 9,430	67.4 9,430
WNYE-TV D24 DT APP	4.0 0	4.0 0	4.0 0
WTAJ-TV D24 DT CP	4.0 764	0.0 0	0.0 0
WPHA-CD D24 DC LIC	4.0 764	0.0 0	0.0 0

Interference to BLANK0000041691 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWDD-LD	D24	LD	CP	HAVRE DE GRACE, MD	BLANK0000041691	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	77.6 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	77.6
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	115.9
	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLEDT20071228ABM	199.2

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 750 kW - Page 4

WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	240.4
WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	66.9
W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	75.1

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1019.2 174,424	1007.3 173,031	928.0 162,602	928.0 162,602	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 235	0.0 0	
WNUV D25 DT STA	4.0 235		0.0 0
WDPB D24 DT CP	75.3 10,429	67.4 9,430	67.4 9,430
WNYE-TV D24 DT LIC	4.0 0	4.0 0	4.0 0
WTAJ-TV D24 DT CP	4.0 764	0.0 0	0.0 0
WPHA-CD D24 DC LIC	4.0 764	0.0 0	0.0 0

Interference to BLANK0000041691 CP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWDD-LD	D24	LD	CP	HAVRE DE GRACE, MD	BLANK0000041691	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	77.6 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	77.6
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	115.9
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	199.2
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	240.4
	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	66.9
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	75.1

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1019.2 174,424	1007.3 173,031	908.2 158,865	908.2 158,865	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 235	0.0 0	
WNUV D25 DT STA	4.0 235		0.0 0
WDPB D24 DT CP	75.3 10,429	35.7 4,121	35.7 4,121
WNYE-TV D24 DT APP	4.0 0	0.0 0	0.0 0
WTAJ-TV D24 DT CP	4.0 764	0.0 0	0.0 0
WPHA-CD D24 DC CP	59.5 9,810	19.8 3,737	19.8 3,737

Interference to BLANK0000041691 CP scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWDD-LD	D24	LD	CP	HAVRE DE GRACE, MD	BLANK0000041691	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	77.6 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	77.6
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	115.9
	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLEDT20071228ABM	199.2
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	240.4
	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	66.9
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	75.1

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1019.2 174,424	1007.3 173,031	908.2 158,865	908.2 158,865	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 235	0.0 0	
WNUV D25 DT STA	4.0 235		0.0 0
WDPB D24 DT CP	75.3 10,429	35.7 4,121	35.7 4,121
WNYE-TV D24 DT LIC	4.0 0	0.0 0	0.0 0
WTAJ-TV D24 DT CP	4.0 764	0.0 0	0.0 0
WPHA-CD D24 DC CP	59.5 9,810	19.8 3,737	19.8 3,737

Interference to BLANK0000034546 CP scenario 1

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 750 kW - Page 5

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	71.3 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	71.3
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	141.9
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	346.5
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	215.0
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	214.3
	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	154.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
5805.2	4,808,309	5757.2	4,803,315	5465.9	4,680,056	5457.9	4,678,539	0.15	0.03
Undesired		Total IX		Unique IX, before		Unique IX, after			
WNUV D25 DT BL		163.6	107,881	79.8	53,995				
WNUV D25 DT STA		175.6	110,362			87.8	55,512		
WDPB D24 DT CP		16.0	780	4.0	177	4.0	177		
WTAJ-TV D24 DT CP		12.0	575	0.0	0	0.0	0		
WRLH-TV D24 DT CP		207.5	69,087	107.8	14,405	103.8	13,441		

Interference to BLANK0000054340 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance			
Desired:	W42CK	D25+	LD	CP	HAGERSTOWN, MD	BLANK0000054340				
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	101.8 km			
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	101.8			
	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	214.2			
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX		
2745.1	306,710	2470.8		294,026	2439.0	292,362	2439.0	292,362	0.00	0.00
Undesired				Total IX		Unique IX, before		Unique IX, after		
WNUV	D25	DT	BL		27.8	1,606	23.9	1,482		
WNUV	D25	DT	STA		27.8	1,606			23.9	1,482
KDKA-TV	D25	DT	LIC		7.9	182	4.0	58	4.0	58

Interference to BLANK0000054140 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance			
Desired:	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140				
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km			
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	271.6			
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	5.3			
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6			
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	212.6			
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2			
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6			
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX		
25364.9	19,853,836	23971.7	19,614,553	23673.2	19,518,009	23661.1	19,517,414	0.05	0.00	
Undesired				Total IX	Unique IX, before		Unique IX, after			
WNUV	D25	DT	BL	28.0	1,372	24.0	1,264			
WNUV	D25	DT	STA	40.1	1,967			36.1	1,859	
WNYE-TV	D24	DT	APP	12.1	5,145	0.0	0	0.0	0	
WMHT	D25	DT	CP	133.2	24,591	97.0	16,508	97.0	16,508	
WJAR	D25	DT	CP	125.2	56,420	97.0	48,445	97.0	48,445	
WFUT-DT	D26	DT	CP	48.2	22,244	32.2	17,099	32.2	17,099	

Interference to BLANK0000054140 LIC scenario 2

Call	Chan	Svc	Status	City, State	File Number	Distance
------	------	-----	--------	-------------	-------------	----------

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 750 kW - Page 6

Desired:	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	271.6
	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLEDT20071228ABM	5.3
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	212.6
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25364.9 19,853,836	23971.7 19,614,553	23673.2 19,518,009	23661.1 19,517,414	0.05 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	28.0 1,372	24.0 1,264	
WNUV D25 DT STA	40.1 1,967		36.1 1,859
WNYE-TV D24 DT LIC	12.1 5,145	0.0 0	0.0 0
WMHT D25 DT CP	133.2 24,591	97.0 16,508	97.0 16,508
WJAR D25 DT CP	125.2 56,420	97.0 48,445	97.0 48,445
WFUT-DT D26 DT CP	48.2 22,244	32.2 17,099	32.2 17,099

Interference to BLANK0000054140 LIC scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140			
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km		
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	271.6		
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	5.3		
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6		
	WMHT	D25	DT	APP	SCHENECTADY, NY	BLANK0000035673	212.6		
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2		
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
25364.9	19,853,836	23971.7	19,614,553	23632.8	19,509,687	23620.7	19,509,092	0.05	0.00

Interference to BLANK0000054140 LIC scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140			
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km		
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	271.6		
	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLEDT20071228ABM	5.3		
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6		
	WMHT	D25	DT	APP	SCHENECTADY, NY	BLANK0000035673	212.6		
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2		
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
25364.9	19,853,836	23971.7	19,614,553	23632.8	19,509,687	23620.7	19,509,092	0.05	0.00

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 750 kW - Page 7

WJAR D25 DT CP	125.2	56,420	93.0	45,508	93.0	45,508
WFUT-DT D26 DT CP	48.2	22,244	32.2	17,099	32.2	17,099

Interference to BLANK0000051674 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	W36DO-D	D25	LD	APP	DARBY, PA	BLANK0000051674	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	144.1 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	144.1
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	0.0
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	66.1
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	127.6
	W25FA-D	D25	LD	LIC	West Orange, NJ	BLANK0000053181	117.4
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	304.8
	WTFX-TV	D25	LD	APP	PHILADELPHIA, PA	BLANK0000054623	60.6
	W26DB-D	D26--	LD	LIC	West Orange, NJ	BLANK0000049187	117.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1405.7 2,603,512	1397.6 2,593,635	1328.9 2,536,077	1324.9 2,533,234	0.30 0.11

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 9,365	4.0 9,365	
WNUV D25 DT STA	8.1 12,208		8.1 12,208
WPHA-CD D24 DC LIC	8.1 10,123	8.1 10,123	8.1 10,123
WWOR-TV D25 DT LIC	12.1 14,637	8.1 14,298	8.1 14,298
WTFX-TV D25 LD APP	48.6 23,772	44.5 23,433	44.5 23,433

Interference to BLANK0000051674 APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	W36DO-D	D25	LD	APP	DARBY, PA	BLANK0000051674	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	144.1 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	144.1
	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	0.0
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	66.1
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	127.6
	W25FA-D	D25	LD	LIC	West Orange, NJ	BLANK0000053181	117.4
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	304.8
	WTFX-TV	D25	LD	APP	PHILADELPHIA, PA	BLANK0000054623	60.6
	W26DB-D	D26--	LD	LIC	West Orange, NJ	BLANK0000049187	117.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1405.7 2,603,512	1397.6 2,593,635	1308.7 2,514,744	1304.7 2,511,901	0.31 0.11

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 9,365	4.0 9,365	
WNUV D25 DT STA	8.1 12,208		8.1 12,208
WPHA-CD D24 DC CP	44.4 49,934	28.2 31,456	28.2 31,456
WWOR-TV D25 DT LIC	12.1 14,637	0.0 0	0.0 0
WTFX-TV D25 LD APP	48.6 23,772	40.5 19,592	40.5 19,592

Interference to BLANK0000054623 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTFX-TV	D25	LD	APP	PHILADELPHIA, PA	BLANK0000054623	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	171.0 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	171.0
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	124.4
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	60.6
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	45.3
	WASA-LD	D25	LD	LIC	Greenwich, CT	BLDTL20091222AQB	124.4
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	121.5

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 750 kW - Page 8

W25FA-D	D25	LD	LIC	West Orange, NJ	BLANK0000053181	102.9
WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	258.1
W36DO-D	D25	LD	APP	DARBY, PA	BLANK0000051674	60.6
W26DB-D	D26-	LD	LIC	West Orange, NJ	BLANK0000049187	102.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
5352.8	1,565,219	4679.5	1,358,376	4495.0	1,319,598	4495.0	1,319,598	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after		
WNUV D25 DT BL		12.0	1,051	8.0	866			
WNUV D25 DT STA		16.0	1,156			8.0	866	
WASA-LD D25 LD LIC		20.0	1,202	0.0	0	0.0	0	
WWOR-TV D25 DT LIC		148.3	25,334	116.3	21,480	112.3	21,375	
W36DO-D D25 LD APP		36.2	15,045	28.1	12,578	28.1	12,578	

Interference to BLANK0000054623 APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTXF-TV	D25	LD	APP	PHILADELPHIA, PA	BLANK0000054623	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	171.0 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	171.0
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	124.4
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	60.6
	W24CS-D	D24	LD	APP	READING, PA	BLANK0000059171	45.3
	WASA-LD	D25	LD	LIC	Greenwich, CT	BLDTL20091222AQB	124.4
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	121.5
	W25FA-D	D25	LD	LIC	West Orange, NJ	BLANK0000053181	102.9
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	258.1
	W36DO-D	D25	LD	APP	DARBY, PA	BLANK0000051674	60.6
	W26DB-D	D26-	LD	LIC	West Orange, NJ	BLANK0000049187	102.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
5352.8	1,565,219	4679.5	1,358,376	4438.9	1,315,109	4438.9	1,315,109	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after		
WNUV D25 DT BL		12.0	1,051	8.0	866			
WNUV D25 DT STA		16.0	1,156			8.0	866	
W24CS-D D24 LD APP		56.1	4,489	56.1	4,489	56.1	4,489	
WASA-LD D25 LD LIC		20.0	1,202	0.0	0	0.0	0	
WWOR-TV D25 DT LIC		148.3	25,334	116.3	21,480	112.3	21,375	
W36DO-D D25 LD APP		36.2	15,045	28.1	12,578	28.1	12,578	

Interference to BLCDT20041004ACS LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	314.7 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	314.7
	WEAO	D24	DT	CP	AKRON, OH	BLANK0000034293	150.8
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	133.5
	WXYZ-TV	D25	DT	CP	DETROIT, MI	BLANK0000034678	347.3
	WGPT	D26	DT	CP	OAKLAND, MD	BLANK0000034106	136.0
	WOSC-CD	D26	DC	CP	PITTSBURGH, PA	BLANK0000029678	7.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
31466.0	3,611,796	30277.0	3,503,139	30181.0	3,496,085	30168.9	3,495,387	0.04 0.02
Undesired		Total IX		Unique IX, before		Unique IX, after		
WNUV D25 DT BL		12.0	507	12.0	507			
WNUV D25 DT STA		24.1	1,205			24.1	1,205	
WEAO D24 DT CP		8.0	131	0.0	0	0.0	0	
WTAJ-TV D24 DT CP		12.0	244	12.0	244	12.0	244	
WXYZ-TV D25 DT CP		68.0	6,227	60.0	6,096	60.0	6,096	
WGPT D26 DT CP		4.0	76	4.0	76	4.0	76	

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 750 kW - Page 9

Interference to BLANK0000051589 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WWBK-LD	D25	LD	CP	RICHMOND, VA	BLANK0000051589			
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	219.0 km		
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	219.0		
	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	0.0		
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
9364.4 1,174,143		9356.5 1,174,116		9050.0 1,168,021		9050.0 1,168,021	0.00 0.00		
Undesired				Total IX	Unique IX, before	Unique IX, after			
WNUV D25 DT BL				7.9 37	7.9 37				
WNUV D25 DT STA				7.9 37		7.9 37			
WRLH-TV D24 DT CP				298.5 6,058	298.5 6,058	298.5 6,058			

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75			
Undesireds:	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	117.4 km		
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	144.1		
	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	71.3		
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	271.6		
	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	314.7		
	WAZT-CD	D26	DC	BL	WOODSTOCK, VA	DTVBL168449	150.8		
Service area		Terrain-limited		IX-free		Percent IX			
28961.1 9,046,435		27864.7 8,858,948		27824.6 8,844,164		0.14 0.17			
Undesired				Total IX	Unique IX	Prcnt Unique IX			
WDPB D24 DT CP				4.0 78	4.0 78	0.01 0.00			
WDCO-CD D24 DC CP				12.0 8,070	12.0 8,070	0.04 0.09			
WWOR-TV D25 DT LIC				8.1 5,145	8.1 5,145	0.03 0.06			
KDKA-TV D25 DT LIC				8.1 674	8.1 674	0.03 0.01			
WAZT-CD D26 DC BL				8.0 817	8.0 817	0.03 0.01			



ENVIRONMENTAL AND RADIO FREQUENCY SAFETY

The predicted emissions of WNUV must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WNUV, which will operate on television Channel 25 (536-542 MHz), the MPE is 359.33 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an “uncontrolled” environment and 1,796.7 $\mu\text{W}/\text{cm}^2$ in a “controlled” environment. The proposed WNUV facility will operate with a maximum ERP of 750 kW from a horizontally polarized directional transmitting antenna with a centerline height of 374.8 meters above ground level (AGL). Considering a conservative predicted vertical plane relative field factor of 0.300 the WNUV facility is predicted to produce a power density at two meters above ground level of 19.905 $\mu\text{W}/\text{cm}^2$, which is 5.54% of the FCC guideline value for an “uncontrolled” environment, and 1.108% of the FCC’s guideline value for “controlled” environments. There are four other full-power DTV facilities, four LPFM facilities and three FM radio stations that are located at, or within relevant proximity of, the WNUV site. The total estimated percentage of the ANSI value at the proposed site, including the cumulative radiation from all authorizations located within the relevant proximity, is 49.13% of the limit applicable to “uncontrolled” environments, and 9.826% of the limit for “controlled” environments. (See Appendix A)

APPENDIX A

SUMMARY OF RADIOFREQUENCY RADIATION STUDY

WNUV, Baltimore, MD
Channel 25, 750 kW, 372.8 m HAAT
September, 2018

CALL	SERVICE	CHANNEL	FREQUENCY	POLAR- IZATION	ANTENNA HEIGHT	ERP (kW)	VERT. RELATIVE FIELD FACTOR	WORST-CASE PREDICTED POWER DENSITY ($\mu\text{W}/\text{cm}^2$)	FCC UNCONTROLLED LIMIT ($\mu\text{W}/\text{cm}^2$)	PERCENT OF UNCONTROLLED LIMIT
WNUV	DT	25	539	H	374.8	920.000	0.300	19.905	359.33	5.54%
WBFF	DT	26	545	H	374.8	440.000	0.300	9.520	363.33	2.62%
WJZ-TV	DT	11	201	H & V	295	30.000	0.300	2.102	200.00	1.05%
WBAL-TV	DT	12	207	H & V	295	27.200	0.300	1.905	200.00	0.95%
WMAR-TV	DT	27	551	H & V	294.6	830.000	0.300	58.301	367.33	15.87%
WTIZ-LP	FM	228	93.5	H	152	0.004	1.000	0.006	200.00	0.00%
W248AO	FM	248	97.5	H	210	0.250	1.000	0.193	200.00	0.10%
WIYY	FM	250	97.9	H & V	275	13.500	1.000	12.104	200.00	6.05%
WLIF (AUX)	FM	270	101.9	H & V	273	2.600	1.000	2.366	200.00	1.18%
WZFT	FM	282	104.3	H & V	296	13.000	1.000	10.050	200.00	5.02%
WJZ-FM (AUX)	FM	289	105.7	H & V	273	0.430	1.000	0.391	200.00	0.20%
W291BA	FM	291	106.1	H & V	273	0.250	1.000	0.227	200.00	0.11%
WWMX (AUX)	FM	293	106.5	H & V	210	13.500	1.000	20.850	200.00	10.43%

TOTAL PERCENTAGE OF FCC GUIDELINE VALUE = 49.13%

* For television stations a very conservative vertical relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION FOR
MINOR MODIFICATION OF
POST REPACK CONSTRUCTION PERMIT
FILE # 0000034499
WNUV - BALTIMORE, MARYLAND
DTV - CH. 25 - 920 kW - 372.8 m HAAT**

Prepared for: BALTIMORE (WNUV-TV) LICENSEE, INC.

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, No. 7418, and in New York State, No. 63418.

GENERAL

This office has been authorized by BALTIMORE (WNUV-TV) LICENSEE, INC., licensee of WNUV, channel 40, facility ID number 7933, licensed to Baltimore, Maryland, to prepare this statement, FCC Form 2100, Schedule A, its technical sections, and the associated exhibits in support of an application for a minor modification of its construction permit, file # 0000034499, which authorizes WNUV to use DTV channel 25 for its post-reassignment broadcasting.

DISCUSSION

Since the applicant has been unable to install the antenna that is authorized in WNUV's construction permit, file # 0000034499, in a timely manner to permit the station's change over to channel 25, the instant application seeks a minor modification of WNUV's construction permit to permit the substitution of its existing panel antenna at its current

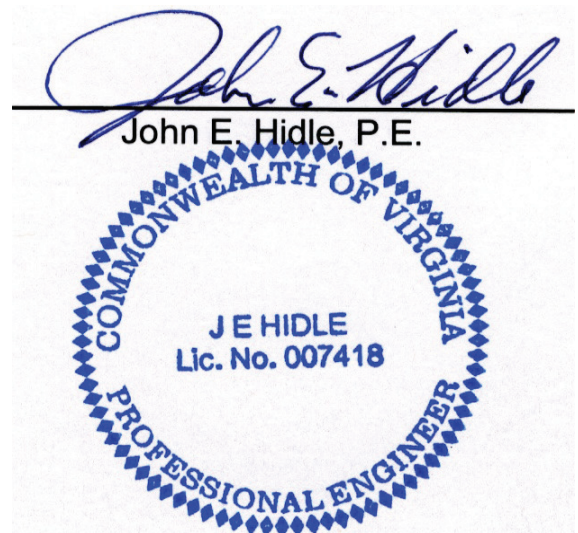
STATEMENT OF JOHN E. HIDLE, P.E.
WNUV - Baltimore, Maryland
PAGE 2

HAAT of 372.8 meters. If necessary the applicant requests waiver of Section 73.1690, and any other pertinent rule, which would permit WNUV to commence broadcasting on its post repack channel 25. The proposed ERP is the same at 920 kW. The current authorization requires that the field strength at the FCC's Laurel monitoring station must not exceed 77 mV/m, and is predicted to be only 53.1 mV/m. No other changes are sought.

SUMMARY

It is submitted that the instant application for a minor modification of construction permit, file # 0000034499, which authorizes WNUV to broadcast on its post-repack DTV channel 25, and the applicant's waiver request, as described herein, complies with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement, FCC Form 2100, its technical sections, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: August 31, 2018





ENVIRONMENTAL AND RADIO FREQUENCY SAFETY

The licensee of WNUV is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WNUV antenna, and is committed to reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to personnel.

The predicted emissions of WNUV must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WNUV, which will operate on television Channel 25 (536-542 MHz), the MPE is 359.33 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an “uncontrolled” environment and $1,796.7 \mu\text{W}/\text{cm}^2$ in a “controlled” environment. The proposed WNUV facility will operate with a maximum ERP of 425 kW from a horizontally polarized directional transmitting antenna with a centerline height of 374.8 meters above ground level (AGL). Considering a conservative predicted vertical plane relative field factor of 0.300 the WNUV facility is predicted to produce a power density at two meters above ground level of $9.195 \mu\text{W}/\text{cm}^2$, which is 2.56% of the FCC guideline value for an “uncontrolled” environment, and 0.512% of the FCC’s guideline value for “controlled” environments. There are four other full-power DTV facilities, four LPFM facilities and three FM radio station that are located at the WNUV site. The total estimated percentage of the ANSI value at the proposed site, including the cumulative radiation from all authorizations located within the relevant proximity, is 44.73% of the limit applicable to “uncontrolled” environments, and 8.946% of the limit for “controlled” environments. (See Appendix A)

SUMMARY OF RADIOFREQUENCY RADIATION STUDY

WNUV, Baltimore, MD

Channel 25, 425 kW, 372.8 m HAAT

June, 2017

CALL	SERVICE	CHANNEL	FREQUENCY	POLAR- IZATION	ANTENNA HEIGHT	ERP (kW)	VERT. RELATIVE FIELD FACTOR	WORST-CASE PREDICTED POWER DENSITY ($\mu\text{W}/\text{cm}^2$)	FCC UNCONTROLLED LIMIT ($\mu\text{W}/\text{cm}^2$)	PERCENT OF UNCONTROLLED LIMIT
WNUV	DT	25	539	H	374.8	425.000	0.300	9.195	359.33	2.56%
WJZ-TV	DT	11	201	H & V	295	33.800	0.300	2.368	200.00	1.18%
WBAL-TV	DT	12	207	H	286	26.600	0.300	0.992	200.00	0.50%
WMAR-TV	DT	27	551	H & V	298	797.000	0.300	54.704	367.33	14.89%
WBFF	DT	26	545	H	374.8	420.000	0.300	9.087	363.33	2.50%
WTIZ-LP	FM	228	93.5	H	152	0.004	1.000	0.006	200.00	0.00%
W248AO	FM	248	97.5	H	210	0.250	1.000	0.193	200.00	0.10%
WYYY	FM	250	97.9	H & V	275	13.500	1.000	12.104	200.00	6.05%
WLIF (AUX)	FM	270	101.9	H & V	273	2.600	1.000	2.366	200.00	1.18%
WZFT	FM	282	104.3	H & V	296	13.000	1.000	10.050	200.00	5.02%
WJZ-FM (AUX)	FM	289	105.7	H & V	273	0.430	1.000	0.391	200.00	0.20%
W291BA	FM	291	106.1	H & V	273	0.250	1.000	0.227	200.00	0.11%
WWMX (AUX)	FM	293	106.5	H & V	210	13.500	1.000	20.850	200.00	10.43%
TOTAL PERCENTAGE OF FCC GUIDELINE VALUE =										44.73%

* For television stations a very conservative vertical relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.



ENVIRONMENTAL AND RADIO FREQUENCY SAFETY

The predicted emissions of WNUV must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WNUV, which will operate on television Channel 25 (536-542 MHz), the MPE is 359.33 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an “uncontrolled” environment and 1,796.7 $\mu\text{W}/\text{cm}^2$ in a “controlled” environment. The proposed WNUV facility will operate with a maximum ERP of 920 kW from an elliptically polarized directional transmitting antenna with a centerline height of 383.6 meters above ground level (AGL). Considering a conservative predicted vertical plane relative field factor of 0.300 the WNUV facility is predicted to produce a power density at two meters above ground level of 37.994 $\mu\text{W}/\text{cm}^2$, which is 10.57% of the FCC guideline value for an “uncontrolled” environment, and 2.114% of the FCC’s guideline value for “controlled” environments. There are four other full-power DTV facilities, four LPFM facilities and three FM radio stations that are located at, or within relevant proximity of, the WNUV site. The total estimated percentage of the ANSI value at the proposed site, including the cumulative radiation from all authorizations located within the relevant proximity, is 54.16% of the limit applicable to “uncontrolled” environments, and 10.832% of the limit for “controlled” environments. (See Appendix A)

APPENDIX A

SUMMARY OF RADIOFREQUENCY RADIATION STUDY

WNUV, Baltimore, MD
Channel 25, 920 kW, 381 m HAAT
July, 2018

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLAR- IZATION</u>	<u>ANTENNA HEIGHT</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>WORST-CASE PREDICTED POWER DENSITY ($\mu\text{W}/\text{cm}^2$)</u>	<u>FCC UNCONTROLLED LIMIT ($\mu\text{W}/\text{cm}^2$)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
WNUV	DT	25	539	H & V	383.6	920.000	0.300	37.994	359.33	10.57%
WBFF	DT	26	545	H	374.8	440.000	0.300	9.520	363.33	2.62%
WJZ-TV	DT	11	201	H & V	295	30.000	0.300	2.102	200.00	1.05%
WBAL-TV	DT	12	207	H & V	295	27.200	0.300	1.905	200.00	0.95%
WMAR-TV	DT	27	551	H & V	294.6	830.000	0.300	58.301	367.33	15.87%
WTIZ-LP	FM	228	93.5	H	152	0.004	1.000	0.006	200.00	0.00%
W248AO	FM	248	97.5	H	210	0.250	1.000	0.193	200.00	0.10%
WIYY	FM	250	97.9	H & V	275	13.500	1.000	12.104	200.00	6.05%
WLIF (AUX)	FM	270	101.9	H & V	273	2.600	1.000	2.366	200.00	1.18%
WZFT	FM	282	104.3	H & V	296	13.000	1.000	10.050	200.00	5.02%
WJZ-FM (AUX)	FM	289	105.7	H & V	273	0.430	1.000	0.391	200.00	0.20%
W291BA	FM	291	106.1	H & V	273	0.250	1.000	0.227	200.00	0.11%
WWMX (AUX)	FM	293	106.5	H & V	210	13.500	1.000	20.850	200.00	10.43%

TOTAL PERCENTAGE OF FCC GUIDELINE VALUE = 54.16%

* For television stations a very conservative vertical relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.



ENVIRONMENTAL AND RADIO FREQUENCY SAFETY

The predicted emissions of WNUV must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WNUV, which will operate on television Channel 25 (536-542 MHz), the MPE is 359.33 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an “uncontrolled” environment and 1,796.7 $\mu\text{W}/\text{cm}^2$ in a “controlled” environment. The proposed WNUV facility will operate with a maximum ERP of 750 kW from a horizontally polarized directional transmitting antenna with a centerline height of 374.8 meters above ground level (AGL). Considering a conservative predicted vertical plane relative field factor of 0.300 the WNUV facility is predicted to produce a power density at two meters above ground level of 19.905 $\mu\text{W}/\text{cm}^2$, which is 5.54% of the FCC guideline value for an “uncontrolled” environment, and 1.108% of the FCC’s guideline value for “controlled” environments. There are four other full-power DTV facilities, four LPFM facilities and three FM radio stations that are located at, or within relevant proximity of, the WNUV site. The total estimated percentage of the ANSI value at the proposed site, including the cumulative radiation from all authorizations located within the relevant proximity, is 49.13% of the limit applicable to “uncontrolled” environments, and 9.826% of the limit for “controlled” environments. (See Appendix A)

APPENDIX A

SUMMARY OF RADIOFREQUENCY RADIATION STUDY

WNUV, Baltimore, MD
Channel 25, 750 kW, 372.8 m HAAT
September, 2018

CALL	SERVICE	CHANNEL	FREQUENCY	POLAR- IZATION	ANTENNA HEIGHT	ERP (kW)	VERT. RELATIVE FIELD FACTOR	WORST-CASE PREDICTED POWER DENSITY ($\mu\text{W}/\text{cm}^2$)	FCC UNCONTROLLED LIMIT ($\mu\text{W}/\text{cm}^2$)	PERCENT OF UNCONTROLLED LIMIT
WNUV	DT	25	539	H	374.8	920.000	0.300	19.905	359.33	5.54%
WBFF	DT	26	545	H	374.8	440.000	0.300	9.520	363.33	2.62%
WJZ-TV	DT	11	201	H & V	295	30.000	0.300	2.102	200.00	1.05%
WBAL-TV	DT	12	207	H & V	295	27.200	0.300	1.905	200.00	0.95%
WMAR-TV	DT	27	551	H & V	294.6	830.000	0.300	58.301	367.33	15.87%
WTIZ-LP	FM	228	93.5	H	152	0.004	1.000	0.006	200.00	0.00%
W248AO	FM	248	97.5	H	210	0.250	1.000	0.193	200.00	0.10%
WIYY	FM	250	97.9	H & V	275	13.500	1.000	12.104	200.00	6.05%
WLIF (AUX)	FM	270	101.9	H & V	273	2.600	1.000	2.366	200.00	1.18%
WZFT	FM	282	104.3	H & V	296	13.000	1.000	10.050	200.00	5.02%
WJZ-FM (AUX)	FM	289	105.7	H & V	273	0.430	1.000	0.391	200.00	0.20%
W291BA	FM	291	106.1	H & V	273	0.250	1.000	0.227	200.00	0.11%
WWMX (AUX)	FM	293	106.5	H & V	210	13.500	1.000	20.850	200.00	10.43%

TOTAL PERCENTAGE OF FCC GUIDELINE VALUE = 49.13%

* For television stations a very conservative vertical relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.