Federal Communications Commission Washington, D.C. 20554	Approved by OMB 3060-0029 (July 2011)	
	FCC 340	
FOR RESE NONCOMMERCIAL I	CONSTRUCTION PERMIT	FOR COMMISSION USE ONLY FILE NO
Read INSTRUCTI	ONS Before Filling Out Form	

Section I - General Information

1.	Legal Name of the Licensee/Permittee SHENANDOAH VALLEY EDUCATIONAL TELEVISION CORPORATION					
	City HARRISONBURG	State or Country VA	y (if foreign address)	Zip Code 22801 - 3052		
	Telephone Number (include area code) 5404345391	E-Mail Address TMANCARI@				
	FCC Registration Number:	Call Sign WVPT		Facility Identifier 60111		
2.	Contact Representative (if other than license EVE R. POGORILER	e/Permittee)		Firm or Company Name COVINGTON & BURLING LLP		
	Mailing Address 1201 PENNSYLVANIA AVE., N.W.					
	City State or Country (if foreign address) WASHINGTON DC		y (if foreign address)	ZIP Code 20004 - 2401		
	Telephone Number (include area code) 2026625345		E-Mail Address (if available) EPOGORILER@COV.COM			
3.	Is this application being filed in response to a If Yes, specify closing date and/or window n			C Yes C No		
4	Application Purpose					
	C New station		Major Modification of constr	ruction permit		
	Major Change in licensed facility		Minor Modification of construction permit			
	Minor Change in licensed facility		Major Amendment to pending applicationMinor Amendment to pending application			
	(a) File number of original construction permit:		-			
	(b) Service Type:		C FM C TV C DTV © DT	S		
	(c) DTV Type:		C Pre-Transition C Post-Transition C Both			
	(d) Community of License:					
	City: STAUNTON		State: VA			

(e) Facility Type	• Main C Auxiliary	
If an amendment, submit as an Exhibit a lis pending application that are being revised.	ting by Section and Question Number the portions of the	[Exhibit 1]

NOTE: The failure to include an explanatory providing full particulars in connection with a "No" response may result in dismissal of the application. See Instructions, paragraph L for additional information regarding completion of explanatory exhibits.

SECTION II - Legal and Financial

	Certification. Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets.	• Yes • No
2	Eligibility. Each application must answer "Yes" to one and "No" to two of the three following certifications. An applicant should not submit an explanatory exhibit in connection with these Question 2 "No" responses.	
	The applicant certifies that it is:	
	a. a nonprofit educational institution; or	C Yes C No
	b. a governmental entity other than a school; or	C Yes C No
	c. a nonprofit educational organization, other than described in a. or b.	C Yes C No
3	For applicants checking "Yes" to question 2(c) and applying for a new noncommercial educational television station only, the applicant certifies that the applicant's officers, directors and members of its governing board are broadly representative of the educational, cultural, and civic segments of the principal community to be served.	C _{Yes} C _{No} C _{N/A}
4	a. The applicant certifies that the Commission has previously granted a broadcast application identified here by file number that found this applicant qualified as a noncommercial educational entity with a qualifying educational program, and that the applicant will use the proposed station to advance a program similar to that the Commission has found qualifying in applicant's previous application.	Yes No FCC FileNumber - [Exhibit 2]
	b. Applicants who answered "No" to Question 4(a), must include an exhibit that describes the applicant's educational objective and how the proposed station will be used to advance an educational program that will further that objective according to 47 C.F.R. Section 73.503 (for radio applicants) and 47 C.F.R. Section 73.621 (for television applicants).	
5	The applicant certifies that its governing documents (e.g., articles of incorporation, by-laws, charter, enabling statute, and/or other pertinent organizational document) permit the applicant to advance an educational program and that there is no provision in any of those documents that would restrict the applicant from advancing an educational program or complying with any Commission rule, policy, or provision of the Communications Act of 1934, as amended.	C Yes C No
6	a. Parties to the Application. List separately each party to the application including, as applicable, the applicant, its officers, directors, five percent or greater stockholders, non-insulated partners, members, and all other persons and entities with attributable interests. If another entity hold an attributable interest in the applicant, list separately, as applicable, its officers, directors, five percent or greater stockholders, non-insulated partners, and board members. Create a separate row for each individual or entity. Attach additional pages if necessary.	
	[Enter Parties/Owners Information]	

	b. Applicant certifies that equity and financial interests not set forth above are non-attributable pursuant to 47 C.F.R. Section 73.3555 and that there are no agreements or understandings with any non-party that would give influence over the applicant's programming, personnel, or finances to that non-party.	C Yes C No [Exhibit 3]			
7.	Other Authorizations. List call signs, locations, and facility identifiers of all other broadcast stations in which applicant or any party to the application has an attributable interest pursuant to the notes to 47 C.F.R. Section 73.3555.	N/A [Exhibit 4]			
8.	Character Issues. Applicant certifies that neither applicant nor any party to the application has or has had any interest in or connection with: a. any broadcast application in any proceeding where character issues were left unresolved or	C Yes C No See Explanation in			
	were resolved adversely against the applicant or party to the application; or	[Exhibit 5]			
	b. any pending broadcast application in which character issues have been raised.				
9.	Adverse Findings. Applicant certifies that, with respect to the applicant, any party to the application, and any non-party equity owner in the applicant, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any law related to any of the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another government unit; or discrimination.	Yes No See Explanation in [Exhibit 6]			
	If the answer is "No," attach as an Exhibit a full disclosure concerning the persons and matters involved, including an identification of the the court or administrative body and the proceeding (by dates and file numbers), and a description of the disposition of the matter. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 C.F.R. Section 1.65, the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.				
10.	Alien Ownership and Control. Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments.	C Yes C No See Explanation in [Exhibit 7]			
11.	Program Service Certification. 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.	C Yes C No			
12.	Local Public Notice. Applicant certifies compliance with the public notice requirements of 47 C.F.R. Section 73.3580.	C Yes C No			
13.	Anti-Drug Abuse Act Certification. Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.	• Yes C No			
14.	Equal Employment Opportunity (EEO). 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 on FCC Form 396-A.	$^{ extsf{C}}_{ ext{Yes}}$ $^{ extsf{C}}_{ ext{N/A}}$			
1 -	QUESTIONS 15, 16 AND 17 APPLY ONLY TO APPLICANTS FOR NEW STATIONS. OTHER APPLICANTS CAN PROCEED TO QUESTION 18.				
15.	Financial. The applicant certifies that sufficient net liquid assets are on hand or that sufficient funds are available from committed sources to construct and operate the requested facilities for three	C Yes C No			
	If "No" to 15., answer question 16. and 17.	See Explanation in [Exhibit 8]			
16.	Is this application contingent upon receipt of a grant from the National Telecommunications and Information Administration?	C Yes C No			

17.	Is this application contingent upon receipt of a grant from a charitable organization, the approval of the budget of a school or university, or an appropriation from a state, county, municipality or other political subdivision?	C Yes C No
app app Co Ap	TE: If Yes to 16. or 17., the application cannot be granted unconditionally until all of the necessary funds propriated. In the case of grants from the National Telecommunications and Information Administration, noticant's part is required. If the applicant relies on funds from a source specified in Question 17., the applicants when the funds are committed or appropriated. This should be accomplished by letter amer plicants should take note that the Commission's construction period is not considered "tolled" by funding must granted conditionally on funding will expire if the station is not constructed for any reason, including	to further action on the cant must advise the adment to the application. difficulties and that any lack of funding.
	JESTIONS 18 AND 19 DO NOT APPLY TO APPLICATIONS FOR NEW STATIONS. APPLICAN ATIONS CAN PROCEED TO SECTION III. APPLICANTS FOR NEW TV STATIONS CAN PRO	
Ho	lding Period.	
18.	Applicant certifies that this application does not propose a modification to an authorization that was awarded on the basis of a preference for fair distribution of service pursuant to 47 U.S.C. Section 307(b).	C Yes C No
	If "No," answer a. and b. below. If applicant answers "No" to 18. above and cannot answer "Yes" to either a. or b. below, the application is unacceptable.	
	a. Applicant certifies that the proposed modification will not downgrade service to the area on which the Section 307(b) preference was based.	C Yes C No
	b. Applicant certifies that although it proposes to downgrade service to the area on which the Section 307(b) preference was based, applicant has provided full service to that area for a period of four years of on-air operations.	C Yes C No
19.	Applicant certifies that this application does not propose a modification to an authorized station that received a credit for superior technical parameters under the point system selection method in 47 C.F.R. Section 73.7003.	C Yes C No
	If "No," applicant must be able to answer "Yes" to a. below or provide an exhibit that makes a compelling showing that the downgrade would be in the public interest.	
	a. Applicant certifies that the population and area within the proposed service contour (60 dBu (FM) or grade B (TV)) are greater than or equivalent to those authorized.	C Yes C No [Exhibit 9]

Section III Fair Distribution of Service Pursuant to 47 U.S.C. Section 307(b) (New and Major Changes to FM Radio Only) (Other applicants can proceed to Section IV).

Applicant certifies that it provides a first aural (reception) service. Applicants answering "Yes" must provide an Exhibit.	Yes No
2. Applicant certifies that (1) it is a Tribal Applicant, as defined in 47 C.F.R. Section 73.7000; (2) the facilities proposed in this Application will provide Tribal Coverage, as defined in 47 C.F.R. Section 73.7000, of Tribal Lands occupied by the applicant Tribe(s); (3) the proposed community of license is located on Tribal Lands, as defined in 47 C.F.R. Section 73.7000; and (4) the proposed facility would be the first local tribal-owned noncommercial educational transmission service at the proposed community of license. Applicants answering "Yes" must provide an Exhibit.	O Yes O No [Exhibit 11]
8. Applicant certifies that the proposed station will provide a first noncommercial educational aural service to (a) at least 10 percent of the people residing within the station's 60 dBu (1 mV/m) service contour and (b) to a minimum of 2,000 people. Applicants answering "Yes" must provide an Exhibit.	105 - 110
Applicant certifies that the proposed station will provide a second noncommercial educational aural service, or an aggregated first and second noncommercial educational aural service, to (a) at least 10 percent of the people residing within the station's 60 dBu (1 mV/m) service contour and (b) to a minimum of 2,000 people. Applicants answering "Yes" must provide an Exhibit.	C Yes C No [Exhibit 13]

Section IV Point System Factors - New and Major Change Applications Only (used to select among mutually exclusive radio and television applications for new stations and major modifications) **NOTE**: Applicants will not receive any additional points for amendments made after the close of the application filing window.

		Established Local Applicant: Applicant certifies that for at least the 24 months immediately prior to application, and continuing through the present, it qualifies as a local applicant pursuant to 47 C.F.R. Section 73.7000, that its governing documents require that such localism be maintained, and that it has blaced documentation of its qualifications as an established local applicant in a local public inspection file and has submitted to the Commission copies of the documentation.	C Yes C No			
	1 (1	Diversity of Ownership: (a) Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized station (comparing radio and television to television, including non-fill-in translator stations other than those dentified in 2(b) below) in which any party to the application has an attributable interest as defined in 47 C.F.R. Section 73.3555, that its governing documents require that such diversity be maintained, and that it has placed documentation of its diversity qualification in a local public inspection file and has submitted to the Commission copies of the documentation.	C Yes C No			
	- 11	(b) Is the application's certification to 2(a) based on its exclusion of translator station(s) that will be replaced with a full service station pursuant to the authorization requested here?	C Yes C No			
	1	If Yes, applicant must include an exhibit identifying the translator station authorization for which it will request cancellation upon commencement of operation of the proposed full service station (i.e., upon its filing of a license application and receipt of program test authority).	[Exhibit 14]			
	3.	State-wide Network: Applicant certifies that (a) it has NOT claimed a credit for diversity of ownership above: (b) it is one of the three specific types of organizations described in 47 C.F.R. Section 73.7003(b)(3); and (c) it has placed documentation of its qualifications in a local public inspection file and has submitted to the Commission copies of the documentation.	C Yes C No			
		Technical Parameters: Applicant certifies that the numbers in the boxes below accurately reflect the new area and population that its proposal would serve with a 60 dBu (FM) or Grade B (TV) signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) (FM) and 73.683(TV) and that it has documented the basis for its calculations in the local public inspection file and has submitted copies to the Commission. Major modification applicants should include the area of proposed increase only (exclude any area already within the station's existing service area). (Points, if any, will be determined by FCC) New area served in square kilometers (excluding areas of water):	C Yes C No			
	Ì	Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:				
ŀ	SECTION V - Tie Breakers - New and Major Change Applications Only (used to choose among competing radio and television applications receiving the same number of points in Section IV)					
	1. Existing Authorizations. By placing a number in the box, the applicant certifies that it and other parties to the application have, as of the date of filing and pursuant to 47 C.F.R. Section 73.3555, attributable interests in the stated number of relevant broadcast station authorizations. Radio applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial, and FM translator stations other than fill-in stations or those identified in IV (2)(b) above. TV applicants should count all attributable full service TV stations, commercial and noncommercial and TV translator stations other than fill-in stations or those identified in IV(2)(b) above. (number of commercial and non-commercial licenses and construction permits)					
		Pending Applications. By placing a number in the box, the applicant certifies that it and other parties to of the date of filing and pursuant to 47 C.F.R. Section 73.3555, attributable interests in the stated number for new or major changes to relevant broadcast stations. Radio applicants should count all attributable ful AM and FM, commercial and noncommercial, and FM translator stations other than fill-in stations or the above. TV applicants should count all attributable full service TV stations, commercial and noncommercial stations other than fill-in stations or those identified in IV(2)(b) above. (number of pending commercial and non-commercial applications)	of pending applications Il service radio stations, see identified in IV(2)(b)			

Section VI -- Certification

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing TONY MANCARI	Typed or Printed Title of Person Signing COO
Signature	Date 12/20/2011

Section VII Preparer's Certification

I certify that I have prepared Section VII (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name DOUG VERNIER		Relationship to Applicant (e.g., Consulting Engineer) ENGINEERING CONSULTANT	
Signature		Date 12/20/2011	
Mailing Address TELECOMMUNICATIONS CONSULTANTS 401 MAIN ST., SUITE 213			
City CEDAR FALLS	-	• , •	Zip Code
Telephone Number (include area code) 3192668402	1	ss (if available) V-SOFT.COM	50613-

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

a=					
SECTION VIII - DTS Engineering					
GENERAL QUESTIONS . Complete the following questions that relate to the proposed DTS facility as a whole.					
1.	Channel Number: 11				
2.	Zone: O I O III				
3.	Reference Point Coordinates for Table of Distances, in accordance with Section 73.626(c Latitude: Degrees 38 Minutes 9 Seconds 54 North South Longitude: Degrees 79 Minutes 18 Seconds 51 West East) of the rules:			
4.	File Number for Current Authorized Service Area: BLEDT-20021220ADX				
5.	The proposed DTS facility will operate on the DTV channel for this station as established in the Post-Transition DTV Table of Allotments, 47 C.F.R. Section 73.622(i).	• Yes C No			
6.	The proposed DTV station satisfies the interference protection provisions of 47 C.F.R. Sections 73.616 and 73.626. If "No," attach as an Exhibit justification.	Yes No [Exhibit 40]			
7.	The proposed DTV station satisfies the coverage requirement in 47 C.F.R. Section 73.625 and, therefore, will encompass the allotted principal community.	Yes No [Exhibit 41]			

	If "No," attach as an Exhibit justification.				
8.	The proposed DTS facility satisfies the requirements in 47 C.F.R. Section 73.626 in the following respects:				
	(a) The combined coverage from all of the DTS transmitters in the proposed DTS facility covers all of the station's authorized service area, as required in 47 C.F.R. Section 73.626(f)(1). If "No," attach as an Exhibit justification.	• Yes • No [Exhibit 42]			
	(b) Each DTS transmitter's coverage is contained within either the DTV station's Table of Distances area (47 C.F.R. Section 73.626 (c)) or its authorized service area, except where such coverage is of a minimal amount and necessary to meet the requirements of 47 C.F.R. Section 73.626(f)(1).				
	 Yes, coverage entirely contained within station's authorized service area. Yes, but coverage exceeds station's authorized service area by "minimal amount". No Attach as an Exhibit a justification if "No" or if "Yes but coverage exceeds station's 				
	authorized service area by minimal amount".	[Exhibit 43]			
	(c) Each DTS transmitter's coverage is contiguous with at least one other DTS transmitter's coverage, as required in 47 C.F.R. Section 73.626(e)(3).	€ Yes C No			
	If "No," attach as an Exhibit justification.	[Exhibit 44]			
	(d) The coverage from one or more DTS transmitter(s) in the DTS facility provide(s) principal community coverage, as required in 47 C.F.R. Section 73.626(e)(4).				
	Yes, one transmitter provides principal community coverage. Yes, multiple transmitters provide principal community coverage. No If "No," or if "Yes, multiple transmitters provide principal community coverage," attach as Exhibit No. an Exhibit justification.	Contribit 461			
		[Exhibit 45]			
	(e) The combined field strength of all of the DTS transmitters in the proposed DTS facility do not cause interference to another station in excess of the criteria specified in 47 C.F.R. Section 73.616, as required in 47 C.F.R. Section 73.626(e)(5).	• Yes • No [Exhibit 46]			
	If "No," attach as an Exhibit justification.				
	Note: The combined field strength level shall be determined by a "root-sum-square" calculation, where the combined field strength level at a given location is equal to the square root of the sum of the squared field strengths from each transmitter in the DTS network at that location.				
	(f) Each DTS transmitter in the proposed DTS facility is located within either the DTV station's Table of Distances area or its authorized service area.	€ Yes C No			
	If "No," attach as an Exhibit justification.	[Exhibit 47]			
9.	Environmental Protection Act.				
	(a) The proposed DTS facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the limits specified in 47 C.F.R. Sections 1.1307 and 1.1310.	€ Yes C No			
	(b) Submit in an Exhibit the following for each transmitter site in the proposed DTS facility:	[Exhibit 48]			

	If "Yes," provide a brief explanation for each site of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to each transmitter site.	
	Note: By checking "Yes" to this question, the applicant also certifies that it, in coordination with other users of each transmitter site, will reduce power or cease operation as necessary to protect persons having access to each site, transmitter or antenna from radio frequency electromagnetic exposure in excess of FCC guidelines.	
	If "No," provide an Environmental Assessment as required by 47 C.F.R. Section 1.1311.	
10.	The proposed DTS facility satisfies the requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations.	€ Yes C No
11.	The antenna structures to be used by the proposed DTS facility have been registered with the Commission and will not require re-registration to support the proposed antennas, OR the FAA has previously determined that the proposed antenna structures will not adversely effect safety in air navigation and these structures qualify for later registration under the Commission's phased registration plan, OR the proposed installation on these antenna structures do not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.	€ Yes C No

[Tech Specs - Transmitter Sites]

SI	CTION VIII - DTS Engineering							
- 11	TECHNICAL SPECIFICATIONS							
	Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All							
ite	items must be completed. The response "on file" is not acceptable.							
Tl	CCH BOX							
1.	DTS Site Number: 1							
2.	Antenna Location Coordinates: (NAD 27):							
	Latitude:							
	Degrees 38 Minutes 9 Seconds 54 North South							
	Longitude:							
	Degrees 79 Minutes 18 Seconds 51							
3.	Antenna Structure Registration Number:							
	▼ Not Applicable □ Notification filed with FAA							
4.	Antenna Location Site Elevation Above Mean Sea Level: 1323 meters							
5.	Overall Tower Height Above Ground Level: 12 meters							
6.	Height of Radiation Center Above Ground Level: 10 meters							
7.	Height of Radiation Center Above Average Terrain: 689 meters							
8.	Maximum Effective Radiated Power (average power): 10 kW							
9.	Antenna Specifications:							
	a. Manufacturer MCI Model SERIES 953422							
	b. Electrical Beam Tilt:							
	1 degrees Not Applicable							
	1 degrees - Not Applicable							

c. Mechan	c. Mechanical Beam Tilt:										
degrees	s toward a	azimuth									
degrees	degrees True Not Applicable										
d. Poloriz	ation:										
● Hor	Horizontal Circular Elliptical										
e. Direction	e. Directional Antenna Relative Field Values: Not applicable (Nondirectional)										
Rotatio	on (Degre	es): 🔽 No	Rotation								
Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0	0.03	10	0.01	20	0.04	30	0.01	40	0.19	50	0.32
60	0.46	70	0.61	80	0.75	90	0.84	100	0.9	110	0.82
120	0.73	130	0.68	140	0.88	150	1	160	0.87	170	0.7
180	0.72	190	0.89	200	0.9	210	0.84	220	0.79	230	0.73
240	0.42	250	0.28	260	0.18	270	0.07	280	0.02	290	0.02
300	0.03	310	0.03	320	0.02	330	0.02	340	0.02	350	0.03
Additional		11.5	0.00	107	0.67	1.40		172	0.605	105	0.01
Azimuths	1 4	115	0.08	127	0.67	149 ED S4:-	1 72 625	173 5(c) must be	0.695	195	0.91
satisfied. E			osea, the i	requirement	S 01 4 / C	.r.k. secno	ns /3.623	o(c) must be		[EXII]	bit 49]
L				1 ,	1	1.		.1 .	*,1	_	
f. Elevatio azimuth for							ation patt	erns that va	ry with	U Ye	es 💽 No
g. Require							Section 2	73 625(c)		ſĘxh	ibit 50]
g. Require	u Lamoi	t. Attach as	, un Ezime	on an aaa s	pecifica	n 17 C.I.i.c.	beetion	73.023(0).		[LAI	1011 50]
The elevation							-				
Spreadsheet subsequent,						-					
shall list the	-	•		_							
horizontal (
include data											
not more th	_		-								
elevation ar 350 degrees											
field value											
maximum E		1			•		•				
REPARER'S	CERTI	FICATION	N ON SE	CTION III	MUST B	BE COMPL	ETED A	AND SIGNI	ED.		

Tl	TECH BOX									
1.	1. DTS Site Number: 2	OTS Site Number: 2								
	2. Antenna Location Coordinates: (NAD 27): Latitude: Degrees 37 Minutes 59 Seconds 0 North South									
	Longitude: Degrees 78 Minutes 29 Seconds 2									

TECH BOX

3.		Antenna Structure Registration Number: Not Applicable Notification filed with FAA										
4.	Antenna Lo	ocation Si	te Elevation	Above I	Mean Sea L	evel:			427	7 meters		
5.	Overall To	wer Heigh	t Above Gr	ound Lev	vel:				91	meters		
6.	Height of F	Height of Radiation Center Above Ground Level: 68 meters										
7.	Height of Radiation Center Above Average Terrain: 333											
8.	Maximum Effective Radiated Power (average power): 0.1 k											
9. Antenna Specifications: a. Manufacturer SCA Model DRV-1 b. Electrical Beam Tilt: degrees												
	Rotation Degrees	on (Degre Value	es): No Degrees	Rotation Value	Degrees	Value	Dagmagg	Value	Degrees	Value	Dagmaga	Value
	Degrees	value	10	0.973	20	0.888	Degrees 30	0.764	40	0.616	Degrees 50	0.465
	60	0.325	70	0.208	80	0.108	90	0.028	100	0.010	110	0.091
	120	0.12	130	0.129	140	0.115	150	0.087	160	0.06	170	0.053
	180	0.056	190	0.053	200	0.06	210	0.087	220	0.115	230	0.129
	240	0.12	250	0.091	260	0.04	270	0.028	280	0.108	290	0.208
	300	0.325	310	0.465	320	0.617	330	0.764	340	0.888	350	0.973
	Additiona Azimuths	1										
	satisfied. I	If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.625(c) must be satisfied. Exhibit required.										
					mechanical			ation patt	criis tilat var	y with	Ye	es © No
	g. Require	ed Exhibi	t: Attach as	an Exhil	oit all data s	pecified i	in 47 C.F.R.	Section	73.625(c).		[Exh	ibit 50]
	g. Required Exhibit: Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c). [Exhibit 50] The elevation antenna (or radiation) pattern data shall be submitted in Office Open XML ("Excel Spreadsheet") format with the first column containing depression angle values and second (and subsequent, when applicable) column(s) containing relative field values. When applicable, the first row shall list the azimuth angle being tabulated. The range of depression angles shall be 10 degrees above horizontal (-10 degrees depression) to 90 degrees below horizontal (90 degrees depression) and shall include data points spaced not more than 0.5-degree between -5 and 10 degrees depression angle, and not more than 5 degrees elsewhere. All pattern minima and maxima shall be included. Additional elevation antenna (or radiation) pattern data may be included following the column corresponding to 350 degrees TN so that the direction(s) of maximum and minimum radiation are provided. A relative field value of 1 shall correspond to the azimuth and depression angles corresponding to the direction of maximum ERP.											

1	DTS Site N	OTS Site Number: 3										
2	Antenna Lo	ocation Co	oordinates: (NAD 27)):							
	Latitude:											
	Degrees 38	Degrees 38 Minutes 20 Seconds 39 North South										
	Longitude:	Longitude:										
	Degrees 78	Degrees 78 Minutes 29 Seconds 2										
3	Antenna St	ructure R	egistration N	Number:								
L	Not Ap	plicable [Notificati	on filed v	vith FAA							
4		Antenna Location Site Elevation Above Mean Sea Level: 1295 meters										
5	Overall To	wer Heigl	ht Above Gr	ound Lev	/el:				46	meters		
6	1		Center Abo						43	meters		
7	Height of I	Radiation	Center Abo	ve Avera	ge Terrain :				470	meters		
8	112011110111		Radiated Po	ower (ave	rage power	·):			0.08	kW		
9	Antenna S	•										
			CA Model	CL-713								
	b. Electri	_										
			ot Applicabl	e								
	c. Mecha											
		es toward	azimuth Not App	licabla								
	d. Polori		- Not App	iicabie								
			C Circula	. Or	llintical							
	III		enna Relativ		-	NT 4 1"	11 (3)	· ·	1\			
	III		ees): 🔽 No		raiues.	Not appin	cable (Nond	песнопа	1)			
					D		D	** 1				T. 1
	Degrees	Value 0.875	Degrees	Value	Degrees	Value 0.475	Degrees	Value 0.191	Degrees 40	Value 0.02	Degrees	Value
	60	0.873	70	0.701	80	0.473	90	0.191	100	0.02	110	0.01
	120	0.01	130	0.01	140	0.01	150	0.01	160	0.01	170	0.01
	180	0.013	190	0.022	200	0.027	210	0.015	220	0.03	230	0.01
	240	0.03	250	0.027	260	0.01	270	0.013	280	0.01	290	0.02
	300	0.191	310	0.475	320	0.701	330	0.875	340	0.972	350	0.972
	Additiona	ıl										
	Azimuths		345	1								
	If a direction satisfied.			sed, the	requirement	ts of 47 C	.F.R. Sectio	ns 73.625	5(c) must be		[Exhi	ibit 49]
	f Floresti	on Dottor	m. Dogg the	nronosa	d antanna n	roposo ale	vection radio	otion nott	erns that var	with	0	α
	11		other than the		-	-		ation patt	erns mat var	y with	Ye	es O No
	g. Require	ed Exhib	it: Attach as	an Exhib	oit all data s	pecified i	n 47 C.F.R.	Section '	73.625(c).		[Exh	ibit 50]
	The elevent	ion antoni	an (or radiati	ion) notto	rn data shal	ll be subr	sitted in Off	iaa Onan	XML ("Exce	5 1		
									second (and	J1		
									olicable, the f			
									e 10 degrees oression) and			
	11		•		-							
		lude data points spaced not more than 0.5-degree between -5 and 10 degrees depression angle, and										

not more than 5 degrees elsewhere. All pattern minima and maxima shall be included. Additional elevation antenna (or radiation) pattern data may be included following the column corresponding to 350 degrees TN so that the direction(s) of maximum and minimum radiation are provided. A relative field value of 1 shall correspond to the azimuth and depression angles corresponding to the direction of maximum ERP.

Exhibits

Exhibit 1

Description: PURPOSE OF APPLICATION

THE PURPOSE OF THIS APPLICATION IS TO CREATE A DTS SYSTEM WITH WVPT-TV AS THE MAIN.

Attachment 1

Exhibit 40

Description: OET-69 DTS COVERAGE ANALYSIS

THE ATTACHED OET-69 COVERAGE ANALYSIS OF THE PROPOSED DTS SYSTEM SHOWS THAT THE PROPOSAL WILL NOT CAUSE MORE THEN 0.5 PERCENT INTERFERENCE TO OTHER STATIONS, CONSTRUCTION PERMITS OR APPLICATIONS.

NOTE THAT THE STUDY SHOWS AN EXCURSION BEYOND THE WVPT 3.2 KW COVERAGE AREA, HOWEVER, WVPT IS IN THE PROCESS OF LICENSING ITS 10KW C.P. WHICH WILL CAUSE NO EXCURSIONS BEYOND THE LIMIT.

Attachment 40

Description

OET-69 DTS Analysis - uses WVPT 10 kW Main

OET-69-DTS Summary Interference Analysis - Uses WVPT Main at 10 kW

Exhibit 41

Description: PRINCIPAL CITY COVERAGE OF THE PROPOSED DTS SYSTEM

THE ATTACHED MAP SHOWS THE NOISE LIMITED COVERAGE OF ALL DTS TRANSMITTERS IN THE PROPOSED SYSTEM. THE PRINCIPAL CITY, STAUTON, IS FULLY SERVED BY WVPT MAIN.

Attachment 41

-			
I)	escri	ntı	Λn

DTS System - Principal City Coverage

Exhibit 42

Description: COMBINED COVERAGE

PLEASE SEE EXHIBIT #41.

Attachment 42

Exhibit 43

Description: COVERAGE CONTAINED

PLEASE SEE EXHIBIT #41.

Attachment 43

Exhibit 46

Description: RSS FIELD STRENGTH - INTERFERENCE

PLEASE SEE EXHIBIT #40.

Attachment 46

Exhibit 48

Description: ENVIRONMENTAL ANALYSIS

ALL THREE SITES SELECTED FOR THE DTS SYSTEM HAVE ALREADY BEEN AUTHORIZED BY THE COMMISSION. WVPT, WAS APPROVED AT 10 KW - FILE BPEDT20081022ABK. THE CHARLOTTESVILLE SITE IS REGISTERED #1018222. THIS SITE WAS BUILT IN 1998 AND IS THEREFORE EXEMPT FROM ENVIRONMENTAL PROCESSING. THE MONTEREY SITE IS A PREVIOUS TRANSLATOR SITE BUILT BEFORE MARCH OF 2001. THIS SITE DOES NOT REQUIRE REGISTRATION DUE TO THE LOW TOWER HEIGHT ABOVE GROUND.

THE ATTACHED EXHIBIT DOCUMENTS THE APPLICANT'S R.F. EMISSIONS PROTECTION TO THE PUBLIC AND WORKERS.

Attachment 48

Description

R.F. Emissions Analysis

Copy 1 - Exhibit 49

Description: SECTION 73.625(C) EXHIBIT

PLEASE SEE THE ATTACHED EXHIBIT. ALSO SEE EXHIBIT #41.

Copy 1 - Attachment 49

-			
Desc	rin	tin	n
17636			

Section 73.625(c) exhibit

Antenna Exhibit

Copy 2 - Exhibit 49

Description: DEPRESSION ANGLE - VERTICAL ELEVATION - ANTENNA EXHIBIT

PLEASE SEE THE ATTACHED EXHIBIT.

Copy 2 - Attachment 49

	Description
Section 73.625(c) exhibit	
Antenna Exhibit	

Copy 3 - Exhibit 49

Description: MONTEREY SITE - SECTION 625(C) EXHIBIT

PLEASE SEE THE ATTACHED EXHIBIT AND EXHIBIT #41.

Copy 3 - Attachment 49

Description					
Section 73.625(c) exhibit					
Antenna Exhibit - CL-713 - Monterey					

Copy 1 - Attachment 50

Description	
Elevation Pattern	

Copy 2 - Attachment 50

Description	
Charlottesville DTS Station Vertical Elevation Field	

Copy 3 - Attachment 50

	Description	
Monterey Elevation Pattern		

Percent allowed new interference: 0.500

Percent allowed new interference to non Class A LPTV: 2.000

Census data selected 2000

Data Base Selected

./data_files/pt_tvdb.sff
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 12-14-2011 Time: 16:21:58

Record Selected for Analysis (Record is a DTS)

-20111212ABK VA US BPEDT STAUNTON

Channel 11 ERP 0.10 kW HAAT 00328 m RCAMSL 00495 m

Latitude 037-59-00 Longitude 0078-29-02

Status AP Border Zone 1 Site number: 01

Dir Antenna Make CDB Model 00000000078975 Beam tilt N Ref Azimuth 0.0

Elevation Antenna Pattern ID: 123

Last update 00000000 Cutoff date 00000000 Docket

Comments

Applicant SHENANDOAH VALLEY EDUCATIONAL TELEVI

MONT **BPEDT** -20111212ABK **STAUNTON** VA US

Channel 11 ERP 0.01 kW HAAT 00457 m Latitude 038-20-39 Longitude 0079-35-47 HAAT 00457 m RCAMSL 01338 m

Status AP Zone 1 Border Site number: 02

Dir Antenna Make CDB Model 0000000077677 Beam tilt N Ref Azimuth 345.0

Elevation Antenna Pattern ID: 124

Last update 00000000 Cutoff date 00000000 Docket

Applicant SHENANDOAH VALLEY EDUCATIONAL TELEVI

MAIN **BPEDT** -20111212ABK STAUNTON VA US

Channel 11 ERP 10.0 HAAT 00680 m RCAMSL 01333 m kW

Lati tude 038-09-54 Longi tude 0079-18-51

Zone 1 Border Site number: 03

Dir Antenna Make CDB Model 0000000107753 Beam tilt N Ref Azimuth 0.0

Elevation Antenna Pattern ID: 122

Last update 00000000 Cutoff date 00000000 Docket

Comments

Applicant SHENANDOAH VALLEY EDUCATIONAL TELEVI

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility (site # 01) meets maximum height/power limits

Facility (site # 02) meets maximum height/power limits

Facility (site # 03) does not meet maximum height/power limits Channel 11 ERP = 10.00 HAAT = 680.

Site number 1

of the Humber	ı		
Azi muth	ERP	HAAT	36. 0 dBu F(50, 90)
(Deg)	(kW)	(m)	(km)
0.0	0. 098	357. 1	61. 1
45.0	0. 029	264. 2	46. 6

90. 0 135. 0	0. 000 0. 001	378. 9 353. 7	16. 9 29. 6
180. 0	0.001	350. 8	29. 0
225. 0	0. 001	324. 8	28. 5
270. 0	0.000	273. 5	13. 9
315. 0	0. 029	321. 6	50. 0

Site number	2		
Azi muth	ERP	HAAT	36.0 dBu F(50, 90)
(Deg)	(kW)	(m)	(km)
0. Ō	0. 008	401. 6	44. 5
45. 0	0.000	268. 2	13. 8
90. 0	0.000	570.8	20. 9
135. 0	0.000	651. 1	23. 0
180. 0	0.000	580. 4	21. 2
225.0	0.000	497. 9	19. 0
270. 0	0.000	386. 1	17. 1
315. 0	0.004	320. 9	34. 3

Database HAAT does not agree with computed HAAT Database HAAT: 457 Computed HAAT: 460

Site number	3		
Azi muth	ERP	HAAT	36.0 dBu F(50, 90)
(Deg)	(kW)	(m)	(km)
0. Ŏ	0. 009	685.0	57. 2
45. 0	0. 649	683.0	92. 0
90.0	7.043	778. 4	114. 3
135.0	6. 071	709. 4	111. 5
180. 0	5. 173	722. 7	110. 4
225. 0	5. 762	619. 0	108. 4
270. 0	0.049	657.0	69. 8
315.0	0.006	609. 3	52. 2

Database HAAT does not agree with computed HAAT Database HAAT: 680 Computed HAAT: 683

Evaluation toward Class A Stations from site # 01

No Spacing violations or contour overlap to Class A stations from site # 01

Evaluation toward Class A Stations from site # 02

No Spacing violations or contour overlap to Class A stations from site # 02

Evaluation toward Class A Stations from site # 03

No Spacing violations or contour overlap to Class A stations from site # 03

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

CVIL 11 STAUNTON VA BPEDT 20111212ABK Site # 01

and station

SHORT TO: WBAL-TV 11 BALTIMORE MD BLCDT 20090619ABW

039-20- 5 0076-39- 3

Req. separation 244.6 Actual separation 219.0 Short 25.6 km

SHORT TO: WBAL-TV 11 BALTIMORE 039-20- 5 0076-39- 3 MD BPCDT 20100429AAF

Req. separation 244.6 Actual separation 219.0 Short 25.6 km

SHORT TO: WVPT 11 STAUNTON VA BPEDT 20081022ABK

038-09-54 0079-18-51

Reg. separation 244.6 Actual separation 75.6 Short 169.0 km

VA DTVPLN 11 STAUNTON DTVP0338

SHORT TO: WVPT 11 38 -09-54 79 -18-51

Req. separation 244.6 Actual separation 75.6 Short 169.0 km

SHORT TO: WVPT 11 STAUNTON VA BLEDT 20021220ADX

038-09-54 0079-18-51

Req. separation 244.6 Actual separation 75.6 Short 169.0 km

SHORT TO: WWBT 12 037-30-23 0077-30-12 12 RICHMOND VA BLCDT 20090803ABS

Req. separation => 20.0 <= 110.0 Actual separation 101.3 Short 8.7(81.3)

km

SPACING VIOLATION FOUND BETWEEN STATION

MONT 11 STAUNTON VA BPEDT 20111212ABK Site # 02

and station

11 JEANNETTE PA BMPCDT SHORT TO: WPCW 20080616ABM

040-29-38 0080-01- 9

Req. separation 244.6 Actual separation 241.4 Short 3.2 km

SHORT TO: WPCW PA BLCDT 20090626AAT 11 JEANNETTE

040-29-38 0080-01- 9

Req. separation 244.6 Actual separation 241.4 Short 3.2 km

SHORT TO: WVPT 11 STAUNTON VA BPEDT 20081022ABK

038-09-54 0079-18-51

Req. separation 244.6 Actual separation 31.7 Short 212.9 km

SHORT TO: WVPT 11 STAUNTON VA DTVPLN DTVP0338

38 -09-54 79 -18-51

Req. separation 244.6 Actual separation 31.7 Short 212.9 km

SHORT TO: WVPT 11 STAUNTON VA BLEDT 20021220ADX

038-09-54 0079-18-51

Req. separation 244.6 Actual separation 31.7 Short 212.9 km

SPACING VIOLATION FOUND BETWEEN STATION

MAIN 11 STAUNTON VA BPEDT 20111212ABK Site # 03

and station

SHORT TO: WVPT 11 STAUNTON VA BPEDT 20081022ABK

038-09-54 0079-18-51

Req. separation 244.6 Actual separation 0.0 Short 244.6 km

SHORT TO: WVPT 11 STAUNTON VA DTVPLN DTVP0338

38 -09-54 79 -18-51

Req. separation 244.6 Actual separation 0.0 Short 244.6 km

SHORT TO: WVPT 11 STAUNTON VA BLEDT 20021220ADX

038-09-54 0079-18-51

Req. separation 244.6 Actual separation 0.0 Short 244.6 km

Checks to Site Number 01

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Checks to Site Number 02

Proposed facility OK to FCC Monitoring Stations

Proposed facility within West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Checks to Site Number 03

Proposed facility OK to FCC Monitoring Stations

Proposed facility within West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Proposed Station City/State STAUNTON VA Channel Call 11 CVIL

ARN **BPEDT** 20111212ABK

Stations Potentially Affected by Proposed Station

Chan 10	Call WAZT-CA	City/State WOODSTOCK VA	Dist(km) 109.1	Status LIC	Application	on Ref. No. 20030718ADF
10	WVFX	CLARKSBURG WV	217. 9	LIC	BLCDT	20090612AJY
10	WSWP-TV	GRANDVI EW WV	219. 8	LIC	BLEDT	20100210AAQ
10	WSWP-TV	GRANDVI EW WV	219. 8	APP	BDSTA	20080225AGT
11	WBAL-TV	BALTI MORE MD	218. 8	LIC	BLCDT	20090619ABW
11	WBAL-TV	BALTI MORE MD	218. 8	СР	BPCDT	20100429AAF
11	WTVI	CHARLOTTE NC	358. 8	LIC	BLEDT	20101222ABA
11	WTVD	DURHAM NC	257. 4	LIC	BLCDT	20100929AGW
11	WPCW	JEANNETTE PA	308.8	CP MOD	BMPCDT	20080616ABM
11	WPCW	JEANNETTE PA	308.8	LIC	BLCDT	20090626AAT
11	WBRE-TV	WI LKES-BARRE PA	420. 0	LIC	BLCDT	20051123AJX
11	WJHL-TV	JOHNSON CITY TN	366. 5	LIC	BLCDT	20100910AAC
12	WWBT	RI CHMOND VA	101. 2	LIC	BLCDT	20090803ABS
12	WBOY-TV	CLARKSBURG WV	215. 9	LIC	BLCDT	20090227ABW
12	WWPX-TV	MARTI NSBURG WV	167. 8	LIC	BLCDT	20021108AAX

Analysis of Interference to Affected Station

Analysis of current record

Ci ty/State Channel Application Ref. No. Call WOODSTOCK VA 10 WAZT-CA

BLTVA -20030718ADF

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km) Status	Applica	
09	WUSA	WASHINGTON DC	116.7 LIC	BLCDT	
09	WO9CT-D	MATHIAS, ETC. WV	43.6 LIC	BLDTV	-20090121AGY

10	WOIO	SHAKER HEIGHTS OH	386. 6	LIC	BLCDT	-19991110AAR
10	WOIO	SHAKER HEIGHTS OH	386. 6	СР	BPCDT	-20080620AKW
10	WHTM-TV	HARRI SBURG PA	196. 5	LIC	BLCDT	-20040812AAH
10	WHTM-TV	HARRI SBURG PA	196. 5	СР	BPCDT	-20080620AGL
10	WVFX	CLARKSBURG WV	169. 2	LIC	BLCDT	-20090612AJY
10	WSWP-TV	GRANDVI EW WV	252. 5	LIC	BLEDT	-20100210AAQ
10	WSWP-TV	GRANDVI EW WV	252. 5	APP	BDSTA	-20080225AGT
11	WVPT	STAUNTON VA	117. 5	СР	BPEDT	-20081022ABK
11	WVPT	STAUNTON VA	117. 5	PLN	DTVPLN	-DTVP0338
11	WVPT	STAUNTON VA	117. 5	LIC	BLEDT	-20021220ADX
11	CVIL	STAUNTON VA	109. 1	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	122. 5	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	117. 5	AP	BPEDT	-20111212ABK

Proposal causes no interference

Analysis of Interference to Affected Station

Analysis of current record Channel Call City/State 10 WVFX CLARKSBURG WV Application Ref. No. BLCDT -20090612AJY

Stations Potentially Affecting This Station

Chan 09	Call WTOV-TV	Ci ty/State STEUBENVILLE OH	Dist(km) 118.2		Application BLCDT	on Ref. No. -20090507AAC
09	WTOV-TV	STEUBENVILLE OH	118. 2	СР	BPCDT	-20110308ABN
10	WOIO	SHAKER HEIGHTS OH	258. 7	LIC	BLCDT	-19991110AAR
10	WOIO	SHAKER HEIGHTS OH	258. 7	СР	BPCDT	-20080620AKW
10	WHTM-TV	HARRI SBURG PA	310. 9	LIC	BLCDT	-20040812AAH
10	WHTM-TV	HARRI SBURG PA	310. 9	СР	BPCDT	-20080620AGL
10	WSWP-TV	GRANDVI EW WV	165. 9	LIC	BLEDT	-20100210AAQ
10	WSWP-TV	GRANDVI EW WV	165. 9	APP	BDSTA	-20080225AGT
11	WPCW	JEANNETTE PA	135. 5	CP MOD	BMPCDT	-20080616ABM
11	WPCW	JEANNETTE PA	135. 5	LIC	BLCDT	-20090626AAT
11	WVPT	STAUNTON VA	154. 6	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA	217. 9	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	124. 4	AP	BPEDT	-20111212ABK

11 MAIN STAUNTON VA 154.6 AP BPEDT -20111212ABK

Proposal causes no interference

Analysis of Interference to Affected Station 3

Analysis of current record

Channel Call City/State Application Ref. No.
10 WSWP-TV GRANDVIEW WV BLEDT -20100210AAQ

Stations Potentially Affecting This Station

Chan 10	Call WNCT-TV	City/State GREENVILLE NC	Dist(km) 426.5	Status LIC	Application BLCDT	on Ref. No. -20110504ACA
10	WOIO	SHAKER HEIGHTS OH	392. 7	LIC	BLCDT	-19991110AAR
10	WOIO	SHAKER HEIGHTS OH	392. 7	СР	BPCDT	-20080620AKW
10	WIS	COLUMBIA SC	419. 7	LIC	BLCDT	-20090624ABZ
10	WBI R-TV	KNOXVILLE TN	335. 9	LIC	BLCDT	-20090619ADG
10	WVFX	CLARKSBURG WV	165. 9	LIC	BLCDT	-20090612AJY
11	WJHL-TV	JOHNSON CITY TN	191. 9	LIC	BLCDT	-20100910AAC
11	WVPT	STAUNTON VA	149. 7	PLN	DTVPLN	-DTVP0338
11	CVI L	STAUNTON VA	219. 8	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	131. 6	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	149. 7	AP	BPEDT	-20111212ABK

Proposed station is beyond the site to nearest cell evaluation distance

Analysis of Interference to Affected Station 4

Analysis of current record

Channel Call City/State Application Ref. No. 10 WSWP-TV GRANDVIEW WV BDSTA -20080225AGT

Stations Potentially Affecting This Station

Chan 10	Call WNCT-TV	City/State GREENVILLE NC	Dist(km) 426.5	Status LIC	Application BLCDT	on Ref. No. -20110504ACA
10	WOIO	SHAKER HEIGHTS OH	392. 7	LIC	BLCDT	-19991110AAR
10	WOIO	SHAKER HEIGHTS OH	392. 7	CP	BPCDT	-20080620AKW
10	WIS	COLUMBIA SC	419. 7	LIC	BLCDT	-20090624ABZ
10	WBI R-TV	KNOXVILLE TN	335. 9	LIC	BLCDT	-20090619ADG
10	WVFX	CLARKSBURG WV	165. 9	LIC	BLCDT	-20090612AJY

11	WJHL-TV	JOHNSON CITY TN	191. 9	LIC	BLCDT	-20100910AAC
11	WVPT	STAUNTON VA	149. 7	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA	219. 8	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	131. 6	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	149. 7	AP	BPEDT	-20111212ABK

Proposed station is beyond the site to nearest cell evaluation distance

Analysis of Interference to Affected Station 5

Analysis of current record

Channel Call City/State Application Ref. No.
11 WBAL-TV BALTIMORE MD BLCDT -20090619ABW

Stations Potentially Affecting This Station

Chan 10	Call WHTM-TV	Ci ty/State HARRI SBURG PA	Dist(km) 112.0	Status LIC	Application	on Ref. No. -20040812AAH
10	WHTM-TV	HARRI SBURG PA	112. 0	СР	BPCDT	-20080620AGL
11	WPIX	NEW YORK NY	271. 7	APP	BMPCDT	-20080620ALB
11	WPI X	NEW YORK NY	275. 8	LIC	BLCDT	-20090911ABN
11	WPCW	JEANNETTE PA	314. 7	CP MOD	BMPCDT	-20080616ABM
11	WPCW	JEANNETTE PA	314. 7	LIC	BLCDT	-20090626AAT
11	WBRE-TV	WILKES-BARRE PA	215. 7	LIC	BLCDT	-20051123AJX
11	WVPT	STAUNTON VA	264. 9	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA	218. 8	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	277. 7	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	264. 9	AP	BPEDT	-20111212ABK
12	WHYY-TV	WILMINGTON DE	144. 0	CP MOD	BMPEDT	-20091204ADC
12	WWBT	RI CHMOND VA	216. 4	LIC	BLCDT	-20090803ABS
12	WWPX-TV	MARTI NSBURG WV	122. 2	LIC	BLCDT	-20021108AAX

Total scenarios = 8

Result key: 1

Scenario 1 Affected station 5

Before Analysis

Results for: 11A MD BALTIMORE BLCDT 20090619ABW LIC HAAT 299.0 m, ATV ERP 5.0 kW

HAAT 299.0 m, ATV ERP 5.0 kW
POPULATION AREA (sq km)
within Noise Limited Contour 7449700 24125.2

not affected by terrain losses 7175012 22901.0

```
lost to NTSC IX
                                                          0.0
   lost to additional IX by ATV lost to ATV IX only
                                                        946.3
                                        217701
                                         217701
                                                        946. 3
   lost to all IX
                                                        946.3
                                        217701
 Potential Interfering Stations Included in above Scenario
10A PA HARRI SBURG
                              BLCDT
                                          20040812AAH
                                                        LIC
11A NY NEW YORK
                              BLCDT
                                          20090911ABN
                                                        LIC
                                                        CP
11A PA JEANNETTE
                              BMPCDT
                                          20080616ABM
11A PA WILKES-BARRE
                              BLCDT
                                          20051123AJX
                                                        LIC
12A WV MARTINSBURG
                                          20021108AAX
                              BLCDT
                                                        LIC
11A VA STAUNTON
                              DTVPLN
                                         DTVP0338
                                                        PLN
After Analysis
                                             BLCDT
                                                        20090619ABW LIC
Results for: 11A MD BALTIMORE
   HAAT 299.0 m, ATV ERP
                               5.0 kW
                                     POPULATI ON
                                                   AREA (sq km)
   within Noise Limited Contour
                                       7449700
                                                      24125.2
   not affected by terrain losses
                                       7175012
                                                      22901.0
   lost to NTSC IX
                                                          0.0
                                              \cap
   lost to additional IX by ATV
                                                        958.4
                                        218333
   lost to ATV IX only
                                        218333
                                                        958.4
                                                        958.4
   lost to all IX
                                        218333
 Potential Interfering Stations Included in above Scenario
                                                                     1
10A PA HARRI SBURG
                               BLCDT
                                          20040812AAH
                                                        LIC
11A NY NEW YORK
                                          20090911ABN
                                                        LIC
                              BLCDT
                              BMPCDT
                                                        CP
11A PA JEANNETTE
                                          20080616ABM
11A PA WILKES-BARRE
                              BLCDT
                                          20051123AJX
                                                        LIC
12A WV MARTINSBURG
                              BLCDT
                                          20021108AAX
                                                        LIC
11A VA STAUNTON
                              BPEDT
                                          20111212ABK
                                                        AP
Percent new IX =
                     0.0091%
Result key:
                 2 Affected station
Scenari o
Before Analysis
Results for: 11A MD BALTIMORE
                                             BLCDT
                                                        20090619ABW LIC
   HAAT 299.0 m, ATV ERP
                               5.0 kW
                                     POPULATI ON
                                                   AREA (sq km)
   within Noise Limited Contour
not affected by terrain losses
lost to NTSC IX
                                                     24125. 2
                                       7449700
                                       7175012
                                                      22901.0
                                              0
                                                          0.0
   lost to additional IX by ATV
                                                        946.3
                                        217701
   lost to ATV IX only
                                        217701
                                                        946.3
   lost to all IX
                                        217701
                                                        946.3
 Potential Interfering Stations Included in above Scenario
                                                                     2
10A PA HARRI SBURG
                              BLCDT
                                          20040812AAH
                                                        IIC
11A NY NEW YORK
                              BLCDT
                                          20090911ABN
                                                        LIC
11A PA JEANNETTE
                              BLCDT
                                          20090626AAT
                                                        LIC
11A PA WILKES-BARRE
                                          20051123AJX
                                                        LIC
                              BLCDT
12A WV MARTINSBURG
                              BLCDT
                                          20021108AAX
                                                        IIC
                                                        PLN
11A VA STAUNTON
                              DTVPLN
                                         DTVP0338
After Analysis
Results for: 11A MD BALTIMORE
HAAT 299.0 m, ATV ERP
                                                        20090619ABW LIC
                                             BLCDT
                             5.0 kW
                                                   AREA (sq km)
24125.2
                                     POPULATI ON
                                       7449700
   within Noise Limited Contour
   not affected by terrain losses
                                       7175012
                                                      22901.0
   lost to NTSC IX
                                              0
                                                          0.0
```

```
lost to additional IX by ATV
                                       218333
                                                      958.4
   lost to ATV IX only lost to all IX
                                       218333
                                                      958.4
                                                      958.4
                                       218333
 Potential Interfering Stations Included in above Scenario
                                                                  2
                             BLCDT
10A PA HARRI SBURG
                                        20040812AAH
11A NY NEW YORK
                             BLCDT
                                        20090911ABN
                                                     LIC
11A PA JEANNETTE
                             BLCDT
                                        20090626AAT
                                                     LIC
11A PA WILKES-BARRE
                                        20051123AJX
                             BLCDT
                                                     LIC
12A WV MARTINSBURG
                             BLCDT
                                        20021108AAX
                                                     LIC
11A VA STAUNTON
                             BPEDT
                                        20111212ABK
                                                     AΡ
Percent new IX =
                    0.0091%
Result key:
                 3 Affected station
Scenari o
Before Analysis
Results for: 11A MD BALTIMORE HAAT 299.0 m, ATV ERP
                                           BLCDT
                                                      20090619ABW LIC
                            5.0 kW
                                                 AREA (sq km)
24125.2
                                   POPULATI ON
                                      7449700
   within Noise Limited Contour
   not affected by terrain losses
                                      7175012
                                                   22901.0
                                                       0.0
   lost to NTSC IX
                                            0
   lost to additional IX by ATV
                                       228326
                                                      974.5
   lost to ATV IX only
                                       228326
                                                      974.5
   lost to all IX
                                                      974.5
                                       228326
 Potential Interfering Stations Included in above Scenario
                                                                  3
10A PA HARRI SBURG
                             BPCDT
                                        20080620AGL
11A NY NEW YORK
                             BLCDT
                                        20090911ABN
                                                     LIC
                             BMPCDT
                                                     CP
11A PA JEANNETTE
                                        20080616ABM
11A PA WILKES-BARRE
                             BLCDT
                                        20051123AJX
                                                     LIC
12A WV MARTINSBURG
                             BLCDT
                                        20021108AAX
                                                     LIC
11A VA STAUNTON
                             DTVPLN
                                        DTVP0338
                                                      PLN
After Analysis
Results for: 11A MD BALTIMORE
                                           BLCDT
                                                     20090619ABW LIC
                              5.0 kW
   HAAT 299.0 m, ATV ERP
                                   POPULATI ON
                                                 AREA (sq km)
                                                   24125. 2
   within Noise Limited Contour
                                      7449700
   not affected by terrain losses
lost to NTSC IX
                                      7175012
                                                   22901.0
                                                       0.0
                                       228958
   lost to additional IX by ATV
                                                      986.6
   lost to ATV IX only
                                                      986.6
                                       228958
   lost to all IX
                                       228958
                                                      986.6
 Potential Interfering Stations Included in above Scenario
                                                                  3
10A PA HARRI SBURG
                             BPCDT
                                        20080620AGL
                                                      CP
11A NY NEW YORK
                                        20090911ABN
                             BLCDT
                                                     LIC
11A PA JEANNETTE
                             BMPCDT
                                        20080616ABM
                                                      CP
11A PA WILKES-BARRE
                                                      LIC
                             BLCDT
                                        20051123AJX
12A WV MARTINSBURG
                             BLCDT
                                        20021108AAX
                                                     LIC
11A VA STAUNTON
                             BPEDT
                                        20111212ABK
                                                     ΑP
Percent new IX =
                    0.0091%
Result key:
                   Affected station
Scenari o
Before Analysis
Results for: 11A MD BALTIMORE
                                           BLCDT
                                                      20090619ABW LIC
   HAAT 299.0 m, ATV ERP 5.0 kW
                                   POPULATI ON
                                               AREA (sq km)
```

```
7449700
                                                   24125.2
   within Noise Limited Contour
   not affected by terrain losses lost to NTSC IX
                                                    22901.0
                                      7175012
                                            0
                                                        0.0
   lost to additional IX by ATV
                                                      974.5
                                       228326
   lost to ATV IX only
                                       228326
                                                      974.5
   lost to all IX
                                       228326
                                                      974.5
 Potential Interfering Stations Included in above Scenario
                                                                  4
                             BPCDT
10A PA HARRI SBURG
                                        20080620AGL
                                                      CP
11A NY NEW YORK
                             BLCDT
                                        20090911ABN
                                                      LIC
11A PA JEANNETTE
                                        20090626AAT
                                                      LIC
                             BLCDT
11A PA WILKES-BARRE
                             BLCDT
                                        20051123AJX
                                                     LIC
12A WV MARTINSBURG
                             BLCDT
                                        20021108AAX
                                                     LIC
11A VA STAUNTON
                             DTVPLN
                                        DTVP0338
                                                      PLN
After Analysis
                                           BLCDT
                                                      20090619ABW LIC
Results for: 11A MD BALTIMORE
   HAAT 299.0 m, ATV ERP
                              5.0 kW
                                    POPULATI ON
                                                 AREA (sq km)
                                                   24125.2
                                      7449700
   within Noise Limited Contour
   not affected by terrain losses
                                                    22901.0
                                      7175012
   lost to NTSC IX
                                            0
                                                        0.0
                                       228958
                                                      986.6
   lost to additional IX by ATV
   lost to ATV IX only
                                       228958
                                                      986.6
   lost to all IX
                                       228958
                                                      986.6
 Potential Interfering Stations Included in above Scenario
                             BPCDT
10A PA HARRI SBURG
                                        20080620AGL
11A NY NEW YORK
                             BLCDT
                                        20090911ABN
                                                     LIC
11A PA JEANNETTE
                             BLCDT
                                        20090626AAT
                                                      LIC
11A PA WILKES-BARRE
                                        20051123AJX
                             BLCDT
                                                     LIC
12A WV MARTINSBURG
                             BLCDT
                                        20021108AAX
                                                     IIC
11A VA STAUNTON
                             BPEDT
                                        20111212ABK
                                                     AΡ
Percent new IX =
                     0.0091%
                    5
Result key:
Scenari o
                   Affected station
Before Analysis
Results for: 11A MD BALTIMORE
                                           BLCDT
                                                      20090619ABW LIC
   HAAT 299.0 m, ATV ERP
                            5.0 kW
                                    POPULATI ON
                                                 AREA (sq km)
24125.2
   within Noise Limited Contour
                                      7449700
   not affected by terrain losses
                                      7175012
                                                    22901.0
   lost to NTSC IX
                                                        0.0
                                            n
   lost to additional IX by ATV
                                       217359
                                                      942.3
   lost to ATV IX only
                                       217359
                                                      942.3
   lost to all IX
                                       217359
                                                      942.3
 Potential Interfering Stations Included in above Scenario
                                                                  5
10A PA HARRI SBURG
                             BLCDT
                                        20040812AAH
                                                     LIC
11A NY NEW YORK
                             BMPCDT
                                                     APP
                                        20080620ALB
11A PA JEANNETTE
                             BMPCDT
                                        20080616ABM
                                                      CP
11A PA WILKES-BARRE
                             BLCDT
                                        20051123AJX
                                                      LIC
12A WV MARTINSBURG
                             BLCDT
                                        20021108AAX
                                                     LIC
                                                      PLN
11A VA STAUNTON
                             DTVPLN
                                        DTVP0338
After Analysis
Results for: 11A MD BALTIMORE
                                           BLCDT
                                                      20090619ABW LIC
   HAAT 299.0 m, ATV ERP
                              5.0 kW
                                    POPULATI ON
                                                 AREA (sq km)
  within Noise Limited Contour
                                      7449700
                                                   24125.2
```

not affected by terrain lost to NTSC IX lost to additional IX by lost to ATV IX only lost to all IX	l osses ATV	7175012 2 0 217991 217991 217991	22901. 0 0. 0 954. 4 954. 4 954. 4	
Potential Interfering Stat	ions Incl	uded in above	Scenari o	5
10A PA HARRISBURG 11A NY NEW YORK 11A PA JEANNETTE 11A PA WILKES-BARRE 12A WV MARTINSBURG 11A VA STAUNTON	BLCDT BMPCDT BMPCDT BLCDT BLCDT BPEDT	20040812AAH 20080620ALB 20080616ABM 20051123AJX 20021108AAX 20111212ABK	LIC APP CP LIC LIC AP	
Percent new IX = 0.0091%				
Result key: 6 Scenario 6 Affected Before Analysis	station	5		
Results for: 11A MD BALTIMON HAAT 299.0 m, ATV ERP	50 kW		20090619ABW	LIC
within Noise Limited Connot affected by terrain lost to NTSC IX lost to additional IX by lost to ATV IX only lost to all IX	PO tour I osses ATV	PULATI ON ARE 7449700 2 7175012 2 0 217359 217359 217359	A (sq km) 4125.2 22901.0 0.0 942.3 942.3	
Potential Interfering Stat				6
10A PA HARRISBURG 11A NY NEW YORK 11A PA JEANNETTE 11A PA WILKES-BARRE 12A WV MARTINSBURG 11A VA STAUNTON	BLCDT BMPCDT BLCDT BLCDT BLCDT DTVPLN	20040812AAH 20080620ALB 20090626AAT 20051123AJX 20021108AAX DTVP0338	LIC APP LIC LIC LIC PLN	
After Analysis				
Results for: 11A MD BALTIMON HAAT 299.0 m, ATV ERP	5.0 kW			LIC
within Noise Limited Connot affected by terrain lost to NTSC IX lost to additional IX by lost to ATV IX only lost to all IX	tour I osses		A (sq km) 24125.2 2901.0 0.0 954.4 954.4	
Potential Interfering Stat	ions Incl	uded in above	Scenari o	6
10A PA HARRI SBURG 11A NY NEW YORK 11A PA JEANNETTE 11A PA WI LKES-BARRE 12A WV MARTI NSBURG 11A VA STAUNTON	BLCDT BMPCDT BLCDT BLCDT BLCDT BPEDT	20040812AAH 20080620ALB 20090626AAT 20051123AJX 20021108AAX 20111212ABK	APP LIC LIC LIC	
Percent new IX = 0.0091%				
Result key: 7 Scenario 7 Affected Before Analysis	station	5		
Results for: 11A MD BALTIMON	RE	BLCDT	20090619ABW	LIC

```
HAAT 299.0 m, ATV ERP
                              5.0 kW
                                                AREA (sq km)
24125.2
                                   POPULATI ON
   within Noise Limited Contour
                                     7449700
   not affected by terrain losses
                                                   22901.0
                                     7175012
   lost to NTSC IX
                                                      0.0
                                           0
   lost to additional IX by ATV
                                      227984
                                                     970.5
                                      227984
                                                     970.5
   lost to ATV IX only
                                                     970.5
   lost to all IX
                                      227984
 Potential Interfering Stations Included in above Scenario
10A PA HARRI SBURG
                             BPCDT
                                       20080620AGL
11A NY NEW YORK
                                                     APP
                             BMPCDT
                                       20080620ALB
11A PA JEANNETTE
                                                     CP
                             BMPCDT
                                       20080616ABM
11A PA WILKES-BARRE
                             BLCDT
                                       20051123AJX
                                                     LIC
12A WV MARTINSBURG
                             BLCDT
                                       20021108AAX
                                                     LIC
11A VA STAUNTON
                             DTVPLN
                                       DTVP0338
                                                     PLN
After Analysis
                                          BLCDT
Results for: 11A MD BALTIMORE
                                                     20090619ABW LIC
   HAAT 299.0 m, ATV ERP
                              5.0 kW
                                   POPULATI ON
                                                 AREA (sq km)
   within Noise Limited Contour
                                     7449700
                                                   24125.2
   not affected by terrain losses
                                                   22901.0
                                     7175012
   lost to NTSC IX
                                           0
                                                       0.0
                                                     982.6
   lost to additional IX by ATV
                                      228616
   lost to ATV IX only
                                                     982.6
                                      228616
   lost to all IX
                                      228616
                                                     982.6
 Potential Interfering Stations Included in above Scenario
                                                                 7
10A PA HARRI SBURG
                             BPCDT
                                       20080620AGL
                                                     APP
11A NY NEW YORK
                             BMPCDT
                                       20080620ALB
11A PA JEANNETTE
                             BMPCDT
                                       20080616ABM
                                                     CP
11A PA WILKES-BARRE
                             BLCDT
                                       20051123AJX
                                                     LIC
12A WV MARTINSBURG
                             BLCDT
                                       20021108AAX
                                                     LIC
11A VA STAUNTON
                             BPEDT
                                       20111212ABK
                                                     AP
Percent new IX =
                    0.0091%
Result key:
Scenari o
                   Affected station
Before Analysis
Results for: 11A MD BALTIMORE
                                          BLCDT
                                                     20090619ABW LIC
   HAAT 299.0 m, ATV ERP
                              5.0 kW
                                   POPULATI ON
                                                 AREA (sq km)
                                                   24125.2
   within Noise Limited Contour
                                     7449700
   not affected by terrain losses
                                     7175012
                                                   22901.0
   lost to NTSC IX
                                           0
                                                       0.0
                                      227984
                                                     970.5
   lost to additional IX by ATV
   lost to ATV IX only
                                      227984
                                                     970.5
   lost to all IX
                                      227984
                                                     970.5
 Potential Interfering Stations Included in above Scenario
10A PA HARRI SBURG
                             BPCDT
                                       20080620AGL
11A NY NEW YORK
                             BMPCDT
                                       20080620ALB
                                                     APP
11A PA JEANNETTE
                             BLCDT
                                       20090626AAT
                                                     LIC
11A PA WILKES-BARRE
                                       20051123AJX
                             BLCDT
                                                     LIC
12A WV MARTINSBURG
                                       20021108AAX
                                                     LIC
                             BLCDT
11A VA STAUNTON
                             DTVPLN
                                       DTVP0338
                                                     PLN
After Analysis
Results for: 11A MD BALTIMORE
                                          BLCDT
                                                     20090619ABW LIC
   HAAT 299.0 m, ATV ERP
                              5.0 kW
```

	POPULATI ON	AREA (sq km)
within Noise Limited Contour	7449700	24125. 2
not affected by terrain losses	7175012	22901. 0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	228616	982. 6
lost to ATV IX only	228616	982. 6
lost to all IX	228616	982. 6

Potential Interfering Stations Included in above Scenario 8

10A PA	HARRI SBURG	BPCDT	20080620AGL	CP
11A NY	NEW YORK	BMPCDT	20080620ALB	APP
11A PA	JEANNETTE	BLCDT	20090626AAT	LIC
11A PA	WI LKES-BARRE	BLCDT	20051123AJX	LIC
12A WV	MARTI NSBURG	BLCDT	20021108AAX	LIC
11A VA	STAUNTON	BPFDT	20111212ABK	AP

Percent new IX = 0.0091%

Worst case new IX 0.0091% Scenario 3

Analysis of Interference to Affected Station 6

Analysis of current record

Channel Call City/State Application Ref. No.

11 WBAL-TV BALTIMORE MD BPCDT -20100429AAF

Stations Potentially Affecting This Station

Chan 10	Call WHTM-TV	Ci ty/State HARRI SBURG PA	Dist(km) 112.0	Status LIC	Application BLCDT	on Ref. No. -20040812AAH
10	WHTM-TV	HARRI SBURG PA	112. 0	СР	BPCDT	-20080620AGL
11	WPI X	NEW YORK NY	271. 7	APP	BMPCDT	-20080620ALB
11	WPI X	NEW YORK NY	275. 8	LIC	BLCDT	-20090911ABN
11	WPCW	JEANNETTE PA	314. 7	CP MOD	BMPCDT	-20080616ABM
11	WPCW	JEANNETTE PA	314. 7	LIC	BLCDT	-20090626AAT
11	WBRE-TV	WILKES-BARRE PA	215. 7	LIC	BLCDT	-20051123AJX
11	WVPT	STAUNTON VA	264. 9	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA	218. 8	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	277. 7	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	264. 9	AP	BPEDT	-20111212ABK
12	WHYY-TV	WILMINGTON DE	144. 0	CP MOD	BMPEDT	-20091204ADC
12	WWBT	RI CHMOND VA	216. 4	LIC	BLCDT	-20090803ABS
12	WWPX-TV	MARTI NSBURG WV	122. 2	LIC	BLCDT	-20021108AAX

Total scenarios = 8

Result key:

Scenario 1 Affected station 6

```
Results for: 11A MD BALTIMORE
                                           BPCDT
                                                      20100429AAF CP
   HAAT 299.0 m, ATV ERP 26.6 kW
                                    POPULATI ON
                                                  AREA (sq km)
   within Noise Limited Contour
                                      8596693
                                                    31809.2
                                                    29972.9
   not affected by terrain losses
                                      8300862
                                            0
                                                        0.0
   lost to NTSC IX
   lost to additional IX by ATV
                                       388635
                                                     1461.8
   lost to ATV IX only
                                       388635
                                                     1461.8
   lost to all IX
                                       388635
                                                     1461.8
 Potential Interfering Stations Included in above Scenario
                                                                   1
10A PA HARRI SBURG
                             BLCDT
                                        20040812AAH
11A NY NEW YORK
                                        20090911ABN
                             BLCDT
                                                      LIC
11A PA JEANNETTE
                             BMPCDT
                                        20080616ABM
                                                      CP
11A PA WILKES-BARRE
                             BLCDT
                                        20051123AJX
                                                      LIC
12A DE WILMINGTON
                                                      CP
                             BMPEDT
                                        20091204ADC
12A WV MARTINSBURG
                             BLCDT
                                        20021108AAX
                                                      LIC
11A VA STAUNTON
                                        DTVP0338
                             DTVPLN
                                                      PLN
After Analysis
                                                                    CP
Results for: 11A MD BALTIMORE
                                           BPCDT
                                                      20100429AAF
   HAAT 299.0 m, ATV ERP 26.6 kW
                                                  AREA (sq_km)
                                    POPULATI ON
  within Noise Limited Contour not affected by terrain losses lost to NTSC IX \,
                                                    31809.2
                                      8596693
                                                    29972.9
                                      8300862
                                            0
                                                       0.0
   lost to additional IX by ATV
                                       391579
                                                     1498.0
   lost to ATV IX only
                                       391579
                                                     1498.0
   lost to all IX
                                       391579
                                                     1498.0
 Potential Interfering Stations Included in above Scenario
                                                                   1
10A PA HARRI SBURG
                             BLCDT
                                        20040812AAH
                                                      LIC
11A NY NEW YORK
                             BLCDT
                                        20090911ABN
                                                      LIC
11A PA JEANNETTE
                                                      CP
                             BMPCDT
                                        20080616ABM
11A PA WILKES-BARRE
                             BLCDT
                                        20051123AJX
                                                      LIC
12A DE WILMINGTON
                             BMPEDT
                                        20091204ADC
                                                      CP
12A WV MARTINSBURG
                             BLCDT
                                        20021108AAX
                                                      LIC
11A VA STAUNTON
                             BPEDT
                                        20111212ABK
                                                     AΡ
Percent new IX =
                  0. 0372%
Result key:
                   10
Scenari o
                2 Affected station
Before Analysis
                                           BPCDT
                                                                    CP
Results for: 11A MD BALTIMORE
                                                      20100429AAF
   HAAT 299.0 m, ATV ERP 26.6 kW
                                                  AREA (sq km)
                                    POPULATI ON
                                                    31809. 2
   within Noise Limited Contour
                                      8596693
   not affected by terrain losses
lost to NTSC IX
                                                    29972.9
                                      8300862
                                                        0.0
   lost to additional IX by ATV
                                       388635
                                                     1461.8
   lost to ATV IX only
                                       388635
                                                     1461.8
   lost to all IX
                                       388635
                                                     1461.8
 Potential Interfering Stations Included in above Scenario
                                                                   2
10A PA HARRI SBURG
                             BLCDT
                                        20040812AAH
                                                      LIC
11A NY NEW YORK
                             BLCDT
                                        20090911ABN
                                                      LIC
11A PA JEANNETTE
                             BLCDT
                                        20090626AAT
                                                      LIC
11A PA WILKES-BARRE
                             BLCDT
                                        20051123AJX
                                                      LIC
12A DE WILMINGTON
                             BMPEDT
                                        20091204ADC
                                                      CP
12A WV MARTINSBURG
                             BLCDT
                                        20021108AAX
                                                      LIC
```

11A VA STAUNTON DTVPLN DTVP0338 PLN

After	Anal	ysi	S

After Analysis				
Results for: 11A MD BALTIMO HAAT 299.0 m, ATV ERP	26.6 kW			СР
within Noise Limited Con not affected by terrain lost to NTSC IX lost to additional IX by lost to ATV IX only lost to all IX	tour Iosses ATV	DPULATI ON ARE 8596693 3 8300862 2 0 391579 391579 391579	EA (sq km) 31809.2 29972.9 0.0 1498.0 1498.0 1498.0	
Potential Interfering Stat	ions Incl	uded in above	Scenari o	2
10A PA HARRI SBURG 11A NY NEW YORK 11A PA JEANNETTE 11A PA WI LKES-BARRE 12A DE WI LMI NGTON 12A WV MARTI NSBURG 11A VA STAUNTON	BLCDT BLCDT BLCDT BLCDT BMPEDT BLCDT BPEDT	20090626AAT 20051123AJX 20091204ADC	LIC LIC LIC CP	
Percent new IX = 0.0372%				
Result key: 11 Scenario 3 Affected Before Analysis	stati on	6		
Results for: 11A MD BALTIMO HAAT 299.0 m, ATV ERP		BPCDT	20100429AAF	СР
within Noise Limited Con not affected by terrain lost to NTSC IX lost to additional IX by lost to ATV IX only lost to all IX	PC tour	PULATION ARE 8596693 3 8300862 2 0 396820 396820 396820	31809.2	
Potential Interfering Stat	ions Incl	uded in above	Scenari o	3
11A PA JEANNETTE 11A PA WILKES-BARRE	BMPCDT BLCDT BMPEDT BLCDT	20080620AGL 20090911ABN 20080616ABM 20051123AJX 20091204ADC 20021108AAX DTVP0338	CP LIC CP LIC	
After Analysis				
Results for: 11A MD BALTIMO HAAT 299.0 m, ATV ERP	26.6 kW		20100429AAF	СР
within Noise Limited Con not affected by terrain lost to NTSC IX lost to additional IX by lost to ATV IX only lost to all IX	tour I osses	8596693 3 8300862 2	EA (sq km) 31809.2 29972.9 0.0 1550.4 1550.4	
Potential Interfering Stat	ions Incl	uded in above	Scenari o	3
10A PA HARRISBURG 11A NY NEW YORK 11A PA JEANNETTE 11A PA WILKES-BARRE	BPCDT BLCDT BMPCDT BLCDT	20080620AGL 20090911ABN 20080616ABM 20051123AJX	LIC CP	

```
12A DE WILMINGTON
                             BMPEDT
                                        20091204ADC
                                                      CP
                                                     LI C
AP
12A WV MARTINSBURG
                              BLCDT
                                        20021108AAX
11A VA STAUNTON
                              BPEDT
                                        20111212ABK
Percent new IX = 0.0372\%
Result key:
                  12
                4 Affected station
Scenari o
Before Analysis
Results for: 11A MD BALTIMORE
HAAT 299.0 m, ATV ERP 26.6 kW
                                           BPCDT
                                                      20100429AAF CP
                                    POPULATI ON
                                                 AREA (sq km)
                                                  31809. 2
  within Noise Limited Contour
                                      8596693
   not affected by terrain losses
                                      8300862
                                                    29972.9
   lost to NTSC IX
                                            0
                                                        0.0
   lost to additional IX by ATV
                                       396820
                                                     1514.2
   lost to ATV IX only
                                       396820
                                                     1514.2
   lost to all IX
                                       396820
                                                     1514.2
 Potential Interfering Stations Included in above Scenario
                              BPCDT
10A PA HARRI SBURG
                                         20080620AGL
11A NY NEW YORK
                              BLCDT
                                        20090911ABN
                                                      LIC
11A PA JEANNETTE
                                        20090626AAT
                             BLCDT
                                                      LIC
11A PA WILKES-BARRE
                             BLCDT
                                        20051123AJX
                                                      LIC
12A DE WILMINGTON
12A WV MARTINSBURG
                             BMPEDT
                                        20091204ADC
                                                      CP
                              BLCDT
                                        20021108AAX
                                                      LIC
11A VA STAUNTON
                              DTVPLN
                                        DTVP0338
                                                      PLN
After Analysis
                                           BPCDT
Results for: 11A MD BALTIMORE
                                                      20100429AAF CP
   HAAT 299.0 m, ATV ERP 26.6 kW
                                    POPULATI ON
                                                  AREA (sq km)
   within Noise Limited Contour
                                      8596693
                                                    31809. 2
  not affected by terrain losses
lost to NTSC IX
lost to additional IX by ATV
                                      8300862
                                                    29972.9
                                            0
                                                        0.0
                                       399764
                                                     1550.4
   lost to ATV IX only
                                       399764
                                                     1550. 4
   lost to all IX
                                       399764
                                                     1550.4
 Potential Interfering Stations Included in above Scenario
                              BPCDT
10A PA HARRI SBURG
                                         20080620AGL
                                                      CP
11A NY NEW YORK
                              BLCDT
                                         20090911ABN
                                                      LIC
11A PA JEANNETTE
                              BLCDT
                                         20090626AAT
                                                      LIC
11A PA WILKES-BARRE
                             BLCDT
                                         20051123AJX
                                                      LIC
12A DE WILMINGTON
                             BMPEDT
                                        20091204ADC
                                                      CP
12A WV MARTINSBURG
                             BLCDT
                                        20021108AAX
                                                      LIC
11A VA STAUNTON
                              BPEDT
                                        20111212ABK
                                                      ΑP
Percent new IX = 0.0372\%
Result key:
                  13
                 5 Affected station
Scenari o
Before Analysis
Results for: 11A MD BALTIMORE
                                            BPCDT
                                                      20100429AAF CP
   HAAT 299.0 m, ATV ERP 26.6 kW
                                    POPULATI ON
                                                  AREA (sq km)
                                                    31809. 2
   within Noise Limited Contour
                                      8596693
   not affected by terrain losses
lost to NTSC IX
                                                    29972.9
                                      8300862
                                            0
                                                        0.0
   lost to additional IX by ATV
                                                     1449.7
                                       386979
   lost to ATV IX only
                                       386979
                                                     1449.7
   lost to all IX
                                       386979
                                                     1449.7
```

Potential Interfering Stati	ons Inci	uded in above	Scenario	5
10A PA HARRISBURG 11A NY NEW YORK 11A PA JEANNETTE 11A PA WILKES-BARRE 12A DE WILMINGTON 12A WV MARTINSBURG 11A VA STAUNTON	BLCDT BMPCDT BMPCDT BLCDT BMPEDT BLCDT DTVPLN	20040812AAH 20080620ALB 20080616ABM 20051123AJX 20091204ADC 20021108AAX DTVP0338	LIC APP CP LIC CP LIC PLN	
After Analysis				
Results for: 11A MD BALTIMOR HAAT 299.0 m, ATV ERP	RE 26.6 kW	BPCDT	20100429AAF	СР
within Noise Limited Con- not affected by terrain I lost to NTSC IX lost to additional IX by lost to ATV IX only lost to all IX	100	וכות וארדוות וווכוו	-/\ (ca km\	
Potential Interfering Stati				5
10A PA HARRISBURG 11A NY NEW YORK 11A PA JEANNETTE 11A PA WILKES-BARRE 12A DE WILMINGTON 12A WV MARTINSBURG 11A VA STAUNTON	BLCDT BMPCDT BMPCDT BLCDT BMPEDT BLCDT BPEDT	20040812AAH 20080620ALB 20080616ABM 20051123AJX 20091204ADC 20021108AAX 20111212ABK	LIC APP CP LIC CP LIC AP	
Percent new IX = 0.0372%				
Result key: 14 Scenario 6 Affected Before Analysis	station	6		
Results for: 11A MD BALTIMOR HAAT 299.0 m, ATV ERP within Noise Limited Cont not affected by terrain I lost to NTSC IX lost to additional IX by lost to ATV IX only lost to all IX	PO tour osses ATV	PULATI ON ARI 8596693 3 8300862 2 0 386979	-A (sa km)	СР
Potential Interfering Stati	ons Incl	uded in above	Scenari o	6
10A PA HARRISBURG 11A NY NEW YORK 11A PA JEANNETTE 11A PA WILKES-BARRE 12A DE WILMINGTON 12A WV MARTINSBURG 11A VA STAUNTON		20040812AAH 20080620ALB 20090626AAT 20051123AJX 20091204ADC 20021108AAX DTVP0338	APP LIC LIC CP	
After Analysis				
Results for: 11A MD BALTIMOR HAAT 299.0 m, ATV ERP	26.6 kW	BPCDT		СР
within Noise Limited Cont not affected by terrain I lost to NTSC IX lost to additional IX by lost to ATV IX only	tour osses	8596693	EA (sq km) 31809.2 29972.9 0.0 1486.0 1486.0	

lost to all IX 389923 1486.0 Potential Interfering Stations Included in above Scenario 10A PA HARRI SBURG BLCDT 20040812AAH IIC11A NY NEW YORK **BMPCDT** 20080620ALB APP 20090626AAT 11A PA JEANNETTE BLCDT LIC 11A PA WILKES-BARRE 20051123AJX BLCDT LIC 12A DE WILMINGTON **BMPEDT** 20091204ADC CP 12A WV MARTINSBURG BLCDT 20021108AAX LIC 11A VA STAUNTON **BPEDT** 20111212ABK AΡ Percent new IX = 0.0372%Result key: 15 7 Affected station Scenari o Before Analysis BPCDT 20100429AAF CP Results for: 11A MD BALTIMORE HAAT 299.0 m, ATV ERP 26.6 kW POPULATI ON AREA (sq km) 31809.2 within Noise Limited Contour 8596693 not affected by terrain losses 29972.9 8300862 lost to NTSC IX 0 0.0 lost to additional IX by ATV 395437 1506.1 lost to ATV IX only 395437 1506.1 lost to all IX 395437 1506.1 Potential Interfering Stations Included in above Scenario 7 10A PA HARRI SBURG **BPCDT** CP 20080620AGL 11A NY NEW YORK **BMPCDT** 20080620ALB APP 11A PA JEANNETTE **BMPCDT** 20080616ABM CP 11A PA WILKES-BARRE 20051123AJX LIC BLCDT 12A DE WILMINGTON **BMPEDT** 20091204ADC CP 12A WV MARTINSBURG BLCDT 20021108AAX LIC 11A VA STAUNTON DTVPLN DTVP0338 PLN After Analysis Results for: 11A MD BALTIMORE BPCDT 20100429AAF HAAT 299.0 m, ATV ERP 26.6 kW POPULATI ON AREA (sq km) 31809.2 within Noise Limited Contour 8596693 not affected by terrain losses lost to NTSC IX 8300862 29972.9 0.0 0 398381 1542.3 lost to additional IX by ATV lost to ATV IX only 398381 1542.3 lost to all IX 398381 1542.3 Potential Interfering Stations Included in above Scenario 7 10A PA HARRI SBURG BPCDT 20080620AGL CP 20080620ALB 11A NY NEW YORK **BMPCDT** APP 11A PA JEANNETTE **BMPCDT** 20080616ABM CP 11A PA WILKES-BARRE BLCDT 20051123AJX LIC 12A DE WILMINGTON CP **BMPEDT** 20091204ADC 12A WV MARTINSBURG BLCDT 20021108AAX LIC 11A VA STAUNTON BPEDT 20111212ABK AΡ Percent new IX = 0.0372% Result key: 16 Scenari o 8 Affected station Before Analysis Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP

HAAT 299.0 m, ATV ERP 26.6 kW

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POPULATI ON
                                               AREA (sq km)
                                                 31809. 2
   within Noise Limited Contour
                                    8596693
   not affected by terrain losses
                                                 29972.9
                                    8300862
   lost to NTSC IX
                                                     0.0
                                          O
   lost to additional IX by ATV
                                     395437
                                                  1506.1
   lost to ATV IX only
                                     395437
                                                  1506.1
   lost to all IX
                                     395437
                                                  1506. 1
 Potential Interfering Stations Included in above Scenario
                                                               8
10A PA HARRI SBURG
                            BPCDT
                                      20080620AGL
11A NY NEW YORK
                            BMPCDT
                                      20080620ALB
                                                   APP
11A PA JEANNETTE
                            BLCDT
                                      20090626AAT
                                                   LIC
11A PA WILKES-BARRE
                                      20051123AJX
                            BLCDT
                                                   LIC
12A DE WILMINGTON
                            BMPEDT
                                      20091204ADC
                                                   CP
12A WV MARTINSBURG
                                      20021108AAX
                                                   LIC
                            BLCDT
                                      DTVP0338
                                                   PLN
11A VA STAUNTON
                            DTVPLN
After Analysis
Results for: 11A MD BALTIMORE
                                         BPCDT
                                                   20100429AAF
                                                                CP
   HAAT 299.0 m, ATV ERP
                            26.6 kW
                                  POPULATI ON
                                               AREA (sq km)
   within Noise Limited Contour
                                    8596693
                                                 31809.2
                                                 29972.9
   not affected by terrain losses
                                    8300862
   lost to NTSC IX
                                                     0.0
                                          0
                                                  1542.3
   lost to additional IX by ATV
                                     398381
   lost to ATV IX only
                                     398381
                                                  1542.3
   lost to all IX
                                     398381
                                                  1542.3
 Potential Interfering Stations Included in above Scenario
                                                               8
10A PA HARRI SBURG
                            BPCDT
                                      20080620AGL
11A NY NEW YORK
                            BMPCDT
                                                   APP
                                      20080620ALB
                                      20090626AAT
11A PA JEANNETTE
                            BLCDT
                                                   LIC
11A PA WILKES-BARRE
                            BLCDT
                                      20051123AJX
                                                   LIC
12A DE WILMINGTON
                            BMPEDT
                                      20091204ADC
                                                   CP
12A WV MARTINSBURG
                            BLCDT
                                      20021108AAX
                                                   LIC
11A VA STAUNTON
                            BPEDT
                                      20111212ABK
                                                   AΡ
Percent new IX =
                    0.0372%
Worst case new IX
                     0.0372% Scenario
                                           3
Analysis of Interference to Affected Station
Analysis of current record
                           Ci ty/State
Channel
            Call
                                             Application Ref. No.
   11
           WTVI
                      CHARLOTTÉ NC
                                                BLEDT
                                                          -20101222ABA
     Stations Potentially Affecting This Station
                 Ci ty/State
Chan
      Call
                                      Dist(km) Status
                                                       Application Ref. No.
 10
      WIS
               COLUMBIA SC
                                         129. 3
                                               LIC
                                                       BLCDT
                                                                 -20090624ABZ
     WTOC-TV
               SAVANNAH GA
                                                LIC
                                                       BLCDT
                                                                  -20090622ABP
 11
                                         364. 4
 11
     WTVD
               DURHAM NC
                                         200.3
                                                LIC
                                                       BLCDT
                                                                  -20100929AGW
 11
     WJHL-TV
               JOHNSON CITY TN
                                         181.8
                                                LIC
                                                       BLCDT
                                                                  -20100910AAC
 11
     WVPT
               STAUNTON VA
                                         342.7
                                                PLN
                                                       DTVPLN
                                                                  -DTVP0338
 11
     CVIL
               STAUNTON VA
                                         358.8
                                                AΡ
                                                       BPEDT
                                                                  -20111212ABK
```

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11
     MONT
               STAUNTON VA
                                          353.6 AP
                                                         BPEDT
                                                                   -20111212ABK
 11
      MAIN
               STAUNTON VA
                                          342.7 AP
                                                         BPEDT
                                                                   -20111212ABK
 Total scenarios = 1
Result key:
                  17
Scenari o
                1 Affected station
Before Analysis
                                                    20101222ABA LIC
Results for: 11A NC CHARLOTTE
                                          BLEDT
   HAAT 363.0 m, ATV ERP 2.6 kW
                                   POPULATI ON
                                                AREA (sq km)
                                     2322392
                                                   23534.0
   within Noise Limited Contour
   not affected by terrain losses
                                     2294540
                                                   22766.8
   lost to NTSC IX
                                           0
                                                       0.0
  lost to additional IX by ATV lost to ATV IX only
                                      146239
                                                    2645.1
                                      146239
                                                    2645.1
   lost to all IX
                                      146239
                                                    2645.1
 Potential Interfering Stations Included in above Scenario
10A SC COLUMBIA
                             BLCDT
                                       20090624ABZ
                                                    LIC
11A GA SAVANNAH
                                       20090622ABP
                                                    LIC
                             BLCDT
11A NC DURHAM
                             BLCDT
                                       20100929AGW
                                                    LIC
11A TN JOHNSON CITY
                             BLCDT
                                       20100910AAC
                                                    LIC
After Analysis
Results for: 11A NC CHARLOTTE
                                          BLEDT
                                                     20101222ABA LIC
   HAAT 363.0 m, ATV ERP 2.6 kW
                                   POPULATI ON
                                                AREA (sq km)
  within Noise Limited Contour
not affected by terrain losses
lost to NTSC IX
lost to additional IX by ATV
                                     2322392
                                                   23534.0
                                     2294540
                                                   22766.8
                                           0
                                                       0.0
                                      146239
                                                    2645.1
   lost to ATV IX only
                                                    2645.1
                                      146239
   lost to all IX
                                      146239
                                                    2645.1
 Potential Interfering Stations Included in above Scenario
                                                                 1
10A SC COLUMBIA
11A GA SAVANNAH
                             BLCDT
                                       20090624ABZ
                                                    IIC
                                       20090622ABP
                             BLCDT
                                                    LIC
11A NC DURHAM
                                       20100929AGW
                             BLCDT
                                                    LIC
11A TN JOHNSON CITY
                             BLCDT
                                       20100910AAC
                                                    LIC
11A VA STAUNTON
                             BPEDT
                                       20111212ABK
                                                    AP
Percent new IX =
                    0.0000%
                     0.0000% Scenari o
Worst case new IX
Analysis of Interference to Affected Station
Analysis of current record
                           Ci ty/State
Channel
                                              Application Ref. No.
           Call
           WTVD
                      DURHAM NČ
                                                 BLCDT -20100929AGW
   11
     Stations Potentially Affecting This Station
Chan
       Call
                 Ci ty/State
                                       Dist(km) Status Application Ref. No.
      WNCT-TV GREENVILLE NC
 10
                                          108. 4 LIC
                                                         BLCDT -20110504ACA
```

11	WTVI	CHARLOTTE NC		200. 3	LIC	BLEDT	-20101222ABA
11	WJHL-TV	JOHNSON CITY	TN	334.8	LIC	BLCDT	-20100910AAC
11	WVPT	STAUNTON VA		286. 1	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA		257. 4	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA		312. 1	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA		286. 1	AP	BPEDT	-20111212ABK
12	WCTI -TV	NEW BERN NC		125. 2	LIC	BLCDT	-20090622AD0
12	WWBT	RI CHMOND VA		224. 0	LIC	BLCDT	-20090803ABS
Total	scenario	os = 1					
Result Scenar Before	: key: io e Analysi:	18 1 Affected s	stati on	8			
		1A NC DURHAM m, ATV ERP	45 O KW	BLCDT	2010	00929AGW	LIC
			DOL	PULATION A	AREA (so 51812	q km)	
not	: affected st to NTS	e Limited Con d by terrain C IX	losses 3	3319437 0	50720		
Los	st to ATV	itional IX by	ATV	149679 149679	4067 4067	. 3	
los	st to all	IX		149679	4067		
Poter	ntial Inte	erfering Stat	ions Inclu	ıded in abov	ve Scena	ari o	1
	GREENVIII CHARLOT	TF	BLCDT BLEDT	20110504A0 20101222AE			
11A TN	JOHNSON NEW BERI	CITY	BLCDT	20100910AA	AC LIC		
	STAUNTO		BLCDT DTVPLN	DTVP0338	PLN		
After	Anal ysi s						
		1A NC DURHAM m, ATV ERP	45.0 kW	BLCDT	2010	00929AGW	LIC
		e Limited Con	POF	PULATION A 3369349	REA (so 51812		
not		d by terrain		3319437 0	50720		
los		itional IX by	ATV	152349 152349	4131 4131	. 8	
	st to all			152349	4131		
Poter	ntial Inte	erfering Stat	ions Inclu	ıded in abov	ve Scena	ari o	1
	GREENVIII CHARLOT		BLCDT BLEDT	20110504A0 20101222AE			
	I JOHNSON NEW BERI		BLCDT BLCDT	20100910AA 20090622AD			
	A STAUNTOI		BPEDT	20111212AE			
		= 0. 0842%					
Worst	case new	IX 0. 0842	% Scenario) 1			

Analysis of current record Channel Call Ci ty/State JEANNETTE PA Application Ref. No. 11 WPCW **BMPCDT** -20080616ABM

Stations Potentially Affecting This Station

Chan 10	Call WOIO	City/State SHAKER HEIGHTS OH	Dist(km) 172.2	Status LIC	Application	on Ref. No. -19991110AAR
10	WOIO	SHAKER HEIGHTS OH	172. 2	СР	BPCDT	-20080620AKW
10	WVFX	CLARKSBURG WV	135. 5	LIC	BLCDT	-20090612AJY
11	WBAL-TV	BALTIMORE MD	314. 7	LIC	BLCDT	-20090619ABW
11	WBAL-TV	BALTI MORE MD	314. 7	СР	BPCDT	-20100429AAF
11	WTOL	TOLEDO OH	310. 5	LIC	BLCDT	-20090622ABU
11	WBRE-TV	WILKES-BARRE PA	356. 9	LIC	BLCDT	-20051123AJX
11	WVPT	STAUNTON VA	265. 9	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA	308. 8	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	241. 7	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	265. 9	AP	BPEDT	-20111212ABK
12	WMFD-TV	MANSFIELD OH	221. 2	LIC	BLCDT	-20081112ALJ
12	WI CU-TV	ERIE PA	174. 5	LIC	BLCDT	-20090619ABT
12	WBOY-TV	CLARKSBURG WV	136. 9	LIC	BLCDT	-20090227ABW
12	WWPX-TV	MARTI NSBURG WV	202. 5	LIC	BLCDT	-20021108AAX
Prop	osal caus	es no interference				

Analysis of Interference to Affected Station 10

Analysis of current record

Application Ref. No. BLCDT -20090626AAT Ci ty/State JEANNETTE PA Channel Call 11 WPCW

Stations Potentially Affecting This Station

Chan 10	Call WOIO	City/State SHAKER HEIGHTS OH	Dist(km) 172.2		Application BLCDT	on Ref. No. -19991110AAR
10	WOIO	SHAKER HEIGHTS OH	172. 2	CP	BPCDT	-20080620AKW
10	WVFX	CLARKSBURG WV	135. 5	LIC	BLCDT	-20090612AJY
11	WBAL-TV	BALTI MORE MD	314. 7	LIC	BLCDT	-20090619ABW
11	WBAL-TV	BALTI MORE MD	314. 7	СР	BPCDT	-20100429AAF
11	WTOL	TOLEDO OH	310. 5	LIC	BLCDT	-20090622ABU

11	WBRE-TV	WILKES-BARRE PA	356. 9	LIC	BLCDT	-20051123AJX
11	WVPT	STAUNTON VA	265. 9	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA	308.8	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	241. 7	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	265. 9	AP	BPEDT	-20111212ABK
12	WMFD-TV	MANSFIELD OH	221. 2	LIC	BLCDT	-20081112ALJ
12	WI CU-TV	ERIE PA	174. 5	LIC	BLCDT	-20090619ABT
12	WBOY-TV	CLARKSBURG WV	136. 9	LIC	BLCDT	-20090227ABW
12	WWPX-TV	MARTI NSBURG WV	202. 5	LIC	BLCDT	-20021108AAX
_		6				

Proposal causes no interference

Analysis of Interference to Affected Station 11

Analysis of current record
Channel Call City/State Application Ref. No.
11 WBRE-TV WILKES-BARRE PA BLCDT -20051123AJX

Stations Potentially Affecting This Station

Chan 10	Call WHTM-TV	Ci ty/State HARRI SBURG PA	Dist(km) 132.3		Application	on Ref. No. -20040812AAH
10	WHTM-TV	HARRI SBURG PA	132. 3	СР	BPCDT	-20080620AGL
11	WWLP	SPRINGFIELD MA	281. 8	LIC	BLCDT	-20090612AJV
11	WBAL-TV	BALTI MORE MD	215. 7	LIC	BLCDT	-20090619ABW
11	WBAL-TV	BALTI MORE MD	215. 7	СР	BPCDT	-20100429AAF
11	WPI X	NEW YORK NY	164. 7	APP	BMPCDT	-20080620ALB
11	WPI X	NEW YORK NY	165. 6	LIC	BLCDT	-20090911ABN
11	WPCW	JEANNETTE PA	356. 9	CP MOD	BMPCDT	-20080616ABM
11	WPCW	JEANNETTE PA	356. 9	LIC	BLCDT	-20090626AAT
11	CVIL	STAUNTON VA	420. 0	AP	BPEDT	-20111212ABK
12	WHYY-TV	WILMINGTON DE	137. 7	CP MOD	BMPEDT	-20091204ADC
12	WNYT	ALBANY NY	222. 4	LIC	BLCDT	-20100505AHT
11	MONT	STAUNTON VA		AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA		AP	BPEDT	-20111212ABK

Proposal causes no interference

Analysis of current record

City/State JOHNSON CITY TN Application Ref. No. BLCDT -20100910AAC Channel Call 11 WJHL-TV

Stations Potentially Affecting This Station

Chan 10	Call WBIR-TV	City/State KNOXVILLE TN	Dist(km) 168.4	Status LIC	Application	on Ref. No. -20090619ADG
10	WSWP-TV	GRANDVI EW WV	191. 9	LIC	BLEDT	-20100210AAQ
10	WSWP-TV	GRANDVI EW WV	191. 9	APP	BDSTA	-20080225AGT
11	WHAS-TV	LOUI SVI LLE KY	391. 2	LIC	BLCDT	-20100628AWQ
11	WTVI	CHARLOTTE NC	181. 8	LIC	BLEDT	-20101222ABA
11	WTVD	DURHAM NC	334. 8	LIC	BLCDT	-20100929AGW
11	WVPT	STAUNTON VA	315. 3	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA	366. 5	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	309. 1	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	315. 3	AP	BPEDT	-20111212ABK
12	WYMT-TV	HAZARD KY	125. 7	LIC	BLCDT	-20040109ACY

Total scenarios = 1

Result key: Scenario Before Analysis 19 1 Affected station 12

Results for: 11A TN JOHNSON CITY	BLCDT	20100910AAC	LIC
HAAT 708.0 m, ATV ERP 34.5 k	kW		
	POPULATI ON	AREA (sq km)	
within Noise Limited Contour	2087406	49236.0	
not affected by terrain losses	1454882	37319. 6	
lost to NTSC IX	0	0. 0	
lost to additional IX by ATV	106181	1909. 4	
lost to ATV IX only	106181	1909. 4	
lost to all IX	106181	1909. 4	

Potential Interfering Stations Included in above Scenario

10A TN	KNOXVI LLE	BLCDT	20090619ADG	LIC
11A KY	LOUI SVI LLE	BLCDT	20100628AWQ	LIC
11A NC	CHARLOTTE	BLEDT	20101222ABA	LIC
11A NC	DURHAM	BLCDT	20100929AGW	LIC
12A KY	HAZARD	BLCDT	20040109ACY	LIC
11A VA	STAUNTON	DTVPLN	DTVP0338	PLN

After Analysis

Results for: 11A TN JOHNSON CITY HAAT 708.0 m. ATV ERP 34.5	BLCDT	20100910AAC	LIC
,	POPULATI ON	AREA (sq km)	
within Noise Limited Contour not affected by terrain losses		49236. 0 37319. 6	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	106395	1921. 5	
lost to ATV IX only	106395	1921. 5	

lost to all IX 106395 1921.5

Potential Interfering Stations Included in above Scenario 1

KNOXVI LLE	BLCDT	20090619ADG	LIC
LOUI SVI LLE	BLCDT	20100628AWQ	LIC
CHARLOTTE	BLEDT	20101222ABA	LIC
DURHAM	BLCDT	20100929AGW	LIC
HAZARD	BLCDT	20040109ACY	LIC
STAUNTON	BPEDT	20111212ABK	AP
	KNOXVI LLE LOUI SVI LLE CHARLOTTE DURHAM HAZARD STAUNTON	LOUI SVI LLE CHARLOTTE DURHAM HAZARD BLCDT BLCDT	LOUI SVI LLE BLCDT 20100628AWQ CHARLOTTE BLEDT 20101222ABA DURHAM BLCDT 20100929AGW HAZARD BLCDT 20040109ACY

Percent new IX = 0.0159%

Worst case new IX 0.0159% Scenario 1

Analysis of Interference to Affected Station 13

Analysis of current record

Channel Call City/State Application Ref. No.
12 WWBT RICHMOND VA BLCDT -20090803ABS

Stations Potentially Affecting This Station

Chan 11	Call WBAL-TV	City/State BALTIMORE MD	Dist(km) 216.4	Status LIC	Application BLCDT	on Ref. No. -20090619ABW
11	WBAL-TV	BALTIMORE MD	216. 4	СР	BPCDT	-20100429AAF
11	WTVD	DURHAM NC	224. 0	LIC	BLCDT	-20100929AGW
11	WVPT	STAUNTON VA	175. 0	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA	101. 2	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	205.8	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	175. 0	AP	BPEDT	-20111212ABK
12	WHYY-TV	WILMINGTON DE	343. 3	CP MOD	BMPEDT	-20091204ADC
12	WCTI -TV	NEW BERN NC	267. 4	LIC	BLCDT	-20090622AD0
12	WBOY-TV	CLARKSBURG WV	315. 7	LIC	BLCDT	-20090227ABW
12	WWPX-TV	MARTI NSBURG WV	222. 3	LIC	BLCDT	-20021108AAX
13	WJZ-TV	BALTIMORE MD	216. 4	СР	BPCDT	-20110810AAL
13	WJZ-TV	BALTIMORE MD	216. 4	LIC	BLCDT	-20090727ADD
13	WVEC	HAMPTON VA	119. 5	LIC	BLCDT	-20090612AJJ
13	WSET-TV	LYNCHBURG VA	189. 4	LIC	BLCDT	-20091013ABE

Proposal causes no interference

Analysis of Interference to Affected Station 14

Analysis of current record Channel Call City/State

Stations Potentially Affecting This Station

Chan 11	Call WPCW	Ci ty/State JEANNETTE PA	Dist(km) 136.9	Status CP MOD	Application BMPCDT	on Ref. No. -20080616ABM
11	WPCW	JEANNETTE PA	136. 9	LIC	BLCDT	-20090626AAT
11	WVPT	STAUNTON VA	152. 5	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA	215. 9	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	122. 3	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	152. 5	AP	BPEDT	-20111212ABK
12	WYMT-TV	HAZARD KY	340. 6	LIC	BLCDT	-20040109ACY
12	WKRC-TV	CINCINNATI OH	359. 9	LIC	BLCDT	-20090622AFI
12	WMFD-TV	MANSFIELD OH	254. 8	LIC	BLCDT	-20081112ALJ
12	WI CU-TV	ERIE PA	310. 1	LIC	BLCDT	-20090619ABT
12	WWBT	RI CHMOND VA	315. 7	LIC	BLCDT	-20090803ABS
12	WWPX-TV	MARTI NSBURG WV	195. 6	LIC	BLCDT	-20021108AAX
13	WQED	PITTSBURGH PA	132. 8	LIC	BLEDT	-20091127ABD
13	WSET-TV	LYNCHBURG VA	227. 2	LIC	BLCDT	-20091013ABE
13	WOWK-TV	HUNTI NGTON WV	184. 2	LIC	BLCDT	-20090227ABU
_						

Proposal causes no interference

Analysis of Interference to Affected Station 15

Analysis of current record
Channel Call City/State Application Ref. No.
12 WWPX-TV MARTINSBURG WV BLCDT -20021108AAX

Stations Potentially Affecting This Station

Chan 11	Call WBAL-TV	City/State BALTIMORE MD	Dist(km) 122.2		Application	on Ref. No. -20090619ABW
11	WBAL-TV	BALTIMORE MD	122. 2	СР	BPCDT	-20100429AAF
11	WPCW	JEANNETTE PA	202. 5	CP MOD	BMPCDT	-20080616ABM
11	WPCW	JEANNETTE PA	202. 5	LIC	BLCDT	-20090626AAT
11	WVPT	STAUNTON VA	179. 9	PLN	DTVPLN	-DTVP0338
11	CVIL	STAUNTON VA	167.8	AP	BPEDT	-20111212ABK
11	MONT	STAUNTON VA	181. 3	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	179. 9	AP	BPEDT	-20111212ABK
12	WHYY-TV	WILMINGTON DE	250. 0	CP MOD	BMPEDT	-20091204ADC

12	WMFD-TV	MANSFIELD OH	413. 3	LIC	BLCDT	-20081112ALJ
12	WI CU-TV	ERIE PA	332. 6	LIC	BLCDT	-20090619ABT
12	WWBT	RI CHMOND VA	222. 3	LIC	BLCDT	-20090803ABS
12	WBOY-TV	CLARKSBURG WV	195. 6	LIC	BLCDT	-20090227ABW
13	WJZ-TV	BALTIMORE MD	122. 2	CP	BPCDT	-20110810AAL
13	WJZ-TV	BALTIMORE MD	122. 2	LIC	BLCDT	-20090727ADD
13	WQED	PITTSBURGH PA	195. 6	LIC	BLEDT	-20091127ABD

Proposal causes no interference

Analysis of Interference to Affected Station 16

Analysis of current record DTS STATION

Call Ci ty/State Channel Application Ref. No. 11 MAIN STAUNTON VA BPEDT -20111212ABK

Stations Potentially Affecting This Station

Chan 10	Call WVFX	Ci ty/State CLARKSBURG WV	Dist(km) 154.6	Status LIC	Application	on Ref. No. -20090612AJY
10	WSWP-TV	GRANDVI EW WV	149. 7	LIC	BLEDT	-20100210AAQ
10	WSWP-TV	GRANDVI EW WV	149. 7	APP	BDSTA	-20080225AGT
11	WBAL-TV	BALTIMORE MD	264. 9	LIC	BLCDT	-20090619ABW
11	WBAL-TV	BALTIMORE MD	264. 9	СР	BPCDT	-20100429AAF
11	WTVI	CHARLOTTE NC	342. 7	LIC	BLEDT	-20101222ABA
11	WTVD	DURHAM NC	286. 1	LIC	BLCDT	-20100929AGW
11	WPCW	JEANNETTE PA	265. 9	CP MOD	BMPCDT	-20080616ABM
11	WPCW	JEANNETTE PA	265. 9	LIC	BLCDT	-20090626AAT
11	WJHL-TV	JOHNSON CITY TN	315. 3	LIC	BLCDT	-20100910AAC
12	WWBT	RI CHMOND VA	175. 0	LIC	BLCDT	-20090803ABS
12	WBOY-TV	CLARKSBURG WV	152. 5	LIC	BLCDT	-20090227ABW
12	WWPX-TV	MARTI NSBURG WV	179. 9	LIC	BLCDT	-20021108AAX

DTS Site number 03 for station 20111212ABK Channel 11 Call MAIN City/State STAUNTON VA

Fails the service area limitations as noted below $\ ^{***}$ Note this comparison is for the current 3.2 kW license, WVPT has a CP for 10 kW and has applied for a

This DTS system uses EWVPT Main as 10 kW, thus there no excursions beyond limits. ****

AZIMUTH (DEGREES) EXCURSION DISTANCE KM 221. 25 0.25

```
221. 50
                                 0.29
        221.75
                                 0.28
        222.00
                                  0.33
        222.25
                                 0.39
        222.50
                                 0.43
        222.75
                                 0.41
        223.00
                                 0.47
        223.25
                                 0.50
        223.50
                                 0.57
        223.75
                                 0.58
        224. 00
224. 25
                                 0.64
                                 0.66
        224.50
                                 0. 66
        224.75
                                 0.79
                                 0.79
        225.00
                                 0.79
        225.25
        225. 50
225. 75
                                 0.85
                                 0.88
        226.00
                                 0.94
        226. 25
226. 50
                                 1.00
                                 0.97
                                 1.05
        226. 75
        227.00
                                 1. 14
        227.25
                                 1.11
        227.50
                                 1. 17
        227.75
                                 1.14
        228.00
                                 1. 23
                                 1. 29
        228. 25
        228. 50
228. 75
                                  1.39
                                 1.38
        229.00
                                 1.43
        229.25
                                 1.43
        229. 50
                                 1.47
        229.75
                                 1. 51
        230.00
                                 1.51
        230. 25
                                 1.41
        230.50
                                 1.30
        230.75
                                 1. 24
1. 28
        231.00
        231.25
                                 1.21
        231.50
                                 1.09
        231.75
                                 1.08
        232.00
                                 1.05
        232.25
                                 0.92
        232. 50
                                 0.86
        232.75
                                 0.77
        233.00
                                 0.71
        233.25
                                 0.61
        233.50
                                 0.46
        233.75
                                 0.42
        234.00
                                 0.34
DTS fails to cover non-DTS served area
        7 Cells unserved
 Total scenarios =
Result key:
                  1 Affected station 16
Scenari o
Before Analysis
Results for: 11A VA STAUNTON
HAAT 328.0 m, ATV ERP 0.1 kW
                                              BPEDT
                                                           20111212ABK AP
                                                      AREA (sq km)
                                       POPULATI ON
                                                         27162. 4
24347. 4
   within Noise Limited Contour
                                          876240
```

731286

0

0.0

not affected by terrain losses

lost to NTSC IX

lost to additional IX by lost to ATV IX only lost to all IX	ATV	47000 47000 47000	1523. 5 1523. 5 1523. 5	
Potential Interfering Stati	ions Inclu	ded in above	Scenari o	1
11A MD BALTIMORE 11A NC CHARLOTTE 11A NC DURHAM 11A TN JOHNSON CITY	BLCDT	20100929AGW	LI C LI C	
Result key: 21 Scenario 2 Affected Before Analysis	station	16		
Results for: 11A VA STAUNTON HAAT 328.0 m, ATV ERP	0.1 kW POP	ULATI ON ARE		АР
within Noise Limited Con- not affected by terrain I lost to NTSC IX lost to additional IX by lost to ATV IX only	l osses	731286 2 0 50777 50777	27162. 4 24347. 4 0. 0 1783. 4 1783. 4	
lost to all IX		50777	1783. 4	
Potential Interfering Stati	ions Inclu	ded in above	Scenari o	2
11A MD BALTIMORE 11A NC CHARLOTTE 11A NC DURHAM 11A TN JOHNSON CITY	BLCDT	20100929AGW	LI C LI C	

FINISHED FINISHED FINISHED FINISHED FINISHED

Summary Study

Percent allowed new interference: 0.500

Percent allowed new interference to non Class A LPTV: 2.000

Census data selected 2000

Data Base Selected

./data_files/pt_tvdb.sff
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 12-14-2011 Time: 16:21:58

Record Selected for Analysis (Record is a DTS)

VA US BPEDT -20111212ABK STAUNTON

Channel 11 ERP 0.10 HAAT 00328 m RCAMSL 00495 m kW

Lati tude 037-59-00 Longi tude 0078-29-02

Status AP Zone 1 Border Site number: 01 Dir Antenna Make CDB Model 0000000078975 Beam tilt N Ref Azimuth 0.0

Elevation Antenna Pattern ID: 123

Last update 00000000 Cutoff date 00000000 Docket

Comments

Applicant SHENANDOAH VALLEY EDUCATIONAL TELEVI

-20111212ABK **STAUNTON** MONT BPEDT VA US

Channel 11 ERP 0.01 HAAT 00457 m RCAMSL 01338 m kW

Latitude 038-20-39 Longitude 0079-35-47

Status AP Zone 1 Border Site number: 02 Dir Antenna Make CDB Model 0000000077677 Beam tilt N Ref Azimuth 345.0

Elevation Antenna Pattern ID: 124

Last update 00000000 Cutoff date 00000000 Docket

Comments

Applicant SHENANDOAH VALLEY EDUCATIONAL TELEVI

BPEDT MAIN -20111212ABK **STAUNTON** VA US

Channel 11 ERP 10.0 kW HAAT 00680 m RCAMSL 01333 m

Latitude 038-09-54 Longitude 0079-18-51

Status AP Zone 1 Border Site number: 03

Dir Antenna Make CDB Model 0000000107753 Beam tilt N Ref Azimuth 0.0

Elevation Antenna Pattern ID: 122

Last update 00000000 Cutoff date 00000000

Comments

Applicant SHENANDOAH VALLEY EDUCATIONAL TELEVI

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility (site # 01) meets maximum height/power limits

Facility (site # 02) meets maximum height/power limits

Facility (site # 03) does not meet maximum height/power limits Channel 11 ERP = 10.00 HAAT = 680.

Site number 1

Azi muth ERP HAAT 36.0 dBu F(50, 90) (kW) (Deg) (m) (km)

0. 0 45. 0 90. 0 135. 0 180. 0 225. 0 270. 0	0. 098 0. 029 0. 000 0. 001 0. 000 0. 001 0. 000	357. 1 264. 2 378. 9 353. 7 350. 8 324. 8 273. 5	61. 1 46. 6 16. 9 29. 6 21. 3 28. 5 13. 9
315. 0	0. 029	321.6	50. 0

Site number	r 2		
Azi muth	ERP	HAAT	36.0 dBu F(50, 90)
(Deg)	(kW)	(m)	(km)
0. Ō	0. 008	401. 6	44. 5
45. 0	0.000	268. 2	13. 8
90. 0	0.000	570. 8	20. 9
135. 0	0.000	651. 1	23. 0
180. 0	0.000	580. 4	21. 2
225. 0	0.000	497. 9	19. 0
270. 0	0.000	386. 1	17. 1
315. 0	0.004	320. 9	34. 3

Database HAAT does not agree with computed HAAT Database HAAT: 457 Computed HAAT: 460

Site number	` 3		
Azi muth	ERP	HAAT	36.0 dBu F(50, 90)
(Deg)	(kW)	(m)	(km)
0. 0	0.009	685.0	57. 2
45. 0	0. 649	683. 0	92. 0
90. 0	7.043	778. 4	114. 3
135. 0	6. 071	709. 4	111. 5
180. 0	5. 173	722. 7	110. 4
225. 0	5. 762	619. 0	108. 4
270. 0	0. 049	657. 0	69. 8
315. 0	0. 006	609. 3	52. 2

Database HAAT does not agree with computed HAAT Database HAAT: 680 Computed HAAT: 683

Evaluation toward Class A Stations from site # 01

No Spacing violations or contour overlap to Class A stations from site # 01

Evaluation toward Class A Stations from site # 02

No Spacing violations or contour overlap to Class A stations from site # 02

Evaluation toward Class A Stations from site # 03

No Spacing violations or contour overlap to Class A stations from site # 03

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

CVIL 11 STAUNTON VA BPEDT 20111212ABK Site # 01

and station

SHORT TO: WBAL-TV 11 BALTIMORE MD BLCDT 20090619ABW

039-20- 5 0076-39- 3

Req. separation 244.6 Actual separation 219.0 Short 25.6 km

SHORT TO: WBAL-TV 11 BALTIMORE 039-20- 5 0076-39- 3 MD BPCDT 20100429AAF

Req. separation 244.6 Actual separation 219.0 Short 25.6 km

SHORT TO: WVPT 11 STAUNTON VA BPEDT 20081022ABK

038-09-54 0079-18-51

Req. separation 244.6 Actual separation 75.6 Short 169.0 km

SHORT TO: WVPT 11 38 -09-54 79 -18-51 VA DTVPLN DTVP0338 11 STAUNTON

Req. separation 244.6 Actual separation 75.6 Short 169.0 km

SHORT TO: WVPT 11 STAUNTON VA BLEDT 20021220ADX

038-09-54 0079-18-51

Req. separation 244.6 Actual separation 75.6 Short 169.0 km

SHORT TO: WWBT 12 RI CHMOND VA BLCDT 20090803ABS

037-30-23 0077-30-12

Req. separation \Rightarrow 20.0 \iff 110.0 Actual separation 101.3 Short 8.7(81.3)

SPACING VIOLATION FOUND BETWEEN STATION

MONT 11 STAUNTON VA BPEDT 20111212ABK Site # 02

and station

SHORT TO: WPCW 11 JEANNETTE PA BMPCDT 20080616ABM

040-29-38 0080-01- 9

Req. separation 244.6 Actual separation 241.4 Short 3.2 km

SHORT TO: WPCW 11 JEANNETTE PA BLCDT 20090626AAT

040-29-38 0080-01- 9

Reg. separation 244.6 Actual separation 241.4 Short 3.2 km

11 STAUNTON VA BPEDT 20081022ABK

SHORT TO: WVPT 11 038-09-54 0079-18-51

Req. separation 244.6 Actual separation 31.7 Short 212.9 km

SHORT TO: WVPT 11 STAUNTON VA DTVPLN **DTVP0338** 38 -09-54 79 -18-51 Req. separation 244.6 Actual separation 31.7 Short 212.9 km

SHORT TO: WVPT 11 STAUNTON VA BLEDT 20021220ADX 038-09-54 0079-18-51 Req. separation 244.6 Actual separation 31.7 Short 212.9 km

SPACING VIOLATION FOUND BETWEEN STATION

MAIN 11 STAUNTON VA BPEDT 20111212ABK Site # 03

and station

SHORT TO: WVPT 11 STAUNTON VA BPEDT 20081022ABK 038-09-54 0079-18-51

Req. separation 244.6 Actual separation 0.0 Short 244.6 km

Req. separation 244.6 Actual separation 0.0 Short 244.6 km

SHORT TO: WVPT 11 STAUNTON VA BLEDT 20021220ADX 038-09-54 0079-18-51

Req. separation 244.6 Actual separation 0.0 Short 244.6 km

Checks to Site Number 01

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Checks to Site Number 02

Proposed facility OK to FCC Monitoring Stations

Proposed facility within West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Checks to Site Number 03

Proposed facility OK to FCC Monitoring Stations

Proposed facility within West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Proposed Station
Channel Call City/State ARN
11 CVIL STAUNTON VA BPEDT 20111212ABK

Stations Potentially Affected by Proposed Station

Chan 10	Call WAZT-CA	City/State WOODSTOCK VA	Dist(km) 109.1	Status LIC	Application	on Ref. No. 20030718ADF
10	WVFX	CLARKSBURG WV	217. 9	LIC	BLCDT	20090612AJY
10	WSWP-TV	GRANDVI EW WV	219. 8	LIC	BLEDT	20100210AAQ
10	WSWP-TV	GRANDVI EW WV	219. 8	APP	BDSTA	20080225AGT
11	WBAL-TV	BALTI MORE MD	218. 8	LIC	BLCDT	20090619ABW
11	WBAL-TV	BALTIMORE MD	218. 8	СР	BPCDT	20100429AAF
11	WTVI	CHARLOTTE NC	358. 8	LIC	BLEDT	20101222ABA
11	WTVD	DURHAM NC	257. 4	LIC	BLCDT	20100929AGW
11	WPCW	JEANNETTE PA	308.8	CP MOD	BMPCDT	20080616ABM
11	WPCW	JEANNETTE PA	308.8	LIC	BLCDT	20090626AAT
11	WBRE-TV	WILKES-BARRE PA	420. 0	LIC	BLCDT	20051123AJX
11	WJHL-TV	JOHNSON CITY TN	366. 5	LIC	BLCDT	20100910AAC
12	WWBT	RI CHMOND VA	101. 2	LIC	BLCDT	20090803ABS
12	WBOY-TV	CLARKSBURG WV	215. 9	LIC	BLCDT	20090227ABW
12	WWPX-TV	MARTI NSBURG WV	167. 8	LIC	BLCDT	20021108AAX

Study of this proposal found the following interference problem(s):

DTS Site number 03 for station 20111212ABK Channel 11 Call MAIN City/State STAUNTON Fails the service area limitations

VA

DTS fails to cover non-DTS served area 7 Cells unserved

*** Note, as explained in the full text for this study, the OET-60 DTV

analysis program compares the proposed DTS service area with the 3.2 kW WVPT service area. This sytem proposes the use of WVPT 10 kW C.P. which as this data is in the process of being licensed.

WVPT DTS System Sites

WVPT-TV (CP)

BLEDT20021220ADX Latitude: 38-09-54 N Longitude: 079-18-51 W ERP: 10.00 kW

Channel: 11 Frequency: 201.0 MHz AMSL Height: 1333.0 m

WVPT-TV

BPEDT20081022ABK Latitude: 38-09-54 N Longitude: 079-18-51 W ERP: 3.20 kW

Channel: 11

Frequency: 201.0 MHz AMSL Height: 1333.0 m

Charlottsville

Latitude: 37-59-00 N Longitude: 078-29-02 W

ERP: 0.10 kW Channel: 11

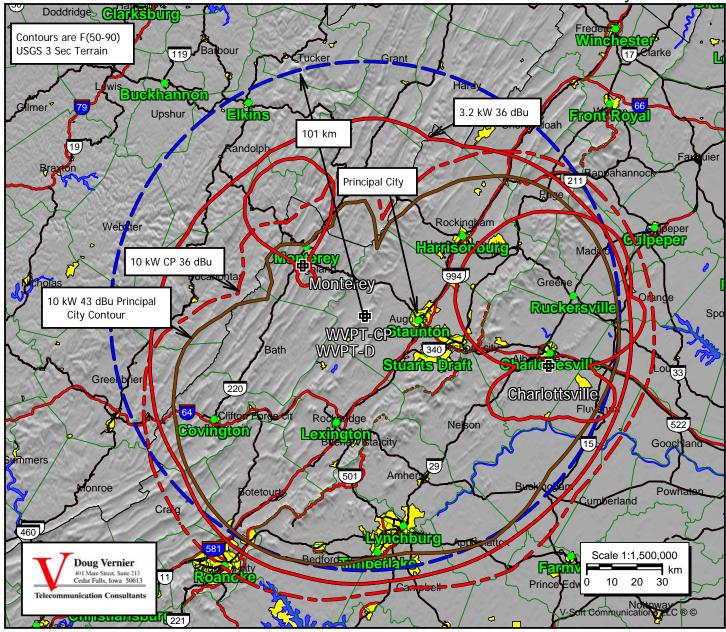
Frequency: 201.0 MHz AMSL Height: 495.0 m

Monterey

Latitude: 38-20-39 N Longitude: 079-35-47 W ERP: 0.008 kW

Channel: 11

Frequency: 201.0 MHz AMSL Height: 1338.0 m



Environmental Exhibit WVPT-TV DTS System

Shenandoah Valley Educational TV Corporation

WVPT-TV - Channel 11, 10 kW H, DA

The proposed antenna will be located at the Elliott Knob transmitter site. This is an isolated Forestry controlled antenna site having high elevation, overlooking a wide expanse of terrain with a rapid fall off of elevation in the direction of the proposed major lobe.

The site is at the top of a long winding 4-5 mile steep road up the mountain. There is a gate under lock and key at the start of this road with warning signs posted. Consequently, the site is off limits to the public and can be considered "controlled."

The applicant's DTV and analog TV are located atop the mountain. There is an LPTV and an FM station also at the site.

Based on the formulas expressed in the OET Bulletin, No. 65, August 1997 as amended, Evaluating Compliance with FCC guidelines for Human Exposure to Radio Frequency Electronic Magnetic Fields", published by the Federal Communications Commission's Office of Science and Engineering, the proposed 10 kW facility, centered at 201 MHz, with its antenna radiation center 10 meters above ground level, is predicted to produce a maximum power density at a position 2 meters above the tower base (head level) of 208.8 microwatts per square centimeter, which is 20.9 percent of the 1000 microwatt per square centimeter maximum. (Relative Field = 0.2) The proposed antenna has a depression angle of 30.3 degrees to the location of the steep drop-off which is located 13.7 meters in the front of the antenna. Based on the manufacturer's vertical elevation field, this location is within the first null. (See attachment A.) The RF density at head height at this null of relative field 0.025 is 3.39 microwatts per square centimeter. This is only 0.34 percent of the maximum. At a distance of 6.85 meters from the antenna base, or half-way between the antenna base and the drop-off, the depression angle becomes 50.9 degrees. Though the manufacturer's relative field graph ends at a depression angle of 30

degrees, if we use the OET 69 referenced high gain antenna relative field of 0.2, we get the same value as is found directly beneath the antenna. Consequently, the focus of the channel 11 beam is well off the mountain top at an area that cannot be reached by site engineers. Even so, the applicant has placed warning signs directly in front of the antenna. The power off the back of the antenna is 0.32 kW (see the proposed azimuth pattern in attachment B.) This produces 0.668 microwatts per square centimeter, assuming a relative field of 0.2. This is only 0.067 percent of the maximum.

WHSV-TV operates a DTS station from this site using the old WVPT channel 51 antenna. This antenna is a unique "billboard" antenna design which now operates at an ERP of 0.5 kW. This antenna also has its center at 10 meters above the ground.

Considering the manufacturer's vertical elevation field graph of 0.02 (see attachment C,) the field of this antenna is also at a null at a depression angle of approximately 28.5 degrees, at the drop off position which is some 13.7 meters from the base of the antenna. The RF density at this point is 0.0023 microwatts per square centimeter which is a negligible percent of the maximum. As is the case for the WVPT- DT antenna, the field will get higher as the observer gets closer to the antenna itself. At a position half the distance from the antenna, 6.85 meters from the antenna base, using a relative field of 0.1, the antenna produces 0.112 microwatts per square centimeter which is 0.005 percent of the maximum. Again, the focus of this antenna is in the same direction as the WVPT-DT antenna which the drop-off. This area has been posted with a warning sign for workers to stay outside of the area where the power density is at its highest. The area Cannot be fenced off under instructions from the Forest Service which prohibit fencing at the site.

The FM station, WTON-FM, operates with an ERI type 3 antenna having an ERP of 0.34 kW from an antenna 11 meters above ground. This station has a calculated power density, at head height, of 8.4 microwatts per square centimeter, which is 0.84 percent of the maximum.

W31CE also transmits from the site with an ERP of 27 kW from an antenna 10 meters above the ground. This station produces 141.9 microwatts per square centimeter at head height, which is 7.4 percent of the maximum.

The licensee of W41DT transmits from this site using a power of 15 kW at 28 meters above ground. At head height this station produces 8.7 microwatts per square centimeter which is 0.411 percent of the maximum.

Charlottesville Site:

This site uses a Scala DRV-1. The manufacturer indicates the field at the nadir is .08 percent. Using the more conservative field of 0.2 percent as recommend in the OET 65 documents, this antenna which transmits with 0.1 kW of horizontally polarized power from an antenna height of 66 meters to head height, this antenna produces 0.031 microwatts per square centimeter. This amounts to 0.003 percent of the maximum of 1000 microwatts per square centimeter. Since this value is well below 1% no further analysis was deemed necessary.

Monterey Site:

This site uses the Scala CL-713 antenna. The manufacturer indicates the field at the nadir is .02 percent. Using the more conservative field of 0.2 percent as recommend in the OET-65 documents, this antenna which transmits with 0.008 kW of power from an antenna height of 41 meters to head height, this antenna produces 0.006 microwatts per square centimeter. This amounts to 0.0006 percent of the maximum of 1000 microwatts per square centimeter. There are no other sources of R.F. emissions at this site.

The sum of all emissions from the WVPT-TV main site falls well below the maximum threshold for a controlled area. The Charlottesville and Monterey sites are equally protective of the environment. Consequently, the applicant will fully comply with the FCC's maximum RF power density standards. The WVPT-TV main site area is posted with warning signs. As a total system, the applicant is confident it will be in full compliance with the Commission's human exposure to radiofrequency electromagnetic fields rules.

The applicant has an agreement with the other stations at the WVPT-TV site to protect workers by either reducing R.F. emissions or terminating operations when workers are on the site or on towers where excessive exposure to electromagnetic radiation can be received.

N. Lat. = 380954.0 W. Lng. = 791851.0 HAAT and Distance to Contour, FCC OET, TV 3. 2 - 16.1, 130 pts - USGS 03 SEC

WVPT- Azi.	-D, Shena AV EL	andoah Va HAAT	alley Educa ERP kW	tiona, BF dBk	PEDT2008 Fi el d	1022ABK DAng	VFI d	D-kW	%Max	D-dBk	43-F9
Azi	AV EL	HAAT	ERP kW 0. 0090 0. 0010 0. 0160 0. 1000 0. 3610 1. 0240 2. 1160 3. 7210 5. 6250 7. 0560 8. 1000 6. 7240 5. 3290 4. 6240 7. 7440 10. 0000 7. 5690 4. 9000 5. 1840 7. 9210 8. 1000 7. 0560 6. 2410 5. 3290 1. 7640 0. 7840 0. 7840 0. 0490 0. 0040 0. 0040	dBk	Fi el d 0. 030 0. 010 0. 040 0. 100 0. 190 0. 320 0. 460 0. 610 0. 750 0. 840 0. 900 0. 820 0. 730 0. 680 1. 000 0. 720 0. 870 0. 720 0. 890 0. 730 0. 720 0. 840 0. 730 0. 720 0. 840 0. 720 0. 890 0. 730 0. 720 0. 890 0. 730 0. 720 0. 890 0. 730 0. 720 0. 900 0. 720 0. 900 0. 730 0. 720 0. 020 0. 030	DAng 0. 725 0. 687 0. 626 0. 633 0. 687 0. 746 0. 769 0. 775 0. 775 0. 764 0. 755 0. 744 0. 738 0. 743 0. 743 0. 743 0. 746 0. 750 0. 772 0. 773 0. 726 0. 772 0. 773 0. 726 0. 713 0. 725 0. 710 0. 718 0. 717 0. 716	VFI d 0. 999	0. 0090 0. 0010 0. 0160 0. 0997 0. 3601 1. 0219 2. 1121 3. 7146 5. 6149 7. 0431 8. 0854 6. 7113 5. 3186 4. 6146 7. 7278 9. 9795 7. 5533 4. 8895 5. 1735 7. 9052 8. 0853 7. 9052 8. 0853 7. 0432 6. 2273 5. 3146 1. 7600 0. 7823 0. 0489 0. 0040 0. 0090	99.9 99.9 99.9 99.9 99.9 99.9 99.9 99.	20. 46 30. 00 17. 96 10. 00 -4. 42 0. 10 3. 26 5. 71 7. 50 8. 49 9. 08 8. 27 6. 65 8. 89 10. 00 8. 79 6. 90 7. 15 8. 99 9. 08 8. 49 7. 27 2. 46 -4. 89 13. 10 23. 98 23. 98 20. 46	45. 69 27. 20 42. 98 57. 50 71. 71 83. 72 90. 54 95. 76 98. 71 100. 41 101. 72 99. 62 97. 24 95. 65 99. 56 102. 03 99. 51 95. 46 96. 54 100. 34 101. 59 100. 46 97. 15 92. 69 86. 33 80. 21 72. 71 56. 96 39. 20 39. 16 45. 22
310 320 330 340 350	706. 6 736. 3 699. 3 697. 8 656. 8	626. 4 596. 7 633. 7 635. 2 676. 2	0. 0090 0. 0040 0. 0040 0. 0040 0. 0090	-20. 46 -23. 98 -23. 98 -23. 98 -20. 46	0. 030 0. 020 0. 020 0. 020 0. 030	0. 693 0. 677 0. 697 0. 698 0. 720	0. 999 0. 999 0. 999 0. 999 0. 999	0. 0090 0. 0040 0. 0040 0. 0040 0. 0090	99. 9 - 2 99. 9 - 2 99. 9 - 2 99. 9 - 2	23. 98 23. 98 23. 98	43. 78 36. 83 38. 07 38. 12 45. 45

Ave EI = 644.10 M HAAT= 688.90 M AMSL= 1333 M

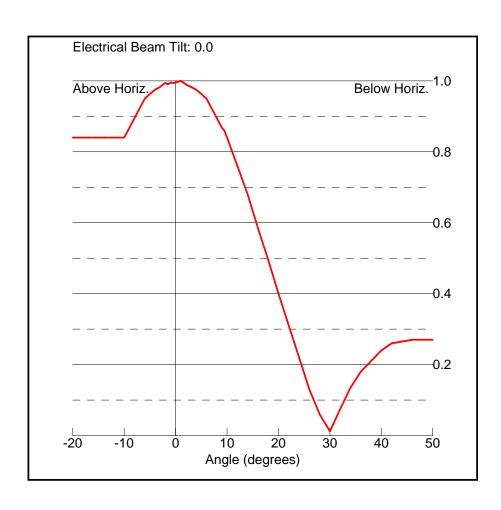
Additional Points

Ĺ	Rel	dBk	kW	dВ
.5	0.800	8.06	6.400	-1.94
48	1.000	10.00	10.000	0.00
149	1.000	10.00	10.000	0.00
Mino	or Lobes	5.		
127	0.670	6.78	4.761	-3.22

Page 2 12/15/11 Id: 10001

Vertical Elevation Pattern

Angle (deg)	Relative Field
-10.0	0.84
-8.0	0.895
-6.0	0.95
-5.0	0.963
-4.5	0.969
-4.0	0.975
-3.5	0.979
-3.0	0.983
-3.0 -2.5	0.989
-2.0 -2.0	0.994
-2.0 -1.5	0.994
-1.0 -1.0	0.995
-0.5	0.993
0.0	0.995
0.5	0.998
1.0	1.0
1.5	0.995
2.0	0.995
2.5	0.986
3.0	0.983
3.5	0.983
4.0	0.975
4.5	0.969
5.0	0.963
5.5	0.956
6.0	0.95
6.5	0.936
7.0	0.922
7.5	0.909
8.0	0.895
8.5	0.881
9.0	0.868
9.5	0.859
10.0	0.84
12.0	0.76
14.0	0.68
16.0	0.585
18.0	0.495
20.0	0.4
22.0	0.31
24.0	0.22
26.0	0.13
28.0	0.06
30.0	0.012
32.0	0.075
34.0	0.135
36.0	0.18
38.0	0.21
33.0	J. <u>L</u> 1



40.00.2442.00.2646.00.27

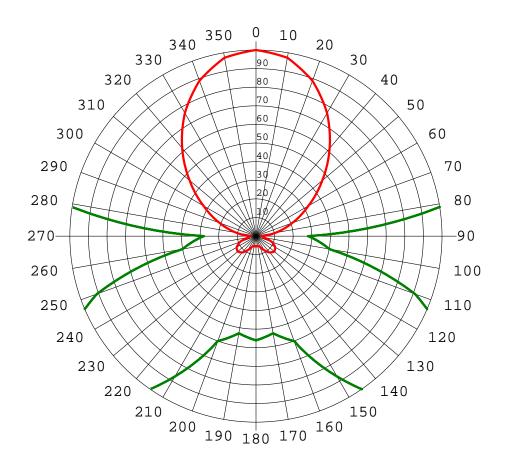
N. Lat. = 375900.0 W. Lng. = 782902.0 HAAT and Distance to Contour, FCC OET, TV 3. 2 - 16.1, 130 pts - USGS 03 SEC

Charlottseville Site - Scala DRV-1, No Rotation

Azi.	AV EL	HAAT	ERP kW	dBk	Fi el d	DAng	VFI d	D-kW	%Max D-dBk	36-F9
000	138. 1	356. 9	0. 1000	-10.00	1.000	0. 523	0. 989	0. 0979	98. 9 -10. 00	61. 33
010 020	130. 4 128. 9	364. 6 366. 1	0. 0947 0. 0789	-10. 24 -11. 03	0. 973 0. 888	0. 529 0. 530	0. 989 0. 989	0. 0927 0. 0772	98. 9 -10. 24 98. 9 -11. 03	61. 43 60. 16
030	135. 9	359. 1	0. 0584	-12.34	0. 764	0. 525	0. 989	0. 0571	98. 9 -12. 34	57. 46
040	202. 9	292. 1	0. 0379	-14. 21	0. 616	0.473	0. 990	0.0372	99.0 -14.21	50.30
050	262.8	232. 2	0. 0216	-16. 65	0. 465	0. 422	0. 991	0. 0212	99. 1 -16. 65	42.65
060	147.5	347.5	0. 0106	-19. 76	0.325	0. 516	0. 989	0. 0103	98. 9 -19. 76	44. 13
070 080	124. 1 121. 1	370. 9 373. 9	0. 0043 0. 0012	-23. 64 -29. 33	0. 208 0. 108	0. 533 0. 536	0. 989 0. 989	0. 0042 0. 0011	98. 9 -23. 64 98. 9 -29. 33	38. 56 28. 92
090	121.1	373. 9 378. 4	0. 0012	-29. 33 -41. 06	0. 108	0. 536	0. 989	0. 0011	98. 9 - 29. 33 98. 9 - 41. 06	20. 92 15. 94
100	114. 7	380. 3	0. 0001	-37. 96	0.040	0. 540	0. 989	0.0001	98. 9 - 37. 96	19. 06
110	105.6	389. 4	0. 0008	-30.82	0. 091	0. 547	0. 990	0.0008	99. 0 -30. 82	27. 52
120	127. 4	367. 6	0. 0014	-28. 42	0. 120	0. 531	0. 989	0. 0014	98. 9 -28. 42	29. 99
130	139. 9	355. 1	0. 0017	-27. 79	0. 129	0. 522	0. 989	0. 0016	98. 9 -27. 79	30. 41
140	147.8	347. 2	0.0013	-28. 79	0. 115	0. 516	0. 989	0.0013	98. 9 -28. 79	28. 60
150 160	149. 2 153. 2	345. 8 341. 8	0. 0008 0. 0004	-31. 21 -34. 44	0. 087 0. 060	0. 515 0. 512	0. 989 0. 989	0. 0007 0. 0004	98. 9 -31. 21 98. 9 -34. 44	25. 43 21. 66
170	150. 3	344. 7	0. 0004	-35. 51	0.053	0. 512	0. 989	0. 0004	98. 9 -35. 51	20.62
180	144.6	350. 4	0. 0003	-35.04	0.056	0. 519	0. 989	0. 0003	98. 9 -35. 04	21. 31
190	149. 4	345.6	0.0003	-35. 51	0.053	0. 515	0. 989	0.0003	98. 9 -35. 51	20.65
200	157. 3	337. 7	0. 0004	-34.44	0.060	0.509	0. 989	0.0004	98. 9 -34. 44	21. 52
210	173.6	321. 4	0. 0008	-31. 21	0. 087	0. 497	0. 989	0.0007	98. 9 -31. 21	24. 55
220 230	175. 8 164. 6	319. 2 330. 4	0. 0013 0. 0017	-28. 79 -27. 79	0. 115 0. 129	0. 495 0. 503	0. 989 0. 989	0. 0013 0. 0016	98. 9 -28. 79 98. 9 -27. 79	27. 50 29. 34
240	168. 1	326. 9	0.0017	-27. 79	0. 129	0. 503	0. 989	0. 0010	98. 9 -28. 42	28. 31
250	202. 2	292. 8	0. 0008	-30.82	0. 091	0. 474	0. 990	0.0008	99. 0 -30. 82	24. 04
260	213.0	282.0	0.0002	-37. 96	0.040	0.465	0. 990	0.0002	99.0 -37.96	16. 24
270	221. 1	273. 9	0. 0001	-41.06	0. 028	0. 458	0. 990	0. 0001	99.0 -41.06	13. 26
280	238. 0	257. 0	0. 0012	-29. 33	0. 108	0.444	0. 990	0. 0011	99.0 -29.33	24. 96
290 300	218. 9 199. 2	276. 1 295. 8	0. 0043 0. 0106	-23. 64 -19. 76	0. 208 0. 325	0. 460 0. 476	0. 990 0. 990	0. 0042 0. 0103	99. 0 -23. 64 99. 0 -19. 76	33. 71 41. 35
310	179. 2	295. 6 316. 4	0. 0106	-19. 76 -16. 65	0. 323	0. 478	0. 990	0. 0103	98. 9 -16. 65	41. 33
320	166. 3	328. 7	0. 0381	-14. 19	0. 617	0. 502	0. 989	0. 0372	98. 9 -14. 19	52. 43
330	165. 6	329. 4	0. 0584	-12.34	0. 764	0. 503	0. 989	0. 0571	98. 9 -12. 34	55. 54
340	159. 7	335. 3	0. 0789	-11. 03	0.888	0. 507	0. 989	0. 0771	98. 9 -11. 03	58.08
350	144. 4	350. 6	0. 0947	-10. 24	0. 973	0. 519	0. 989	0. 0926	98. 9 -10. 24	60. 48

Ave EI = 162.13 M HAAT= 332.87 M AMSL= 495 M

Charlottesville, DRV-1, Horizontal Azimuth Pattern

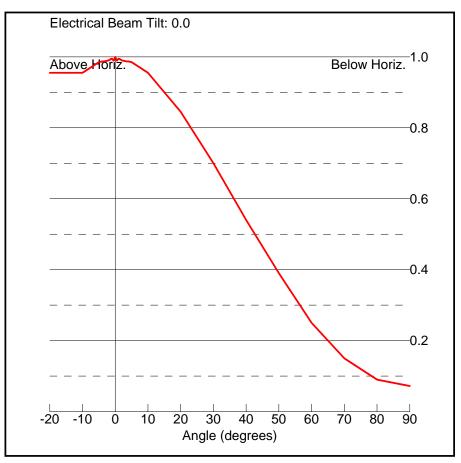


Azi	Rel	dBk	kW	dB	Azi	Rel	dBk	kW	dB
0	1.000	-10.00	0.100	0.00	180	0.056	-35.04	0.000	-25.04
10	0.973	-10.24	0.095	-0.24	190	0.053	-35.51	0.000	-25.51
20	0.888	-11.03	0.079	-1.03	200	0.060	-34.44	0.000	-24.44
30	0.764	-12.34	0.058	-2.34	210	0.087	-31.21	0.001	-21.21
40	0.616	-14.21	0.038	-4.21	220	0.115	-28.79	0.001	-18.79
50	0.465	-16.65	0.022	-6.65	230	0.129	-27.79	0.002	-17.79
60	0.325	-19.76	0.011	-9.76	240	0.120	-28.42	0.001	-18.42
70	0.208	-23.64	0.004	-13.64	250	0.091	-30.82	0.001	-20.82
80	0.108	-29.33	0.001	-19.33	260	0.040	-37.96	0.000	-27.96
90	0.028	-41.06	0.000	-31.06	270	0.028	-41.06	0.000	-31.06
100	0.040	-37.96	0.000	-27.96	280	0.108	-29.33	0.001	-19.33
110	0.091	-30.82	0.001	-20.82	290	0.208	-23.64	0.004	-13.64
120	0.120	-28.42	0.001	-18.42	300	0.325	-19.76	0.011	-9.76
130	0.129	-27.79	0.002	-17.79	310	0.465	-16.65	0.022	-6.65
140	0.115	-28.79	0.001	-18.79	320	0.617	-14.19	0.038	-4.19
150	0.087	-31.21	0.001	-21.21	330	0.764	-12.34	0.058	-2.34
160	0.060	-34.44	0.000	-24.44	340	0.888	-11.03	0.079	-1.03
170	0.053	-35.51	0.000	-25.51	350	0.973	-10.24	0.095	-0.24

Rotation Angle = 0

Chrlottesville_Vertical Elevation Pattern

Angle (deg)	Relative Field
-10.0	0.955
-5.0	0.985
-4.5	0.986
-4.0	0.987
-3.5	0.987
-3.0	0.988
-2.5	0.989
-2.0	0.99
-1.5	0.993
-1.0	0.995
-0.5	0.989
0.0	1.0
0.5	0.989
1.0	0.995
1.5	0.993
2.0	0.99
2.5	0.989
3.0	0.988
3.5	0.987
4.0	0.987
4.5	0.986
5.0	0.985
5.5	0.982
6.0	0.979
6.5	0.976
7.0	0.973
7.5	0.97
8.0	0.967
8.5	0.964
9.0	0.961
9.5	0.958
10.0	0.955
20.0	0.845
30.0	0.7
40.0	0.54
50.0	0.39
60.0	0.25
70.0	0.15
80.0	0.09
90.0	0.072



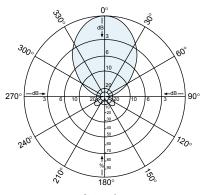


Kathrein Scala Division DRV panel antennas for VHF television transmission offer high performance, low VSWR, and application flexibility. Multi-panel arrays can be utilized to provide the standard patterns shown below and custom patterns for specific coverage requirements. Arrays include power dividers and coax feeders, plus installation hardware.

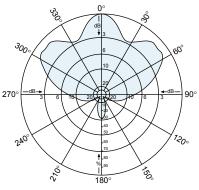
Like all Kathrein Scala Division antennas, the DRV is made of the finest materials using state of the art electrical and mechanical designs, resulting in superior performance and long service life.

*The DRV covers channel 7 through 13 in system M as well as all other international band III channels.

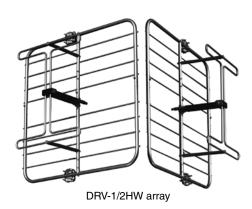


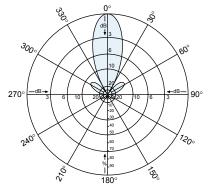


/1 series Azimuth pattern (E-plane)

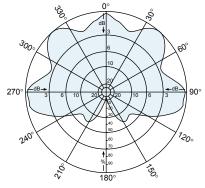


/2HW series Azimuth pattern (E-plane)

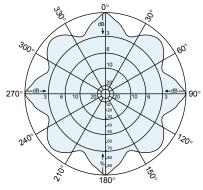




/2HN series
Azimuth pattern (E-plane)



/3HC series
Azimuth pattern (E-plane)



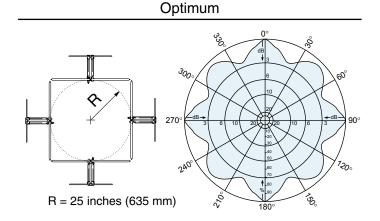
/4HO series
Azimuth pattern (E-plane)



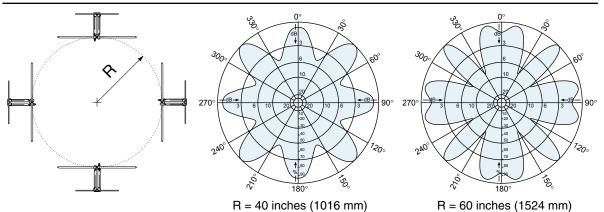




Panel antennas are designed so that their azimuth patterns achieve optimum smoothness when mounted as closely together as possible. Larger mounting radii produce undesirable scalloping.



Scalloped



Specifications:

-p	Gain	Power	Weight			Number	Number
Model	dBd	Gain	lb (kg)	Dimen	sions	of Panels	of Bays
DRV-1/1	7	5.01	18 (8.2)	48 x 48 x 18 inches	(1219 x 1219 x 457 mm)	1	1
DRV-2/1	10.4	10.96	36 (16.4)	110 x 48 x 18 inches	(2794 x 1219 x 457 mm)	2	2
DRV-4/1	13.4	21.88	72 (32.8)	237 x 48 x 18 inches	(6020 x 1219 x 457 mm)	4	4
DRV-1/2HN	10	10	36 (16.4)	48 x 100 x 18 inches	(1219 x 2540 x 457 mm)	2	1
DRV-2/2HN	13.4	21.88	72 (32.8)	110 x 100 x 18 inches	(2794 x 2540 x 457 mm)	4	2
DRV-4/2HN	16.4	43.65	144 (65.6)	237 x 100 x 18 inches	(6020 x 2540 x 457 mm)	8	4
DRV-1/2HW	4.5	2.82	36 (16.4)	48 x 70 x 70 inches	(1219 x 1778 x 1778 mm)	2	1
DRV-2/2HW	7.9	6.17	72 (32.8)	110 x 70 x 70 inches	(2794 x 1778 x 1778 mm)	4	2
DRV-4/2HW	10.9	12.3	144 (65.6)	237 x 70 x 70 inches	(6020 x 1778 x 1778 mm)	8	4
DRV-1/3HC	2.5	1.78	54 (24.6)	48 x 88 x 70 inches	(1219 x 2235 x 1778 mm)	3	1
DRV-2/3HC	5.9	3.89	108 (49.2)	110 x 88 x 70 inches	(2794 x 2235 x 1778 mm)	6	2
DRV-4/3HC	8.9	7.76	216 (98.4)	237 x 88 x 70 inches	(6020 x 2235 x 1778 mm)	12	4
DRV-1/4HO	1	1.26	72 (32.8)	48 x 88 x 88 inches	(1219 x 2235 x 2235 mm)	4	1
DRV-2/4HO	4.4	2.75	144 (65.6)	110 x 88 x 88 inches	(2794 x 2235 x 2235 mm)	8	2
DRV-4/4HO	7.4	5.5	288 (131)	237 x 88 x 88 inches	(6020 x 2235 x 2235 mm)	16	4

Contact Kathrein Scala Division Sales Engineering for information on special arrays with higher gain, asymmetrical patterns, electrical beamtilt, null fill, multichannel bandwidth, and other features to meet your specific requirements.

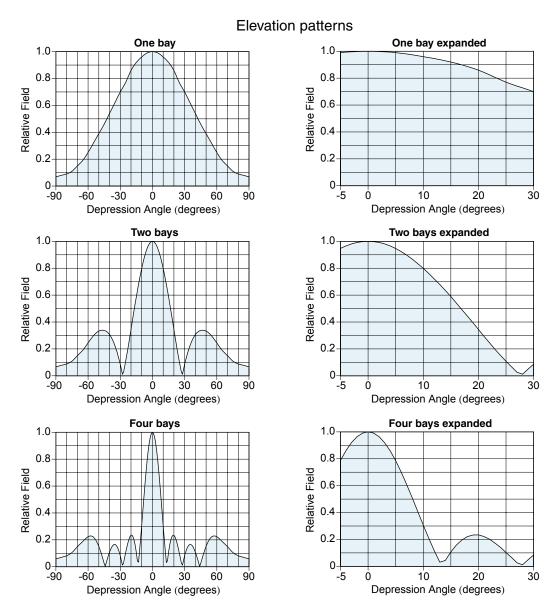


General Specifications:

	•
Frequency	174-230 MHz (broadband)*
Impedance	50 ohms
VSWR	< 1.2:1
Polarization	Horizontal or vertical
Maximum input power	500 watts per panel (at 50° C)
Connector	N female
Wind load Front	at 100 mph (160 kph) 93 lbf (412 N)
Wind survival rating**	120 mph (200 kph)
Mounting	Hardware is included for attachment to 2.375 inch (60 mm) OD masts. Contact Kathrein Scala Division Sales Engineering for special mounting hardware and accessories.

^{*}The DRV covers channel 7 through 13 in system M as well as all other international band III channels.

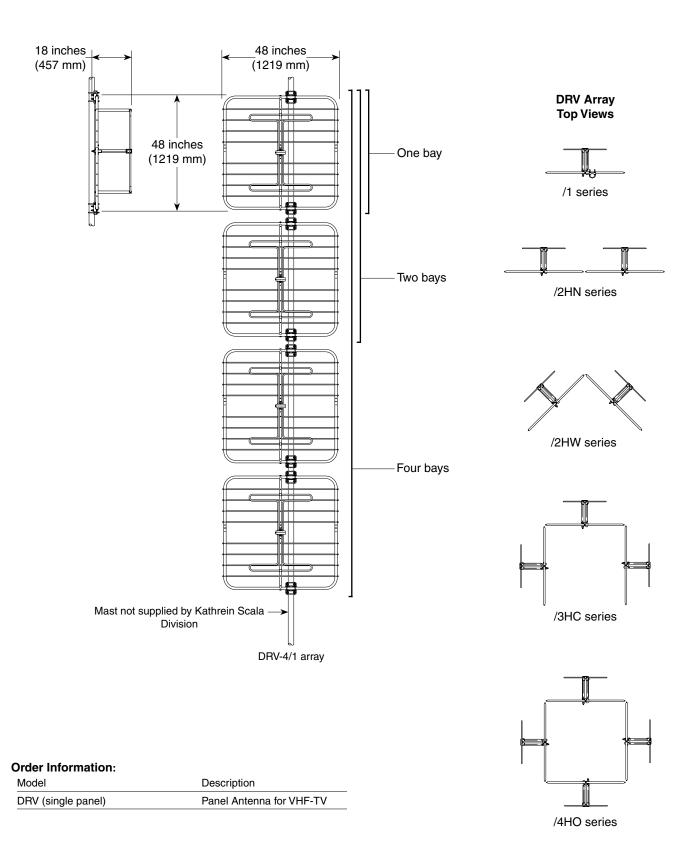
^{**} Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.







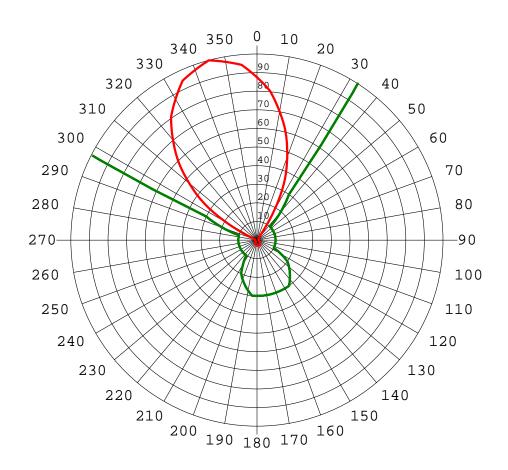
N. Lat. = 382039.0 W. Lng. = 793547.0 HAAT and Distance to Contour, FCC OET,TV 3.2 - 16.1, 130 pts - USGS 03 SEC

Mont Azi.		Site - HAAT	distance to ERP kW	contour dBk		ssion a		D-kW	%Max	D-dBk	36-F9
Azi 000 010 020 030 040 050 060 070 120 130 140 150 160 170 180 190 220 230 240 250 260 270 280	AV EL 936.0 946.5 912.4 981.2 1049.4 993.3 874.0 830.5 802.8 767.1 744.9 733.5 707.3 680.9 678.0 690.6 723.3 763.3 844.9 840.8 758.2 873.1 847.9 827.4 895.4 959.2 980.0	HAAT 402.0 391.5 425.6 356.8 288.6 344.7 464.0 507.5 535.2 570.9 593.1 604.5 630.7 636.7 657.1 660.0 647.4 614.7 497.5 497.2 579.8 464.9 490.1 510.6 442.6 378.8 358.0	ERP kw	dBk22.03 -23.94 -27.25 -36.62 -60.97 -60.97 -60.97 -60.97 -60.97 -57.45 -51.43 -51.43 -51.43 -51.43 -51.43 -51.43 -51.43 -51.43 -51.97 -60.97 -60.97 -60.97	Field 0.885 0.710 0.485 0.165 0.010 0.010 0.010 0.010 0.010 0.015 0.025 0.030	DAng \	/F1d 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998 0.998	0.0062 0.0044 0.0019 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	99 99 99 99 99 99 99 99 99 99 99 99 99		43.08 39.15 35.40 19.86 2.68 2.74 2.85 2.90 2.92 2.93 2.93 4.20 6.86 8.07 8.08 7.86 7.44 6.39 4.14 2.85 2.92 2.93 2.94 2.95 2.85 2.76 2.
290 300 310 320 330 340 350	1039.5 1009.2 1001.9 1013.0 1017.7 1005.5 968.3	298.5 328.8 336.1 325.0 320.3 332.5 369.7	0.0000 0.0000 0.0002 0.0019 0.0040 0.0063 0.0077	-60.97 -60.97 -36.62 -27.25 -23.94 -22.03 -21.13	0.010 0.165 0.485 0.710 0.885 0.982 0.982	0.524 0.479 0.502 0.508 0.499 0.496 0.505 0.533	0.998 0.998 0.998 0.998 0.998 0.998	0.0000 0.0002 0.0019 0.0040 0.0062 0.0077	99 99 99 99 99 2 99 7	.8 -60.97 .8 -60.97 .8 -36.62 .8 -27.25 .8 -23.94 .8 -22.03 .8 -21.13	2.69 18.95 30.40

Ave El= 867.73 M HAAT= 470.27 M AMSL= 1338 M

Full Field at 345 Degrees true North

CL-713, Monterey, Horizontal Azimuth Pattern



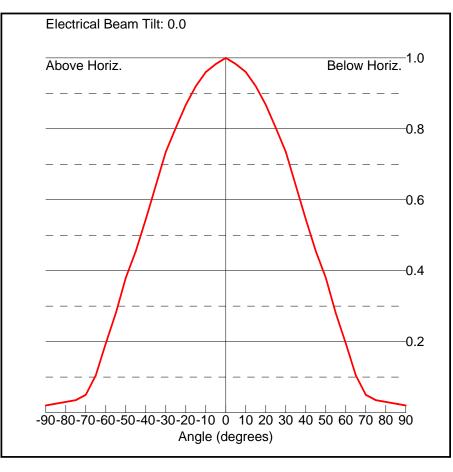
Azi	Rel	dBk	kW	dB	Azi	Rel	dBk	kW	dB
0	1.000	-10.97	0.080	0.00	180	0.030	-41.43	0.000	-30.46
10	0.945	-11.46	0.071	-0.49	190	0.030	-41.43	0.000	-30.46
20	0.805	-12.85	0.052	-1.88	200	0.030	-41.43	0.000	-30.46
30	0.598	-15.44	0.029	-4.47	210	0.025	-43.01	0.000	-32.04
40	0.352	-20.03	0.010	-9.06	220	0.020	-44.95	0.000	-33.98
50	0.030	-41.43	0.000	-30.46	230	0.010	-50.97	0.000	-40.00
60	0.010	-50.97	0.000	-40.00	240	0.010	-50.97	0.000	-40.00
70	0.010	-50.97	0.000	-40.00	250	0.010	-50.97	0.000	-40.00
80	0.010	-50.97	0.000	-40.00	260	0.010	-50.97	0.000	-40.00
90	0.010	-50.97	0.000	-40.00	270	0.010	-50.97	0.000	-40.00
100	0.010	-50.97	0.000	-40.00	280	0.010	-50.97	0.000	-40.00
110	0.010	-50.97	0.000	-40.00	290	0.010	-50.97	0.000	-40.00
120	0.010	-50.97	0.000	-40.00	300	0.010	-50.97	0.000	-40.00
130	0.010	-50.97	0.000	-40.00	310	0.030	-41.43	0.000	-30.46
140	0.020	-44.95	0.000	-33.98	320	0.352	-20.03	0.010	-9.06
150	0.025	-43.01	0.000	-32.04	330	0.598	-15.44	0.029	-4.47
160	0.030	-41.43	0.000	-30.46	340	0.805	-12.85	0.052	-1.88
170	0.030	-41.43	0.000	-30.46	350	0.945	-11.46	0.071	-0.49

Rotation Angle = 345

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Monterey Vertical Elevation Pattern

Angle (deg)	Relative Field
-90.0	0.02
-89.0	0.021
-88.0	0.022
-87.0	0.023
-86.0	0.024
-85.0	0.025
-84.0	0.026
-83.0	0.027
-82.0	0.028
-81.0	0.029
-80.0	0.03
-79.0	0.031
-78.0	0.032
-77.0	0.033
-76.0	0.034
-75.0	0.035
-74.0	0.038
-73.0	0.041
-72.0	0.044
-71.0	0.047
-70.0	0.05
-69.0	0.061
-68.0	0.072
-67.0	0.083
-66.0	0.094
-65.0	0.105
-64.0	0.123
-63.0	0.141
-62.0	0.159
-61.0	0.177
-60.0	0.195
-59.0	0.212
-58.0	0.229
-57.0	0.246
-56.0	0.263
-55.0	0.28
-54.0	0.3
-53.0	0.32
-52.0	0.34
-51.0	0.36
-50.0	0.38
-49.0	0.395
-48.0 47.0	0.41
-47.0 46.0	0.425
-46.0	0.44
-45.0	0.455
-44.0	0.473
-43.0	0.491



-42.0	0.509
-41.0	0.527
-40.0	0.545
-39.0	0.564
-38.0	0.583
-37.0	0.602
-36.0	0.621
-35.0	0.64
-34.0	0.659
-33.0	0.678
-32.0	0.697
-31.0	0.716
-30.0	0.735
-29.0	0.749
-28.0	0.762
-27.0	0.776
-26.0	0.789
-25.0	0.803
-24.0	0.816
-23.0	0.829
-22.0	0.842
-21.0	0.855

-20.0	0.868	32.0	0.697
-19.0	0.878	33.0	0.678
-18.0	0.889	34.0	0.659
-17.0	0.899	35.0	0.64
-16.0	0.91	36.0	0.621
-15.0	0.92	37.0	0.602
-14.0	0.928	38.0	0.583
-13.0	0.936	39.0	0.564
-12.0	0.944	40.0	0.545
-11.0	0.952	41.0	0.527
-10.0	0.96	42.0	0.509
-9.0	0.965	43.0	0.491
-8.0	0.969	44.0	0.473
-7.0	0.974	45.0	0.455
-6.0	0.978	46.0	0.44
-5.0	0.983	47.0	0.425
-4.0	0.986	48.0	0.41
-3.0	0.99	49.0	0.395
-2.0	0.993	50.0	0.38
-1.0	0.997	51.0	0.36
0.0	1.0	52.0	0.34
1.0	0.997	53.0	0.32
2.0	0.993	54.0	0.3
3.0	0.99	55.0	0.28
4.0	0.986	56.0	0.263
5.0	0.983	57.0	0.246
6.0	0.978	58.0	0.229
7.0	0.974	59.0	0.212
8.0	0.969	60.0	0.195
9.0	0.965	61.0	0.177
10.0	0.96	62.0	0.159
11.0	0.952	63.0	0.141
12.0	0.944	64.0	0.123
13.0	0.936	65.0	0.105
14.0	0.928	66.0	0.094
15.0	0.92	67.0	0.083
16.0	0.91	68.0	0.072
17.0	0.899	69.0	0.061
18.0	0.889	70.0	0.05
19.0	0.878	71.0	0.047
20.0	0.868	72.0	0.044
21.0	0.855	73.0	0.041
22.0	0.842	74.0	0.038
23.0	0.829	75.0	0.035
24.0	0.816	76.0	0.034
25.0	0.803	77.0	0.033
26.0	0.789	78.0	0.032
27.0	0.776	79.0	0.031
28.0	0.762	80.0	0.03
29.0	0.749	81.0	0.029
30.0	0.735	82.0	0.028
31.0	0.716	83.0	0.027
		30.0	
10010011			



VHF-TV Log-periodic Antenna 174 to 216 MHz (Channels 7–13)

The Kathrein Scala Division CL-713 is a ruggedly built, horizontally polarized log-periodic antenna, designed for professional VHF-TV transmit and receive applications.

Like all Kathrein Scala Division antennas, the CL-713 is made of the finest materials using state of the art electrical and mechanical designs, resulting in superior performance and long service life.

The CL-713 may be used stand alone or in arrays for higher gains, increased side-lobe suppression or custom azimuth patterns.

Specifications:

Frequency range	174-216 MHz (broadband)		
Gain	9 dBd		
Power gain	7.84		
Impedance	50 or 75 ohms		
VSWR	< 1.5:1		
Polarization	Horizontal		
Front-to-back ratio	>25 dB		
Maximum input power	250 watts (higher power rating optional)		
Azimuth pattern	50 degrees (half-power)		
Elevation pattern	62 degrees (half-power)		
Connector	N female (50 Ω or 75 Ω)		
Wind load Front	at 100 mph (160 kph) 121 lbf (537 N) maximum		
Wind survival rating*	120 mph (200 kph)		
Mounting	For masts of 2.375 inches (60 mm) OD.		
CL-713/HCM	Center-mount		
CL-713/HRM	Rear-mount		
See reverse for order informa	ition.		

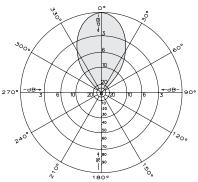
Specifications: CL-713/HCM

Weight	28.5 lb (12.9 kg)
Dimensions	89.2 x 33.9 x 9.9 inches (2266 x 862 x 252 mm)
Shipping dimensions	95 x 10 x 6 inches (2413 x 254 x 153 mm)
Shipping weight	42 lb (19.1 kg)

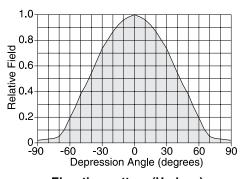
Specifications: CL-713/HRM

Weight	40 lb (18.2 kg)
Dimensions	104 x 38.5 x 33.9 inches (2642 x 978 x 862 mm)
Shipping dimensions	112 x 14 x 6 inches (2845 x 356 x 153 mm)
Shipping weight	79 lb (35.9 kg)





Azimuth pattern (E-plane)



Elevation pattern (H-plane)

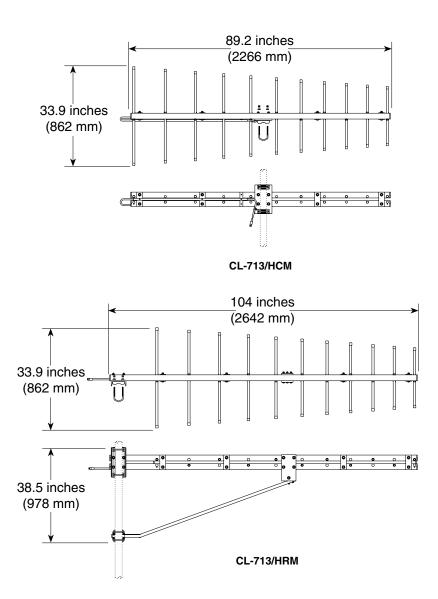




^{*}Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



VHF-TV Log-periodic Antenna 174 to 216 MHz (Channels 7–13)



Order Information:

Model	Description
CL-713/HCM/50N	Antenna with 50 Ω N connector
CL-713/HCM/75N	Antenna with 75 Ω N connector
CL-713/HRM/50N	Antenna with 50 Ω N connector
CL-713/HRM/75N	Antenna with 75 Ω N connector