Federal Communications Commission Washington, D.C. 20554	Approved by OMB 3060-0029 (July 2011)	FOR FCC USE ONLY
FCC 340		
APPLICATION FOR CONSTRUCTION PERMIT FOR RESERVED CHANNEL NONCOMMERCIAL EDUCATIONAL BROADCAST STATION Read INSTRUCTIONS Before Filling Out Form		FOR COMMISSION USE ONLY FILE NO. - 20120321ADL

Section I - General Information

1.	Legal Name of the Licensee/Permittee SHENANDOAH VALLEY EDUCATIONAL TELEVISION CORPORATION		
	Mailing Address 298 PORT REPUBLIC ROAD		
	City HARRISONBURG	State or Country (if foreign address) VA	Zip Code 22801 - 3052
	Telephone Number (include area code) 5404345391	E-Mail Address (if available) TMANCARI@WVPT.NET	
	FCC Registration Number: 0002064392	Call Sign WVPT	Facility Identifier 60111
2.	Contact Representative (if other than licensee/Permittee) WILLIAM H. FITZ		Firm or Company Name COVINGTON & BURLING LLP
	Mailing Address 1201 PENNSYLVANIA AVE., N.W.		
	City WASHINGTON	State or Country (if foreign address) DC	ZIP Code 20004 - 2401
	Telephone Number (include area code) 2026625120		E-Mail Address (if available) WFITZ@COV.COM
3.	Is this application being filed in response to a window? If Yes, specify closing date and/or window number:		○ Yes ◉ No

4 **Application Purpose**

○ New station	○ Major Modification of construction permit
○ Major Change in licensed facility	○ Minor Modification of construction permit
◉ Minor Change in licensed facility	○ Major Amendment to pending application
	○ Minor Amendment to pending application

(a) File number of original construction permit: -

(b) Service Type: ○ FM ○ TV ○ DTV ◉ DTS

(c) DTV Type: ○ Pre-Transition ○ Post-Transition ○ Both

(d) Community of License:

City: STAUNTON State: VA

(e) Facility Type ◉ Main ○ Auxiliary

If an amendment, **submit as an Exhibit** a listing by Section and Question Number the portions of the pending application that are being revised.	[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

1.	**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 b. a governmental entity other than a school; or c. a nonprofit educational organization, other than described in a. or b.	 ( ) Yes ( ) No ( ) Yes ( ) No ( ) Yes ( ) 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.	( ) Yes ( ) No ( ) 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. 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).	( ) Yes ( ) No FCC FileNumber - [Exhibit 2]
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.	( ) Yes ( ) 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.	○ Yes ○ 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 were resolved adversely against the applicant or party to the application; or b. any pending broadcast application in which character issues have been raised.	○ Yes ○ No See Explanation in [Exhibit 5]
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. 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.	○ Yes ○ No See Explanation in [Exhibit 6]
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.	○ Yes ○ 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.	○ Yes ○ No
12.	**Local Public Notice.** Applicant certifies compliance with the public notice requirements of 47 C.F.R. Section 73.3580.	○ Yes ○ 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 ○ 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.	○ Yes ○ No ○ N/A
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 months without revenue. If "No" to 15., answer question 16. and 17.	○ Yes ○ No See Explanation in [Exhibit 8]

16.	Is this application contingent upon receipt of a grant from the National Telecommunications and Information Administration?	○ Yes ○ 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?	○ Yes ○ No

NOTE: If Yes to 16. **or** 17., the application cannot be granted unconditionally until all of the necessary funds are committed or appropriated. In the case of grants from the National Telecommunications and Information Administration, no further action on the applicant's part is required. If the applicant relies on funds from a source specified in Question 17., **the applicant must advise the Commission when the funds are committed or appropriated.** This should be accomplished by letter amendment to the application. Applicants should take note that the Commission's construction period is not considered "tolled" by funding difficulties and that any permit granted conditionally on funding will expire if the station is not constructed for any reason, including lack of funding.

QUESTIONS 18 AND 19 DO NOT APPLY TO APPLICATIONS FOR NEW STATIONS. APPLICANTS FOR NEW FM STATIONS CAN PROCEED TO SECTION III. APPLICANTS FOR NEW TV STATIONS CAN PROCEED TO SECTION IV.

Holding 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). 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.	◉ Yes ○ No
	a. Applicant certifies that the proposed modification will not downgrade service to the area on which the Section 307(b) preference was based.	○ Yes ○ 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.	○ Yes ○ 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. 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.	◉ Yes ○ No
	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.	○ Yes ○ 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).

1.	Applicant certifies that it provides a first aural (reception) service. Applicants answering "Yes" must provide an Exhibit.	○ Yes ○ No [Exhibit 10]
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.	○ Yes ○ No [Exhibit 11]
3.	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	○ Yes ○ No [Exhibit 12]

	provide an Exhibit.	
4.	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.	○ Yes ○ 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.

1.	**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 placed 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.	○ Yes ○ No
2.	**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 identified 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.	○ Yes ○ No
	(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? 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).	○ Yes ○ No [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.	○ Yes ○ No
4.	**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)	○ Yes ○ No
	New area served in square kilometers (excluding areas of water):	
	Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:	

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)
2.	**Pending Applications.** 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 pending applications for new or major changes to relevant broadcast stations. 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 pending commercial and non-commercial applications)

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 3/21/2012

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 3/19/2012	
Mailing Address TELECOMMUNICATIONS CONSULTANTS 401 MAIN ST., SUITE 213		
City CEDAR FALLS	State or Country (if foreign address) IA	Zip Code 50613-
Telephone Number (include area code) 3192668402	E-Mail Address (if available) DVERNIER@V-SOFT.COM	

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).

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: (•) I ( ) II ( ) III	
3.	Reference Point Coordinates for Table of Distances, in accordance with Section 73.626(c) of the rules: Latitude: Degrees 38 Minutes 9 Seconds 54 (•) North ( ) South Longitude: Degrees 79 Minutes 18 Seconds 51 (•) West ( ) East	
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	(•) Yes ( ) No

	established in the Post-Transition DTV Table of Allotments, 47 C.F.R. Section 73.622(i).	
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. If "No," attach as an Exhibit justification.	(•) Yes ( ) No [Exhibit 41]
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). If "No," attach as an Exhibit justification.	(•) Yes ( ) No [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.	[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). 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.	(•) Yes ( ) No [Exhibit 46]
	(f) Each DTS transmitter in the proposed DTS facility is located within either the	(•) Yes ( ) No

	DTV station's Table of Distances area or its authorized service area. 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 ( ) No
	(b) Submit in an Exhibit the following for each transmitter site in the proposed DTS facility: 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.	[Exhibit 48]
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 ( ) 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 ( ) No

[Tech Specs - Transmitter Sites]

SECTION VIII - DTS Engineering	
TECHNICAL SPECIFICATIONS Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.	
TECH 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 (•) West ( ) East
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

c. Mechanical Beam Tilt:

degrees toward azimuth

degrees True ☑ Not Applicable

d. Polorization:

◉ Horizontal ○ Circular ○ Elliptical

e. Directional Antenna Relative Field Values: ☐ Not applicable (Nondirectional)

Rotation (Degrees): ☑ 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 Azimuths		115	0.08	127	0.67	149	1	173	0.695	195	0.91

If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.625(c) must be satisfied. **Exhibit required.** [Exhibit 49]

f. **Elevation Pattern:** Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt? ○ Yes ◉ No

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.

PREPARER'S CERTIFICATION ON SECTION III MUST BE COMPLETED AND SIGNED.

TECH BOX

1. DTS 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 (•) West ( ) East

3. Antenna Structure Registration Number:
[x] Not Applicable [ ] Notification filed with FAA

4. Antenna Location Site Elevation Above Mean Sea Level: 427 meters

5. Overall Tower Height Above Ground Level: 91 meters

6. Height of Radiation Center Above Ground Level: 68 meters

7. Height of Radiation Center Above Average Terrain : 333 meters

8. Maximum Effective Radiated Power (average power): 0.1 kW

9. Antenna Specifications:
a. Manufacturer SCA Model DRV-1
b. Electrical Beam Tilt:
degrees [x] Not Applicable
c. Mechanical Beam Tilt:
degrees toward azimuth
degrees True [x] Not Applicable
d. Polorization:
(•) Horizontal ( ) Circular ( ) Elliptical
e. Directional Antenna Relative Field Values: [ ] Not applicable (Nondirectional)
Rotation (Degrees): [x] No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0	1	10	0.973	20	0.888	30	0.764	40	0.616	50	0.465
60	0.325	70	0.208	80	0.108	90	0.028	100	0.04	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
Additional Azimuths											

If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.625(c) must be satisfied. **Exhibit required.** [Exhibit 49]

f. **Elevation Pattern:** Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt? ( ) Yes (•) No

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.

TECH BOX

1. DTS Site Number: 3

2. Antenna Location Coordinates: (NAD 27):
Latitude:
Degrees 38 Minutes 20 Seconds 39 (•) North ( ) South

Longitude:
Degrees 79 Minutes 35 Seconds 47 (•) West ( ) East

3. Antenna Structure Registration Number:
[x] Not Applicable [ ] Notification filed with FAA

4. Antenna Location Site Elevation Above Mean Sea Level: 1295 meters

5. Overall Tower Height Above Ground Level: 46 meters

6. Height of Radiation Center Above Ground Level: 43 meters

7. Height of Radiation Center Above Average Terrain : 470 meters

8. Maximum Effective Radiated Power (average power): 0.008 kW

9. Antenna Specifications:
a. Manufacturer SCA Model CL-713
b. Electrical Beam Tilt:
degrees [x] Not Applicable
c. Mechanical Beam Tilt:
degrees toward azimuth
degrees True [x] Not Applicable
d. Polorization:
(•) Horizontal ( ) Circular ( ) Elliptical
e. Directional Antenna Relative Field Values: [ ] Not applicable (Nondirectional)
Rotation (Degrees): [x] No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0	0.974	10	0.879	20	0.717	30	0.491	40	0.224	50	0.048
60	0.01	70	0.01	80	0.01	90	0.01	100	0.01	110	0.01
120	0.01	130	0.01	140	0.01	150	0.01	160	0.01	170	0.01
180	0.01	190	0.01	200	0.01	210	0.01	220	0.01	230	0.01
240	0.01	250	0.01	260	0.01	270	0.01	280	0.01	290	0.01
300	0.048	310	0.224	320	0.491	330	0.717	340	0.879	350	0.974
Additional Azimuths		355	1								

If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.625(c) must be [Exhibit 49]

satisfied. **Exhibit required.**

f. **Elevation Pattern:** Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	○ Yes ◉ No
g. **Required Exhibit:** Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c). 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.	[Exhibit 50]

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 EXHIBIT USES THE COMPUTER PROGRAM DEVELOPED BY BILL MEINTELL FOR THE FCC. THE RSS METHOD OF SUMMING INTERFERENCE SIGNAL LEVELS WAS USED FOR THIS ANALYSIS. THE DTS SYSTEM CAUSES NO INTERFERENCE TO OTHER STATIONS, CONSTRUCTION PERMITS OR APPLICATIONS ABOVE THE THRESHOLD OF 0.5%. NOTE THAT WHILE THE PROPOSED MONTEREY DTS SITE WAS STUDIED AT 0.01 KW, WHICH CAUSES NO INTERFERENCE, THE APPLICANT IS APPLYING FOR 0.008 KW AT THIS SITE.

NOTE THAT THE STUDY SHOWS AN EXCURSION BEYOND THE WVPT 3.2 KW NOISE LIMITED COVERAGE CONTOUR. HOWEVER, WVPT HAS AUTHORIZATION TO OPERATE AT, AND IS OPERATING AT 10 KW AS PER BMPEDT-20111223ABJ. WVPT HAS FILED AN APPLICATION FOR LICENSE TO COVER THE 10 KW CP(SEE BLEDT - 20120109ACF). WVPT IS IN THE PROCESS OF LICENSING ITS 10KW C.P. WHICH WILL CAUSE NO EXCURSIONS BEYOND THE NOISE LIMITED CONTOUR OR THE 101 KM DTV STATION'S TABLE OF DISTANCES AREA.

THE READER WILL ALSO FIND A COORDINATION LETTER WITH THE NATIONAL RADIO ASTRONOMY OBSERVATORY IN GREEN BANK, WEST VIRGINIA. THE NRQZ COORDINATES ARE IN NAD 83. PURSUANT TO 47 C.F.R. 1.924(A)(2) AND THE REFERENCED COORDINATION LETTER, APPLICANT WILL PROVIDE WRITTEN NOTICE TO THE NATIONAL RADIO ASTRONOMY OBSERVATORY OF THE INSTANT FILING, CONCURRENT WITH THE FILING OF THIS APPLICATION.

Attachment 40

Description
OET-69 DTS Analysis - uses WVPT 10 kW Main
OET-69-DTS Summary Interference Analysis - Uses WVPT Main at 10 kW
Coordination with NRZQ, Green Bank

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

Description
DTS System Showing the 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

Description
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
73.625 (c) Exhibit
Anntenna Exhibit

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)

 CVIL BPEDT -20111212ABK STAUNTON VA US
 Channel 11 ERP 0.10 kW HAAT 00328 m RCAMSL 00495 m
 Latitude 037-59-00 Longitude 0078-29-02
 Status AP Zone 1 Border 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 RCAMSL 01338 m
 Latitude 038-20-39 Longitude 0079-35-47
 Status AP Zone 1 Border Site number: 02
 Dir Antenna Make CDB Model 00000000077677 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

 MAIN BPEDT -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 00000000107753 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			
Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	0.098	357.1	61.1
45.0	0.029	264.2	46.6

90.0	0.000	378.9	16.9
135.0	0.001	353.7	29.6
180.0	0.000	350.8	21.3
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

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	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

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (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 MD BPCDT 20100429AAF
039-20- 5 0076-39- 3
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 STAUNTON VA DTVPLN DTVP0338
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 RICHMOND VA BLCDT 20090803ABS
037-30-23 0077-30-12
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

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
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

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

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WAZT-CA	WOODSTOCK VA	109.1	LIC	BLTVA	20030718ADF
10	WVFX	CLARKSBURG WV	217.9	LIC	BLCDT	20090612AJY
10	WSWP-TV	GRANDVIEW WV	219.8	LIC	BLEDT	20100210AAQ
10	WSWP-TV	GRANDVIEW WV	219.8	APP	BDSTA	20080225AGT
11	WBAL-TV	BALTIMORE MD	218.8	LIC	BLCDT	20090619ABW
11	WBAL-TV	BALTIMORE MD	218.8	CP	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	RICHMOND VA	101.2	LIC	BLCDT	20090803ABS
12	WBOY-TV	CLARKSBURG WV	215.9	LIC	BLCDT	20090227ABW
12	WWPX-TV	MARTINSBURG WV	167.8	LIC	BLCDT	20021108AAX

%%

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
10	WAZT-CA	WOODSTOCK VA	BLTVA	-20030718ADF

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
09	WUSA	WASHINGTON DC	116.7	LIC	BLCDT	-20110314ACQ
09	W09CT-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	CP	BPCDT	-20080620AKW
10	WHTM-TV	HARRISBURG PA	196.5	LIC	BLCDT	-20040812AAH
10	WHTM-TV	HARRISBURG PA	196.5	CP	BPCDT	-20080620AGL
10	WVFX	CLARKSBURG WV	169.2	LIC	BLCDT	-20090612AJY
10	WSWP-TV	GRANDVIEW WV	252.5	LIC	BLEDT	-20100210AAQ
10	WSWP-TV	GRANDVIEW WV	252.5	APP	BDSTA	-20080225AGT
11	WVPT	STAUNTON VA	117.5	CP	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 2

Analysis of current record

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

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
09	WTOV-TV	STEUBENVILLE OH	118.2	LIC	BLCDT	-20090507AAC
09	WTOV-TV	STEUBENVILLE OH	118.2	CP	BPCDT	-20110308ABN
10	WOIO	SHAKER HEIGHTS OH	258.7	LIC	BLCDT	-19991110AAR
10	WOIO	SHAKER HEIGHTS OH	258.7	CP	BPCDT	-20080620AKW
10	WHTM-TV	HARRISBURG PA	310.9	LIC	BLCDT	-20040812AAH
10	WHTM-TV	HARRISBURG PA	310.9	CP	BPCDT	-20080620AGL
10	WSWP-TV	GRANDVIEW WV	165.9	LIC	BLEDT	-20100210AAQ
10	WSWP-TV	GRANDVIEW 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	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WNCT-TV	GREENVILLE NC	426.5	LIC	BLCDT	-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	WBIR-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 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	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WNCT-TV	GREENVILLE NC	426.5	LIC	BLCDT	-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	WBIR-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	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WHTM-TV	HARRISBURG PA	112.0	LIC	BLCDT	-20040812AAH
10	WHTM-TV	HARRISBURG PA	112.0	CP	BPCDT	-20080620AGL
11	WPIX	NEW YORK NY	271.7	APP	BMPCDT	-20080620ALB
11	WPIX	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	RICHMOND VA	216.4	LIC	BLCDT	-20090803ABS
12	WWPX-TV	MARTINSBURG 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

	POPULATION	AREA (sq km)
within Noise Limited Contour	7449700	24125.2
not affected by terrain losses	7175012	22901.0

```
   lost to NTSC IX                          0          0.0
   lost to additional IX by ATV        217701        946.3
   lost to ATV IX only                 217701        946.3
   lost to all IX                      217701        946.3

 Potential Interfering Stations Included in above Scenario     1

10A PA HARRISBURG           BLCDT     20040812AAH  LIC
11A NY NEW YORK             BLCDT     20090911ABN  LIC
11A PA JEANNETTE            BMPCDT    20080616ABM  CP
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
   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          0.0
   lost to additional IX by ATV      218333        958.4
   lost to ATV IX only               218333        958.4
   lost to all IX                    218333        958.4

 Potential Interfering Stations Included in above Scenario     1

10A PA HARRISBURG           BLCDT     20040812AAH  LIC
11A NY NEW YORK             BLCDT     20090911ABN  LIC
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:        2
Scenario        2  Affected station        5
Before Analysis

Results for: 11A MD BALTIMORE            BLCDT     20090619ABW  LIC
   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          0.0
   lost to additional IX by ATV      217701        946.3
   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 HARRISBURG           BLCDT     20040812AAH  LIC
11A NY NEW YORK             BLCDT     20090911ABN  LIC
11A PA JEANNETTE            BLCDT     20090626AAT  LIC
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
   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          0.0
```

```
   lost to additional IX by ATV      218333        958.4
   lost to ATV IX only               218333        958.4
   lost to all IX                    218333        958.4

 Potential Interfering Stations Included in above Scenario     2

10A PA HARRISBURG           BLCDT     20040812AAH  LIC
11A NY NEW YORK             BLCDT     20090911ABN  LIC
11A PA JEANNETTE            BLCDT     20090626AAT  LIC
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:        3
Scenario        3  Affected station        5
Before Analysis

Results for: 11A MD BALTIMORE            BLCDT     20090619ABW  LIC
   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          0.0
   lost to additional IX by ATV      228326        974.5
   lost to ATV IX only               228326        974.5
   lost to all IX                    228326        974.5

 Potential Interfering Stations Included in above Scenario     3

10A PA HARRISBURG           BPCDT     20080620AGL  CP
11A NY NEW YORK             BLCDT     20090911ABN  LIC
11A PA JEANNETTE            BMPCDT    20080616ABM  CP
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
   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          0.0
   lost to additional IX by ATV      228958        986.6
   lost to ATV IX only               228958        986.6
   lost to all IX                    228958        986.6

 Potential Interfering Stations Included in above Scenario     3

10A PA HARRISBURG           BPCDT     20080620AGL  CP
11A NY NEW YORK             BLCDT     20090911ABN  LIC
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:        4
Scenario        4  Affected station        5
Before Analysis

Results for: 11A MD BALTIMORE            BLCDT     20090619ABW  LIC
   HAAT  299.0 m, ATV ERP    5.0 kW
                                  POPULATION   AREA (sq km)
```

	POPULATION	AREA (sq km)
within Noise Limited Contour	7449700	24125.2
not affected by terrain losses	7175012	22901.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	228326	974.5
lost to ATV IX only	228326	974.5
lost to all IX	228326	974.5

Potential Interfering Stations Included in above Scenario 4

10A PA HARRISBURG	BPCDT	20080620AGL	CP
11A NY NEW YORK	BLCDT	20090911ABN	LIC
11A PA JEANNETTE	BLCDT	20090626AAT	LIC
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
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	0.0
lost to additional IX by ATV	228958	986.6
lost to ATV IX only	228958	986.6
lost to all IX	228958	986.6

Potential Interfering Stations Included in above Scenario 4

10A PA HARRISBURG	BPCDT	20080620AGL	CP
11A NY NEW YORK	BLCDT	20090911ABN	LIC
11A PA JEANNETTE	BLCDT	20090626AAT	LIC
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: 5
Scenario 5 Affected station 5
Before Analysis

Results for: 11A MD BALTIMORE BLCDT 20090619ABW LIC
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	0.0
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 HARRISBURG	BLCDT	20040812AAH	LIC
11A NY NEW YORK	BMPCDT	20080620ALB	APP
11A PA JEANNETTE	BMPCDT	20080616ABM	CP
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
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          0.0
   lost to additional IX by ATV      217991        954.4
   lost to ATV IX only               217991        954.4
   lost to all IX                    217991        954.4

 Potential Interfering Stations Included in above Scenario     5

10A PA HARRISBURG           BLCDT     20040812AAH  LIC
11A NY NEW YORK             BMPCDT    20080620ALB  APP
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:        6
Scenario        6  Affected station        5
Before Analysis

Results for: 11A MD BALTIMORE            BLCDT     20090619ABW  LIC
   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          0.0
   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     6

10A PA HARRISBURG           BLCDT     20040812AAH  LIC
11A NY NEW YORK             BMPCDT    20080620ALB  APP
11A PA JEANNETTE            BLCDT     20090626AAT  LIC
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
   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          0.0
   lost to additional IX by ATV      217991        954.4
   lost to ATV IX only               217991        954.4
   lost to all IX                    217991        954.4

 Potential Interfering Stations Included in above Scenario     6

10A PA HARRISBURG           BLCDT     20040812AAH  LIC
11A NY NEW YORK             BMPCDT    20080620ALB  APP
11A PA JEANNETTE            BLCDT     20090626AAT  LIC
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:        7
Scenario        7  Affected station        5
Before Analysis

Results for: 11A MD BALTIMORE            BLCDT     20090619ABW  LIC
```

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	0.0
lost to additional IX by ATV	227984	970.5
lost to ATV IX only	227984	970.5
lost to all IX	227984	970.5

Potential Interfering Stations Included in above Scenario 7

10A PA HARRISBURG	BPCDT	20080620AGL	CP
11A NY NEW YORK	BMPCDT	20080620ALB	APP
11A PA JEANNETTE	BMPCDT	20080616ABM	CP
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

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	0.0
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 7

10A PA HARRISBURG	BPCDT	20080620AGL	CP
11A NY NEW YORK	BMPCDT	20080620ALB	APP
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: 8
Scenario 8 Affected station 5
Before Analysis

Results for: 11A MD BALTIMORE BLCDT 20090619ABW LIC

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	0.0
lost to additional IX by ATV	227984	970.5
lost to ATV IX only	227984	970.5
lost to all IX	227984	970.5

Potential Interfering Stations Included in above Scenario 8

10A PA HARRISBURG	BPCDT	20080620AGL	CP
11A NY NEW YORK	BMPCDT	20080620ALB	APP
11A PA JEANNETTE	BLCDT	20090626AAT	LIC
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

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	0.0
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 HARRISBURG	BPCDT	20080620AGL	CP
11A NY NEW YORK	BMPCDT	20080620ALB	APP
11A PA JEANNETTE	BLCDT	20090626AAT	LIC
11A PA WILKES-BARRE	BLCDT	20051123AJX	LIC
12A WV MARTINSBURG	BLCDT	20021108AAX	LIC
11A VA STAUNTON	BPEDT	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	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WHTM-TV	HARRISBURG PA	112.0	LIC	BLCDT	-20040812AAH
10	WHTM-TV	HARRISBURG PA	112.0	CP	BPCDT	-20080620AGL
11	WPIX	NEW YORK NY	271.7	APP	BMPCDT	-20080620ALB
11	WPIX	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	RICHMOND VA	216.4	LIC	BLCDT	-20090803ABS
12	WWPX-TV	MARTINSBURG WV	122.2	LIC	BLCDT	-20021108AAX

Total scenarios = 8

Result key: 9
Scenario 1 Affected station 6

Before Analysis

Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP
HAAT 299.0 m, ATV ERP 26.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
not affected by terrain losses	8300862	29972.9
lost to NTSC IX	0	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 1

10A PA HARRISBURG	BLCDT	20040812AAH	LIC
11A NY NEW YORK	BLCDT	20090911ABN	LIC
11A PA JEANNETTE	BMPCDT	20080616ABM	CP
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 Analysis

Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP
HAAT 299.0 m, ATV ERP 26.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
not affected by terrain losses	8300862	29972.9
lost to NTSC IX	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 HARRISBURG	BLCDT	20040812AAH	LIC
11A NY NEW YORK	BLCDT	20090911ABN	LIC
11A PA JEANNETTE	BMPCDT	20080616ABM	CP
11A PA WILKES-BARRE	BLCDT	20051123AJX	LIC
12A DE WILMINGTON	BMPEDT	20091204ADC	CP
12A WV MARTINSBURG	BLCDT	20021108AAX	LIC
11A VA STAUNTON	BPEDT	20111212ABK	AP

Percent new IX = 0.0372%

Result key: 10
Scenario 2 Affected station 6
Before Analysis

Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP
HAAT 299.0 m, ATV ERP 26.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
not affected by terrain losses	8300862	29972.9
lost to NTSC IX	0	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 HARRISBURG	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 Analysis

Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP
HAAT 299.0 m, ATV ERP 26.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
not affected by terrain losses	8300862	29972.9
lost to NTSC IX	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 2

10A PA HARRISBURG	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	BPEDT	20111212ABK	AP

Percent new IX = 0.0372%

Result key: 11
Scenario 3 Affected station 6
Before Analysis

Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP
HAAT 299.0 m, ATV ERP 26.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
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 3

10A PA HARRISBURG	BPCDT	20080620AGL	CP
11A NY NEW YORK	BLCDT	20090911ABN	LIC
11A PA JEANNETTE	BMPCDT	20080616ABM	CP
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 Analysis

Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP
HAAT 299.0 m, ATV ERP 26.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
not affected by terrain losses	8300862	29972.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	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 3

10A PA HARRISBURG	BPCDT	20080620AGL	CP
11A NY NEW YORK	BLCDT	20090911ABN	LIC
11A PA JEANNETTE	BMPCDT	20080616ABM	CP
11A PA WILKES-BARRE	BLCDT	20051123AJX	LIC

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12A DE WILMINGTON           BMPEDT    20091204ADC  CP
12A WV MARTINSBURG          BLCDT     20021108AAX  LIC
11A VA STAUNTON             BPEDT     20111212ABK  AP

Percent new IX =    0.0372%

Result key:       12
Scenario        4  Affected station        6
Before Analysis

Results for: 11A MD BALTIMORE            BPCDT     20100429AAF  CP
   HAAT  299.0 m, ATV ERP   26.6 kW
                                POPULATION   AREA (sq km)
   within Noise Limited Contour     8596693      31809.2
   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     4

10A PA HARRISBURG           BPCDT     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             DTVPLN    DTVP0338     PLN

After Analysis

Results for: 11A MD BALTIMORE            BPCDT     20100429AAF  CP
   HAAT  299.0 m, ATV ERP   26.6 kW
                                POPULATION   AREA (sq km)
   within Noise Limited Contour     8596693      31809.2
   not affected by terrain losses   8300862      29972.9
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV      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     4

10A PA HARRISBURG           BPCDT     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  AP

Percent new IX =    0.0372%

Result key:       13
Scenario        5  Affected station        6
Before Analysis

Results for: 11A MD BALTIMORE            BPCDT     20100429AAF  CP
   HAAT  299.0 m, ATV ERP   26.6 kW
                                POPULATION   AREA (sq km)
   within Noise Limited Contour     8596693      31809.2
   not affected by terrain losses   8300862      29972.9
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV      386979       1449.7
   lost to ATV IX only               386979       1449.7
   lost to all IX                    386979       1449.7
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Potential Interfering Stations Included in above Scenario 5

10A	PA HARRISBURG	BLCDT	20040812AAH	LIC
11A	NY NEW YORK	BMPCDT	20080620ALB	APP
11A	PA JEANNETTE	BMPCDT	20080616ABM	CP
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 Analysis

Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP
HAAT 299.0 m, ATV ERP 26.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
not affected by terrain losses	8300862	29972.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	389923	1486.0
lost to ATV IX only	389923	1486.0
lost to all IX	389923	1486.0

Potential Interfering Stations Included in above Scenario 5

10A	PA HARRISBURG	BLCDT	20040812AAH	LIC
11A	NY NEW YORK	BMPCDT	20080620ALB	APP
11A	PA JEANNETTE	BMPCDT	20080616ABM	CP
11A	PA WILKES-BARRE	BLCDT	20051123AJX	LIC
12A	DE WILMINGTON	BMPEDT	20091204ADC	CP
12A	WV MARTINSBURG	BLCDT	20021108AAX	LIC
11A	VA STAUNTON	BPEDT	20111212ABK	AP

Percent new IX = 0.0372%

Result key: 14
Scenario 6 Affected station 6
Before Analysis

Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP
HAAT 299.0 m, ATV ERP 26.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
not affected by terrain losses	8300862	29972.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	386979	1449.7
lost to ATV IX only	386979	1449.7
lost to all IX	386979	1449.7

Potential Interfering Stations Included in above Scenario 6

10A	PA HARRISBURG	BLCDT	20040812AAH	LIC
11A	NY NEW YORK	BMPCDT	20080620ALB	APP
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 Analysis

Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP
HAAT 299.0 m, ATV ERP 26.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
not affected by terrain losses	8300862	29972.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	389923	1486.0
lost to ATV IX only	389923	1486.0

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   lost to all IX                    389923       1486.0

 Potential Interfering Stations Included in above Scenario     6

10A PA HARRISBURG           BLCDT     20040812AAH  LIC
11A NY NEW YORK             BMPCDT    20080620ALB  APP
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  AP

Percent new IX =    0.0372%

Result key:       15
Scenario        7  Affected station        6
Before Analysis

Results for: 11A MD BALTIMORE            BPCDT     20100429AAF  CP
   HAAT  299.0 m, ATV ERP   26.6 kW
                                 POPULATION   AREA (sq km)
   within Noise Limited Contour     8596693      31809.2
   not affected by terrain losses   8300862      29972.9
   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 HARRISBURG           BPCDT     20080620AGL  CP
11A NY NEW YORK             BMPCDT    20080620ALB  APP
11A PA JEANNETTE            BMPCDT    20080616ABM  CP
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 Analysis

Results for: 11A MD BALTIMORE            BPCDT     20100429AAF  CP
   HAAT  299.0 m, ATV ERP   26.6 kW
                                 POPULATION   AREA (sq km)
   within Noise Limited Contour     8596693      31809.2
   not affected by terrain losses   8300862      29972.9
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV      398381       1542.3
   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 HARRISBURG           BPCDT     20080620AGL  CP
11A NY NEW YORK             BMPCDT    20080620ALB  APP
11A PA JEANNETTE            BMPCDT    20080616ABM  CP
11A PA WILKES-BARRE         BLCDT     20051123AJX  LIC
12A DE WILMINGTON           BMPEDT    20091204ADC  CP
12A WV MARTINSBURG          BLCDT     20021108AAX  LIC
11A VA STAUNTON             BPEDT     20111212ABK  AP

Percent new IX =    0.0372%

Result key:       16
Scenario        8  Affected station        6
Before Analysis

Results for: 11A MD BALTIMORE            BPCDT     20100429AAF  CP
   HAAT  299.0 m, ATV ERP   26.6 kW
```

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
not affected by terrain losses	8300862	29972.9
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 8

10A PA HARRISBURG	BPCDT	20080620AGL	CP
11A NY NEW YORK	BMPCDT	20080620ALB	APP
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 Analysis

Results for: 11A MD BALTIMORE BPCDT 20100429AAF CP
HAAT 299.0 m, ATV ERP 26.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	8596693	31809.2
not affected by terrain losses	8300862	29972.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	398381	1542.3
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 HARRISBURG	BPCDT	20080620AGL	CP
11A NY NEW YORK	BMPCDT	20080620ALB	APP
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	AP

Percent new IX = 0.0372%

Worst case new IX 0.0372% Scenario 3

##

Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
11	WTVI	CHARLOTTE NC	BLEDT	-20101222ABA

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WIS	COLUMBIA SC	129.3	LIC	BLCDT	-20090624ABZ
11	WTOC-TV	SAVANNAH GA	364.4	LIC	BLCDT	-20090622ABP
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	AP	BPEDT	-20111212ABK

11	MONT	STAUNTON VA	353.6	AP	BPEDT	-20111212ABK
11	MAIN	STAUNTON VA	342.7	AP	BPEDT	-20111212ABK

Total scenarios = 1

Result key: 17
Scenario 1 Affected station 7
Before Analysis

Results for: 11A NC CHARLOTTE BLEDT 20101222ABA LIC
HAAT 363.0 m, ATV ERP 2.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2322392	23534.0
not affected by terrain losses	2294540	22766.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	146239	2645.1
lost to ATV IX only	146239	2645.1
lost to all IX	146239	2645.1

Potential Interfering Stations Included in above Scenario 1

10A SC COLUMBIA	BLCDT	20090624ABZ	LIC
11A GA SAVANNAH	BLCDT	20090622ABP	LIC
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

	POPULATION	AREA (sq km)
within Noise Limited Contour	2322392	23534.0
not affected by terrain losses	2294540	22766.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	146239	2645.1
lost to ATV IX only	146239	2645.1
lost to all IX	146239	2645.1

Potential Interfering Stations Included in above Scenario 1

10A SC COLUMBIA	BLCDT	20090624ABZ	LIC
11A GA SAVANNAH	BLCDT	20090622ABP	LIC
11A NC DURHAM	BLCDT	20100929AGW	LIC
11A TN JOHNSON CITY	BLCDT	20100910AAC	LIC
11A VA STAUNTON	BPEDT	20111212ABK	AP

Percent new IX = 0.0000%

Worst case new IX 0.0000% Scenario 1

##

Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
11	WTVD	DURHAM NC	BLCDT	-20100929AGW

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WNCT-TV	GREENVILLE NC	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	-20090622ADO
12	WWBT	RICHMOND VA	224.0	LIC	BLCDT	-20090803ABS

Total scenarios = 1

Result key: 18
Scenario 1 Affected station 8
Before Analysis

Results for: 11A NC DURHAM BLCDT 20100929AGW LIC
HAAT 615.0 m, ATV ERP 45.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3369349	51812.2
not affected by terrain losses	3319437	50720.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	149679	4067.3
lost to ATV IX only	149679	4067.3
lost to all IX	149679	4067.3

Potential Interfering Stations Included in above Scenario 1

10A NC GREENVILLE	BLCDT	20110504ACA	LIC
11A NC CHARLOTTE	BLEDT	20101222ABA	LIC
11A TN JOHNSON CITY	BLCDT	20100910AAC	LIC
12A NC NEW BERN	BLCDT	20090622ADO	LIC
11A VA STAUNTON	DTVPLN	DTVP0338	PLN

After Analysis

Results for: 11A NC DURHAM BLCDT 20100929AGW LIC
HAAT 615.0 m, ATV ERP 45.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3369349	51812.2
not affected by terrain losses	3319437	50720.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	152349	4131.8
lost to ATV IX only	152349	4131.8
lost to all IX	152349	4131.8

Potential Interfering Stations Included in above Scenario 1

10A NC GREENVILLE	BLCDT	20110504ACA	LIC
11A NC CHARLOTTE	BLEDT	20101222ABA	LIC
11A TN JOHNSON CITY	BLCDT	20100910AAC	LIC
12A NC NEW BERN	BLCDT	20090622ADO	LIC
11A VA STAUNTON	BPEDT	20111212ABK	AP

Percent new IX = 0.0842%

Worst case new IX 0.0842% Scenario 1

##

Analysis of Interference to Affected Station 9

Analysis of current record

Channel	Call	City/State	Application Ref. No.
11	WPCW	JEANNETTE PA	BMPCDT -20080616ABM

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WOIO	SHAKER HEIGHTS OH	172.2	LIC	BLCDT	-19991110AAR
10	WOIO	SHAKER HEIGHTS OH	172.2	CP	BPCDT	-20080620AKW
10	WVFX	CLARKSBURG WV	135.5	LIC	BLCDT	-20090612AJY
11	WBAL-TV	BALTIMORE MD	314.7	LIC	BLCDT	-20090619ABW
11	WBAL-TV	BALTIMORE MD	314.7	CP	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	WICU-TV	ERIE PA	174.5	LIC	BLCDT	-20090619ABT
12	WBOY-TV	CLARKSBURG WV	136.9	LIC	BLCDT	-20090227ABW
12	WWPX-TV	MARTINSBURG WV	202.5	LIC	BLCDT	-20021108AAX

Proposal causes no interference

##

Analysis of Interference to Affected Station 10

Analysis of current record

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

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WOIO	SHAKER HEIGHTS OH	172.2	LIC	BLCDT	-19991110AAR
10	WOIO	SHAKER HEIGHTS OH	172.2	CP	BPCDT	-20080620AKW
10	WVFX	CLARKSBURG WV	135.5	LIC	BLCDT	-20090612AJY
11	WBAL-TV	BALTIMORE MD	314.7	LIC	BLCDT	-20090619ABW
11	WBAL-TV	BALTIMORE MD	314.7	CP	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	WICU-TV	ERIE PA	174.5	LIC	BLCDT	-20090619ABT
12	WBOY-TV	CLARKSBURG WV	136.9	LIC	BLCDT	-20090227ABW
12	WWPX-TV	MARTINSBURG WV	202.5	LIC	BLCDT	-20021108AAX

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	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WHTM-TV	HARRISBURG PA	132.3	LIC	BLCDT	-20040812AAH
10	WHTM-TV	HARRISBURG PA	132.3	CP	BPCDT	-20080620AGL
11	WWLP	SPRINGFIELD MA	281.8	LIC	BLCDT	-20090612AJV
11	WBAL-TV	BALTIMORE MD	215.7	LIC	BLCDT	-20090619ABW
11	WBAL-TV	BALTIMORE MD	215.7	CP	BPCDT	-20100429AAF
11	WPIX	NEW YORK NY	164.7	APP	BMPCDT	-20080620ALB
11	WPIX	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 Interference to Affected Station 12

Analysis of current record

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

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WBIR-TV	KNOXVILLE TN	168.4	LIC	BLCDT	-20090619ADG
10	WSWP-TV	GRANDVIEW WV	191.9	LIC	BLEDT	-20100210AAQ
10	WSWP-TV	GRANDVIEW WV	191.9	APP	BDSTA	-20080225AGT
11	WHAS-TV	LOUISVILLE 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: 19
Scenario 1 Affected station 12
Before Analysis

Results for: 11A TN JOHNSON CITY BLCDT 20100910AAC LIC
HAAT 708.0 m, ATV ERP 34.5 kW

	POPULATION	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 1

10A TN KNOXVILLE	BLCDT	20090619ADG	LIC
11A KY LOUISVILLE	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 BLCDT 20100910AAC LIC
HAAT 708.0 m, ATV ERP 34.5 kW

	POPULATION	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	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

10A	TN KNOXVILLE	BLCDT	20090619ADG	LIC
11A	KY LOUISVILLE	BLCDT	20100628AWQ	LIC
11A	NC CHARLOTTE	BLEDT	20101222ABA	LIC
11A	NC DURHAM	BLCDT	20100929AGW	LIC
12A	KY HAZARD	BLCDT	20040109ACY	LIC
11A	VA STAUNTON	BPEDT	20111212ABK	AP

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	Call	City/State	Dist(km)	Status	Application	Ref. No.
11	WBAL-TV	BALTIMORE MD	216.4	LIC	BLCDT	-20090619ABW
11	WBAL-TV	BALTIMORE MD	216.4	CP	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	-20090622ADO
12	WBOY-TV	CLARKSBURG WV	315.7	LIC	BLCDT	-20090227ABW
12	WWPX-TV	MARTINSBURG WV	222.3	LIC	BLCDT	-20021108AAX
13	WJZ-TV	BALTIMORE MD	216.4	CP	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	Application	Ref. No.

Channel	Call	City/State	Application Ref. No.
12	WBOY-TV	CLARKSBURG WV	BLCDT -20090227ABW

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
11	WPCW	JEANNETTE PA	136.9	CP MOD	BMPCDT -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	WICU-TV	ERIE PA	310.1	LIC	BLCDT -20090619ABT
12	WWBT	RICHMOND VA	315.7	LIC	BLCDT -20090803ABS
12	WWPX-TV	MARTINSBURG 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	HUNTINGTON 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	Call	City/State	Dist(km)	Status	Application Ref. No.
11	WBAL-TV	BALTIMORE MD	122.2	LIC	BLCDT -20090619ABW
11	WBAL-TV	BALTIMORE MD	122.2	CP	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	WICU-TV	ERIE PA	332.6	LIC	BLCDT	-20090619ABT
12	WWBT	RICHMOND 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

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

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
10	WVFX	CLARKSBURG WV	154.6	LIC	BLCDT -20090612AJY
10	WSWP-TV	GRANDVIEW WV	149.7	LIC	BLEDT -20100210AAQ
10	WSWP-TV	GRANDVIEW WV	149.7	APP	BDSTA -20080225AGT
11	WBAL-TV	BALTIMORE MD	264.9	LIC	BLCDT -20090619ABW
11	WBAL-TV	BALTIMORE MD	264.9	CP	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	RICHMOND VA	175.0	LIC	BLCDT -20090803ABS
12	WBOY-TV	CLARKSBURG WV	152.5	LIC	BLCDT -20090227ABW
12	WWPX-TV	MARTINSBURG 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 license.
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	0.64
224.25	0.66
224.50	0.66
224.75	0.79
225.00	0.79
225.25	0.79
225.50	0.85
225.75	0.88
226.00	0.94
226.25	1.00
226.50	0.97
226.75	1.05
227.00	1.14
227.25	1.11
227.50	1.17
227.75	1.14
228.00	1.23
228.25	1.29
228.50	1.39
228.75	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
231.00	1.28
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 = 2

Result key: 20
Scenario 1 Affected station 16
Before Analysis

Results for: 11A VA STAUNTON BPEDT 20111212ABK AP
HAAT 328.0 m, ATV ERP 0.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	876240	27162.4
not affected by terrain losses	731286	24347.4
lost to NTSC IX	0	0.0

```
   lost to additional IX by ATV       47000       1523.5
   lost to ATV IX only                47000       1523.5
   lost to all IX                     47000       1523.5

 Potential Interfering Stations Included in above Scenario     1

11A MD BALTIMORE            BLCDT     20090619ABW  LIC
11A NC CHARLOTTE            BLEDT     20101222ABA  LIC
11A NC DURHAM               BLCDT     20100929AGW  LIC
11A TN JOHNSON CITY         BLCDT     20100910AAC  LIC

Result key:       21
Scenario        2  Affected station       16
Before Analysis

Results for: 11A VA STAUNTON             BPEDT     20111212ABK  AP
   HAAT  328.0 m, ATV ERP    0.1 kW
                                    POPULATION   AREA (sq km)
   within Noise Limited Contour      876240      27162.4
   not affected by terrain losses    731286      24347.4
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV       50777       1783.4
   lost to ATV IX only                50777       1783.4
   lost to all IX                     50777       1783.4

 Potential Interfering Stations Included in above Scenario     2

11A MD BALTIMORE            BPCDT     20100429AAF  CP
11A NC CHARLOTTE            BLEDT     20101222ABA  LIC
11A NC DURHAM               BLCDT     20100929AGW  LIC
11A TN JOHNSON CITY         BLCDT     20100910AAC  LIC

################################################################################

FINISHED 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)

CVIL BPEDT -20111212ABK STAUNTON VA US
Channel 11 ERP 0.10 kW HAAT 00328 m RCAMSL 00495 m
Latitude 037-59-00 Longitude 0078-29-02
Status AP Zone 1 Border 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 RCAMSL 01338 m
Latitude 038-20-39 Longitude 0079-35-47
Status AP Zone 1 Border Site number: 02
Dir Antenna Make CDB Model 00000000077677 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

MAIN BPEDT -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 00000000107753 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

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

0.0	0.098	357.1	61.1
45.0	0.029	264.2	46.6
90.0	0.000	378.9	16.9
135.0	0.001	353.7	29.6
180.0	0.000	350.8	21.3
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

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	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

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (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 MD BPCDT 20100429AAF
039-20- 5 0076-39- 3
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 STAUNTON VA DTVPLN DTVP0338
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 RICHMOND VA BLCDT 20090803ABS
037-30-23 0077-30-12
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

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
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

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

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
10	WAZT-CA	WOODSTOCK VA	109.1	LIC	BLTVA	20030718ADF
10	WVFX	CLARKSBURG WV	217.9	LIC	BLCDT	20090612AJY
10	WSWP-TV	GRANDVIEW WV	219.8	LIC	BLEDT	20100210AAQ
10	WSWP-TV	GRANDVIEW WV	219.8	APP	BDSTA	20080225AGT
11	WBAL-TV	BALTIMORE MD	218.8	LIC	BLCDT	20090619ABW
11	WBAL-TV	BALTIMORE MD	218.8	CP	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	RICHMOND VA	101.2	LIC	BLCDT	20090803ABS
12	WBOY-TV	CLARKSBURG WV	215.9	LIC	BLCDT	20090227ABW
12	WWPX-TV	MARTINSBURG 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 VA
Fails the service area limitations

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

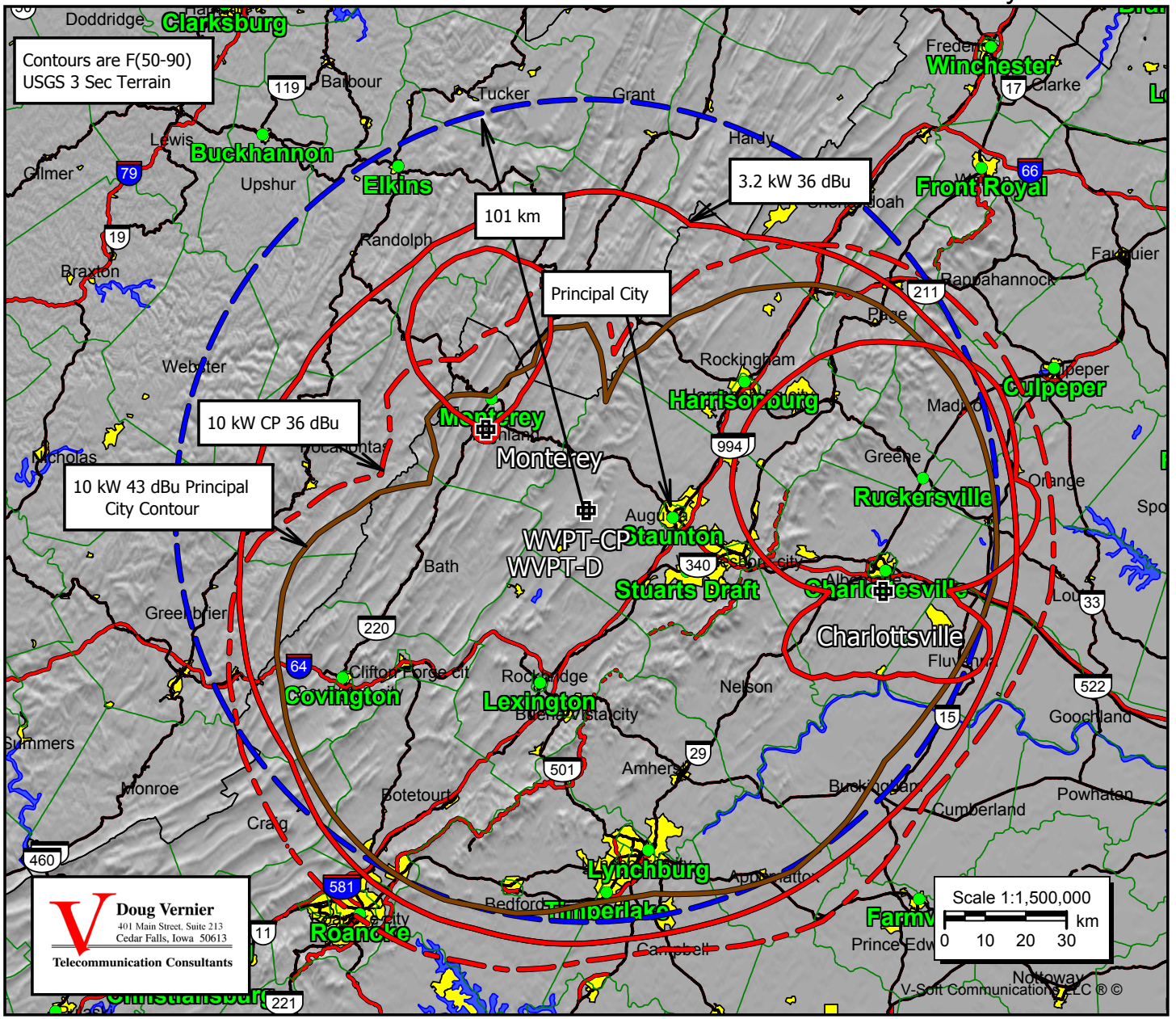
WVPT-TV
BPEDT20081022ABK
Latitude: 38-09-54 N
Longitude: 079-18-51 W
ERP: 3.20 kW
Channel: 11
Frequency: 201.0 MHz
AMSL Height: 1333.0 m

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 0.11 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.

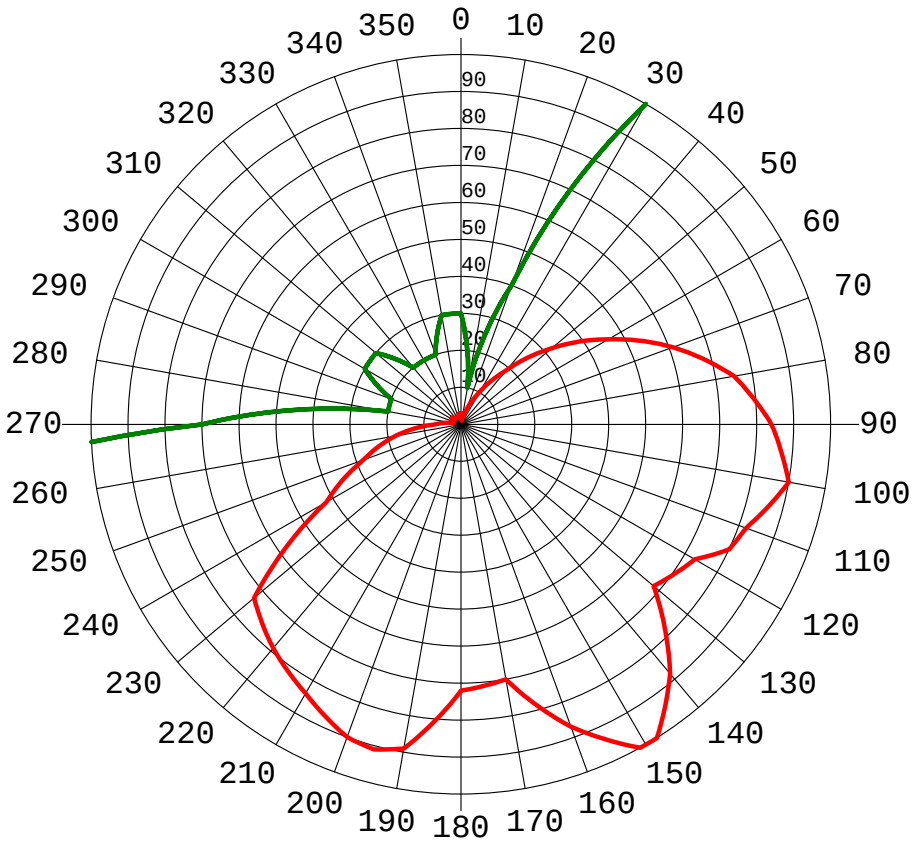
N. Lat. = 380954.0 W. Lng. = 791851.0
HAAT and Distance to Contour,
FCC OET,TV 3.2 - 16.1, 130 pts - USGS 03 SEC

WVPT-D, Shenandoah Valley Educationa, BPEDT20081022ABK

Azi.	AV EL	HAAT	ERP kW	dBk	Field	DAng	VFld	D-kW	%Max	D-dBk	43-F9
000	648.7	684.3	0.0090	-20.46	0.030	0.725	0.999	0.0090	99.9	-20.46	45.69
010	718.4	614.6	0.0010	-30.00	0.010	0.687	0.999	0.0010	99.9	-30.00	27.20
020	822.9	510.1	0.0160	-17.96	0.040	0.626	0.999	0.0160	99.9	-17.96	42.98
030	810.7	522.3	0.1000	-10.00	0.100	0.633	0.999	0.0997	99.9	-10.00	57.50
040	717.1	615.9	0.3610	-4.42	0.190	0.687	0.999	0.3601	99.9	-4.42	71.71
050	608.6	724.4	1.0240	0.10	0.320	0.746	0.999	1.0219	99.9	0.10	83.72
060	561.8	771.2	2.1160	3.26	0.460	0.769	0.999	2.1121	99.9	3.26	90.54
070	527.8	805.2	3.7210	5.71	0.610	0.786	0.999	3.7146	99.9	5.71	95.76
080	547.1	785.9	5.6250	7.50	0.750	0.777	0.999	5.6149	99.9	7.50	98.71
090	556.1	776.9	7.0560	8.49	0.840	0.772	0.999	7.0431	99.9	8.49	100.41
100	549.6	783.4	8.1000	9.08	0.900	0.775	0.999	8.0854	99.9	9.08	101.72
110	572.3	760.7	6.7240	8.28	0.820	0.764	0.999	6.7113	99.9	8.28	99.62
120	589.9	743.1	5.3290	7.27	0.730	0.755	0.999	5.3186	99.9	7.27	97.24
130	606.7	726.3	4.6240	6.65	0.680	0.746	0.999	4.6146	99.9	6.65	95.65
140	623.9	709.1	7.7440	8.89	0.880	0.738	0.999	7.7278	99.9	8.89	99.56
150	613.3	719.7	10.0000	10.00	1.000	0.743	0.999	9.9795	99.9	10.00	102.03
160	617.8	715.2	7.5690	8.79	0.870	0.741	0.999	7.5533	99.9	8.79	99.51
170	633.4	699.6	4.9000	6.90	0.700	0.733	0.999	4.8895	99.9	6.90	95.46
180	608.7	724.3	5.1840	7.15	0.720	0.746	0.999	5.1735	99.9	7.15	96.54
190	600.0	733.0	7.9210	8.99	0.890	0.750	0.999	7.9052	99.9	8.99	100.34
200	555.3	777.7	8.1000	9.08	0.900	0.772	0.999	8.0853	99.9	9.08	101.59
210	553.8	779.2	7.0560	8.49	0.840	0.773	0.999	7.0432	99.9	8.49	100.46
220	646.9	686.1	6.2410	7.95	0.790	0.726	0.999	6.2273	99.9	7.95	97.15
230	763.7	569.3	5.3290	7.27	0.730	0.661	0.999	5.3146	99.9	7.27	92.69
240	670.1	662.9	1.7640	2.46	0.420	0.713	0.999	1.7600	99.9	2.46	86.33
250	654.2	678.8	0.7840	-1.06	0.280	0.722	0.999	0.7823	99.9	-1.06	80.21
260	647.7	685.3	0.3240	-4.89	0.180	0.725	0.999	0.3233	99.9	-4.89	72.71
270	676.8	656.2	0.0490	-13.10	0.070	0.710	0.999	0.0489	99.9	-13.10	56.96
280	660.9	672.1	0.0040	-23.98	0.020	0.718	0.999	0.0040	99.9	-23.98	39.20
290	662.4	670.6	0.0040	-23.98	0.020	0.717	0.999	0.0040	99.9	-23.98	39.16
300	664.4	668.6	0.0090	-20.46	0.030	0.716	0.999	0.0090	99.9	-20.46	45.22
310	706.6	626.4	0.0090	-20.46	0.030	0.693	0.999	0.0090	99.9	-20.46	43.78
320	736.3	596.7	0.0040	-23.98	0.020	0.677	0.999	0.0040	99.9	-23.98	36.83
330	699.3	633.7	0.0040	-23.98	0.020	0.697	0.999	0.0040	99.9	-23.98	38.07
340	697.8	635.2	0.0040	-23.98	0.020	0.698	0.999	0.0040	99.9	-23.98	38.12
350	656.8	676.2	0.0090	-20.46	0.030	0.720	0.999	0.0090	99.9	-20.46	45.45

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

Horizontal Azimuth Pattern



Azi	Rel	dBk	kW	dB
0	0.030	-20.46	0.009	-30.46
10	0.010	-30.00	0.001	-40.00
20	0.040	-17.96	0.016	-27.96
30	0.100	-10.00	0.100	-20.00
40	0.190	-4.42	0.361	-14.42
50	0.320	0.10	1.024	-9.90
60	0.460	3.26	2.116	-6.74
70	0.610	5.71	3.721	-4.29
80	0.750	7.50	5.625	-2.50
90	0.840	8.49	7.056	-1.51
100	0.900	9.08	8.100	-0.92
110	0.820	8.28	6.724	-1.72
120	0.730	7.27	5.329	-2.73
130	0.680	6.65	4.624	-3.35
140	0.880	8.89	7.744	-1.11
150	1.000	10.00	10.000	0.00
160	0.870	8.79	7.569	-1.21
170	0.700	6.90	4.900	-3.10

Azi	Rel	dBk	kW	dB
180	0.720	7.15	5.184	-2.85
190	0.890	8.99	7.921	-1.01
200	0.900	9.08	8.100	-0.92
210	0.840	8.49	7.056	-1.51
220	0.790	7.95	6.241	-2.05
230	0.730	7.27	5.329	-2.73
240	0.420	2.46	1.764	-7.54
250	0.280	-1.06	0.784	-11.06
260	0.180	-4.89	0.324	-14.89
270	0.070	-13.10	0.049	-23.10
280	0.020	-23.98	0.004	-33.98
290	0.020	-23.98	0.004	-33.98
300	0.030	-20.46	0.009	-30.46
310	0.030	-20.46	0.009	-30.46
320	0.020	-23.98	0.004	-33.98
330	0.020	-23.98	0.004	-33.98
340	0.020	-23.98	0.004	-33.98
350	0.030	-20.46	0.009	-30.46

Rotation Angle = 0

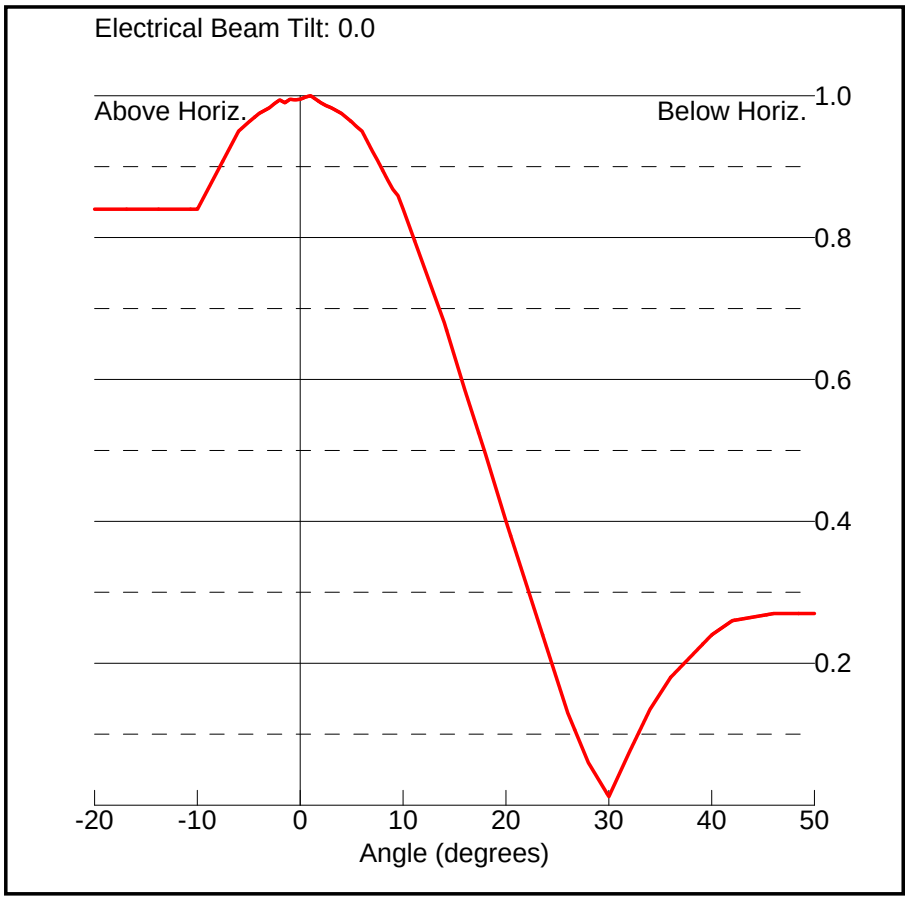
Additional Points

Azi	Rel	dBk	kW	dB	Azi	Rel	dBk	kW	dB
115	0.800	8.06	6.400	-1.94	151	1.000	10.00	10.000	0.00
148	1.000	10.00	10.000	0.00	195	0.910	9.18	8.281	-0.82
149	1.000	10.00	10.000	0.00					

Minor Lobes.

127	0.670	6.78	4.761	-3.22	173	0.695	6.84	5.013	-2.999

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
-2.5	0.989
-2.0	0.994
-1.5	0.99
-1.0	0.995
-0.5	0.994
0.0	0.995
0.5	0.998
1.0	1.0
1.5	0.995
2.0	0.99
2.5	0.986
3.0	0.983
3.5	0.979
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
40.0	0.24
42.0	0.26
46.0	0.27

12/15/2011

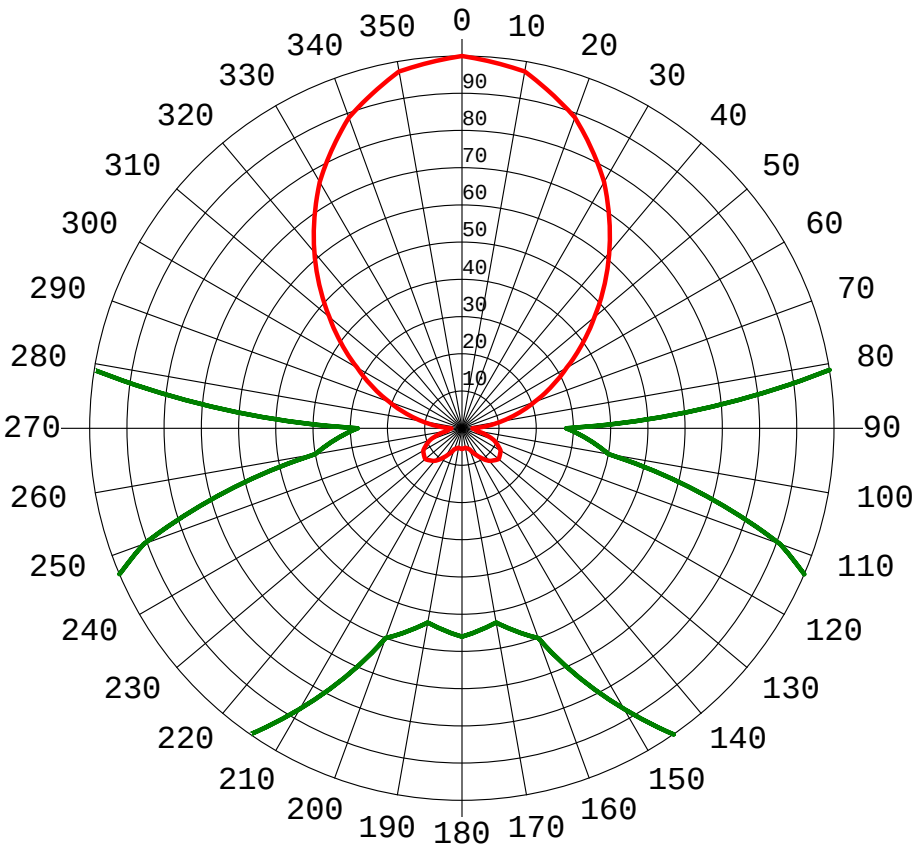
N. Lat. = 375900.0 W. Lng. = 782902.0
HAAT and Distance to Contour,
FCC OET,TV 3.2 - 16.1, 130 pts - USGS 03 SEC

Charlottseville Site - Scala DRV-1, No Rotation

Azi.	AV EL	HAAT	ERP kW	dBk	Field	DAng	VFld	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	130.4	364.6	0.0947	-10.24	0.973	0.529	0.989	0.0927	98.9	-10.24	61.43
020	128.9	366.1	0.0789	-11.03	0.888	0.530	0.989	0.0772	98.9	-11.03	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	124.1	370.9	0.0043	-23.64	0.208	0.533	0.989	0.0042	98.9	-23.64	38.56
080	121.1	373.9	0.0012	-29.33	0.108	0.536	0.989	0.0011	98.9	-29.33	28.92
090	116.6	378.4	0.0001	-41.06	0.028	0.539	0.989	0.0001	98.9	-41.06	15.94
100	114.7	380.3	0.0002	-37.96	0.040	0.540	0.989	0.0002	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	149.2	345.8	0.0008	-31.21	0.087	0.515	0.989	0.0007	98.9	-31.21	25.43
160	153.2	341.8	0.0004	-34.44	0.060	0.512	0.989	0.0004	98.9	-34.44	21.66
170	150.3	344.7	0.0003	-35.51	0.053	0.514	0.989	0.0003	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	175.8	319.2	0.0013	-28.79	0.115	0.495	0.989	0.0013	98.9	-28.79	27.50
230	164.6	330.4	0.0017	-27.79	0.129	0.503	0.989	0.0016	98.9	-27.79	29.34
240	168.1	326.9	0.0014	-28.42	0.120	0.501	0.989	0.0014	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	218.9	276.1	0.0043	-23.64	0.208	0.460	0.990	0.0042	99.0	-23.64	33.71
300	199.2	295.8	0.0106	-19.76	0.325	0.476	0.990	0.0103	99.0	-19.76	41.35
310	178.6	316.4	0.0216	-16.65	0.465	0.493	0.989	0.0212	98.9	-16.65	47.70
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 El= 162.13 M HAAT= 332.87 M AMSL= 495 M

Charlottesville, DRV-1, Horizontal Azimuth Pattern



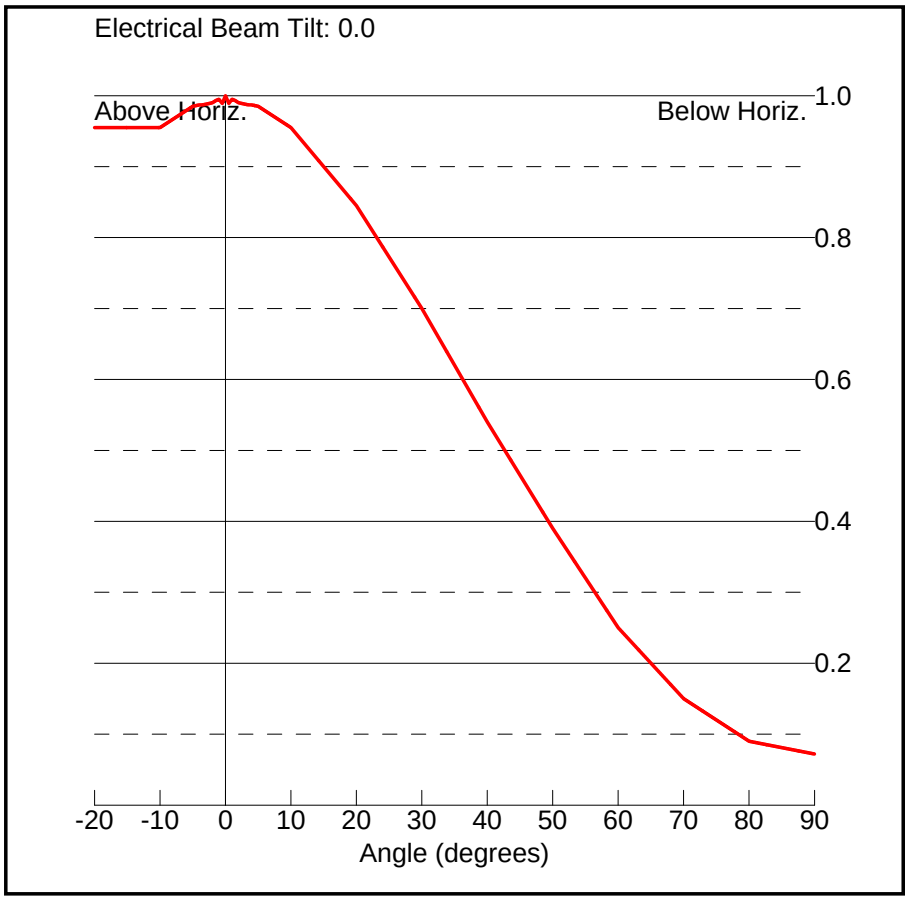
Azi	Rel	dBk	kW	dB
0	1.000	-10.00	0.100	0.00
10	0.973	-10.24	0.095	-0.24
20	0.888	-11.03	0.079	-1.03
30	0.764	-12.34	0.058	-2.34
40	0.616	-14.21	0.038	-4.21
50	0.465	-16.65	0.022	-6.65
60	0.325	-19.76	0.011	-9.76
70	0.208	-23.64	0.004	-13.64
80	0.108	-29.33	0.001	-19.33
90	0.028	-41.06	0.000	-31.06
100	0.040	-37.96	0.000	-27.96
110	0.091	-30.82	0.001	-20.82
120	0.120	-28.42	0.001	-18.42
130	0.129	-27.79	0.002	-17.79
140	0.115	-28.79	0.001	-18.79
150	0.087	-31.21	0.001	-21.21
160	0.060	-34.44	0.000	-24.44
170	0.053	-35.51	0.000	-25.51

Azi	Rel	dBk	kW	dB
180	0.056	-35.04	0.000	-25.04
190	0.053	-35.51	0.000	-25.51
200	0.060	-34.44	0.000	-24.44
210	0.087	-31.21	0.001	-21.21
220	0.115	-28.79	0.001	-18.79
230	0.129	-27.79	0.002	-17.79
240	0.120	-28.42	0.001	-18.42
250	0.091	-30.82	0.001	-20.82
260	0.040	-37.96	0.000	-27.96
270	0.028	-41.06	0.000	-31.06
280	0.108	-29.33	0.001	-19.33
290	0.208	-23.64	0.004	-13.64
300	0.325	-19.76	0.011	-9.76
310	0.465	-16.65	0.022	-6.65
320	0.617	-14.19	0.038	-4.19
330	0.764	-12.34	0.058	-2.34
340	0.888	-11.03	0.079	-1.03
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



12/20/2011

KATHREIN
SCALA DIVISION

DRV

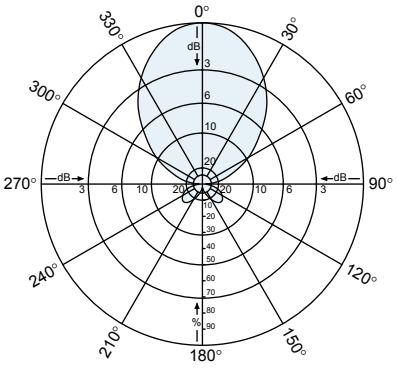
VHF-TV Panel Antenna
174 to 230 MHz (Channels 7–13*)

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.

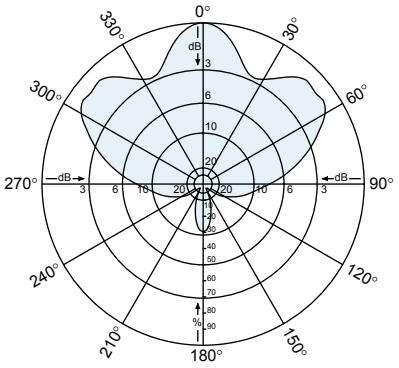
Like all Kathrein Scala Division antennas, the DRV is made of the finest materials using state of the art electrical and mechanical designs, resulting in superior performance and long service life.

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

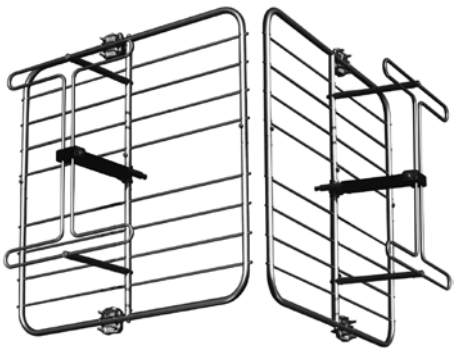
(shown horizontally polarized)



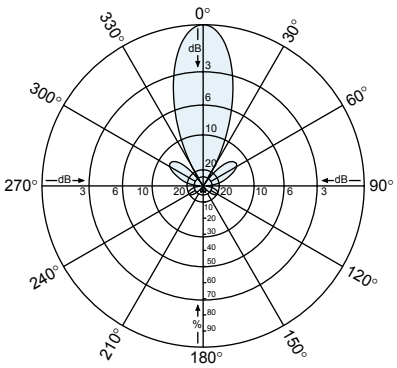
/1 series
Azimuth pattern (E-plane)



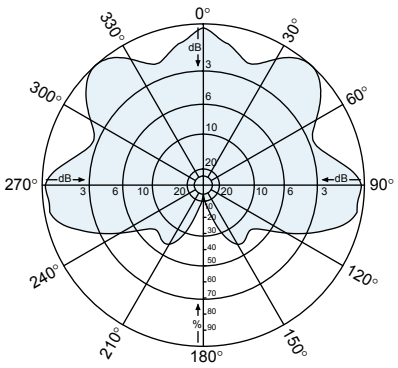
/2HW series
Azimuth pattern (E-plane)



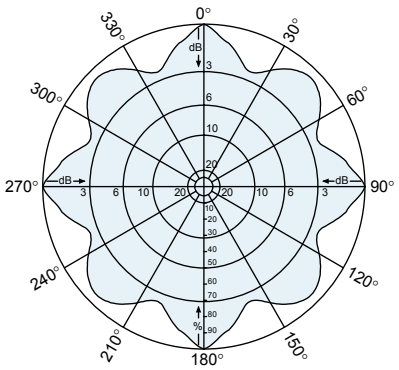
DRV-1/2HW array



/2HN series
Azimuth pattern (E-plane)



/3HC series
Azimuth pattern (E-plane)



/4HO series
Azimuth pattern (E-plane)

10285-E

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

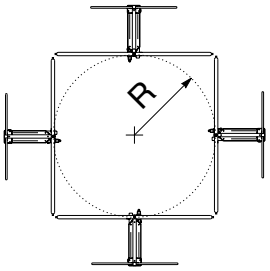
KATHREIN
SCALA DIVISION

DRV

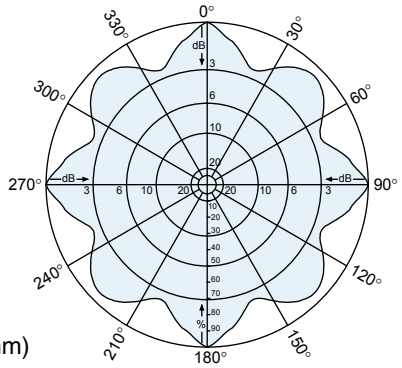
VHF-TV Panel Antenna
174 to 230 MHz (Channels 7–13*)

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.

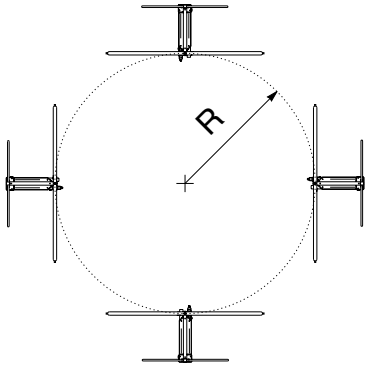
Optimum

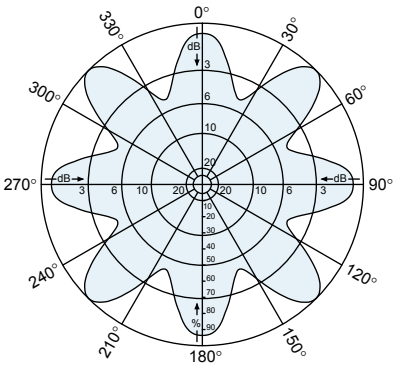


R = 25 inches (635 mm)

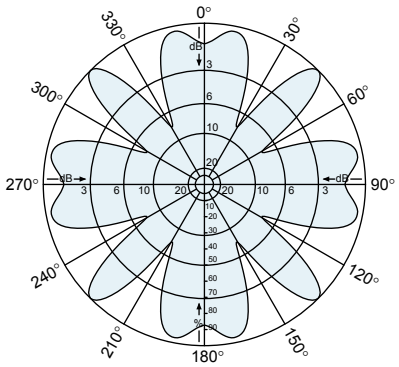


Scalloped





R = 40 inches (1016 mm)



R = 60 inches (1524 mm)

Specifications:

Model	Gain dBd	Power Gain	Weight lb (kg)	Dimensions		Number of Panels	Number 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.

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

KATHREIN
SCALA DIVISION

DRV

VHF-TV Panel Antenna
174 to 230 MHz (Channels 7–13*)

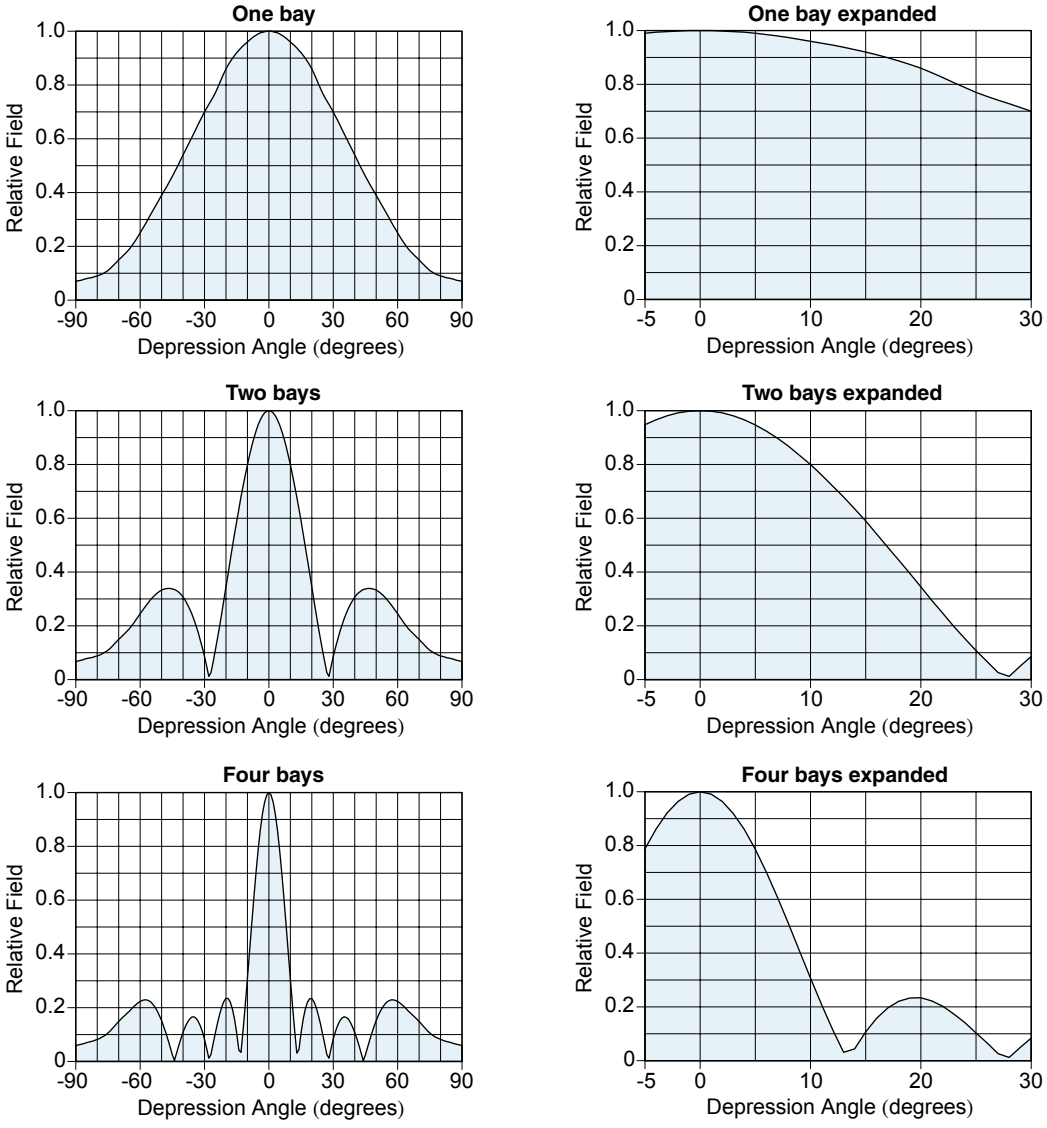
General Specifications:

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.

Elevation patterns



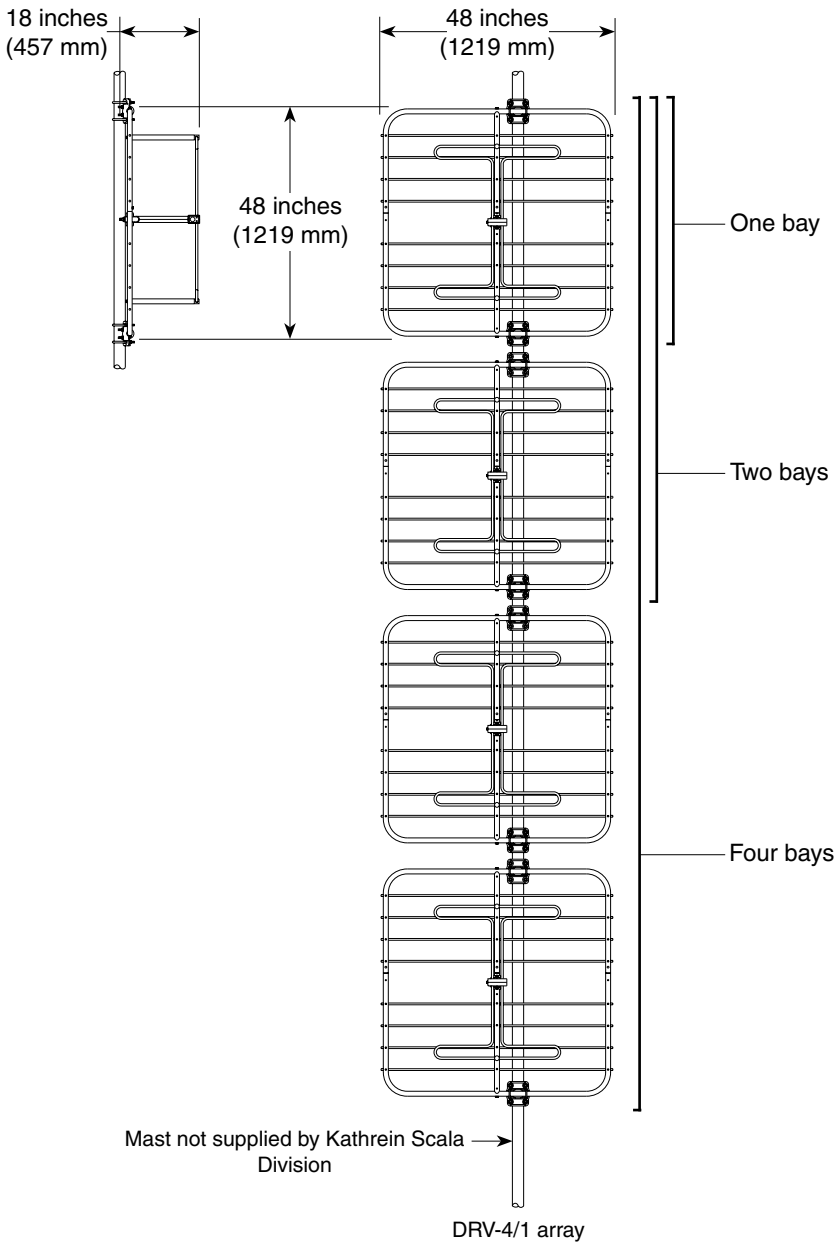
All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

KATHREIN
SCALA DIVISION

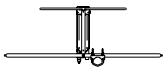
DRV

VHF-TV Panel Antenna
174 to 230 MHz (Channels 7–13*)

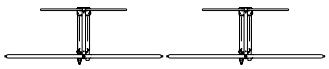


DRV-4/1 array

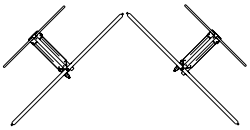
DRV Array Top Views



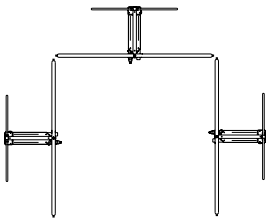
/1 series



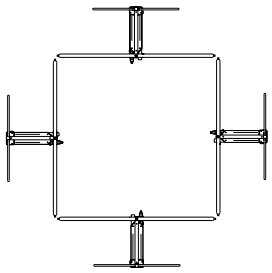
/2HN series



/2HW series



/3HC series



/4HO series

Order Information:

Model	Description
DRV (single panel)	Panel Antenna for VHF-TV

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: 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

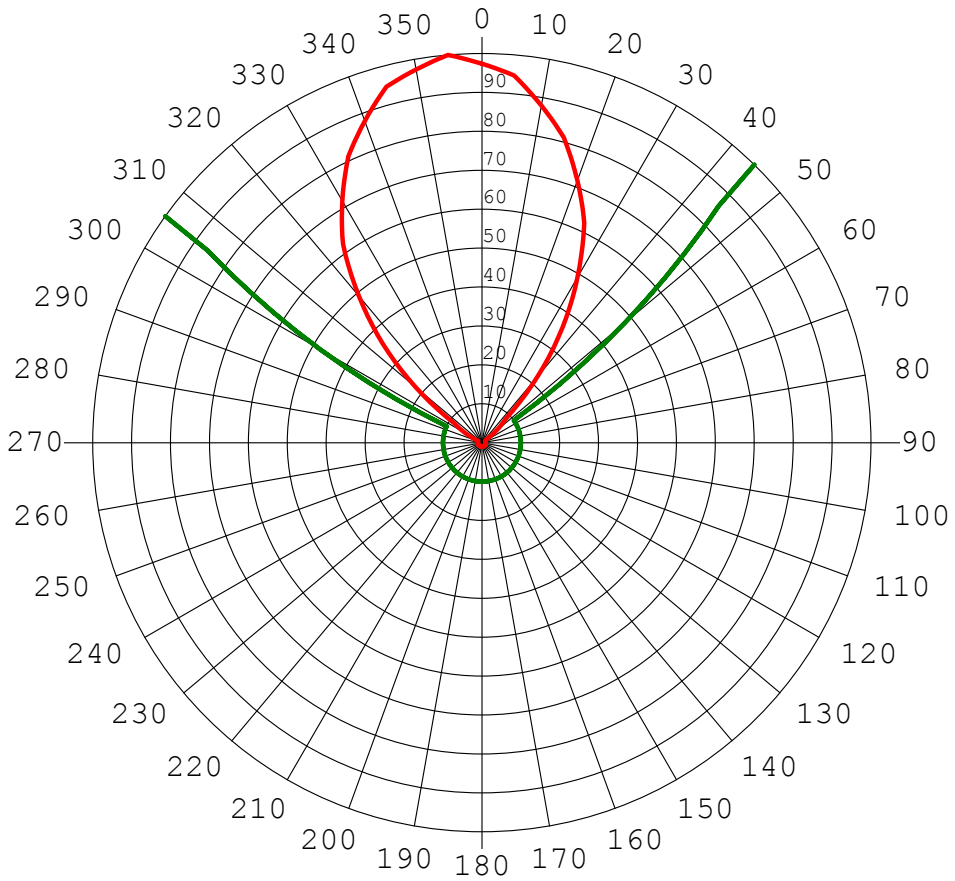
Distance to Contour and Depression Angle

Azi.	AV EL	HAAT	ERP kW	dBk	Field	DAng	VFld	D-kW	%Max	D-dBk	36-F9
000	936.0	402.0	0.0076	-21.20	0.974	0.555	0.998	0.0076	99.8	-21.20	44.53
010	946.5	391.5	0.0062	-22.09	0.879	0.548	0.998	0.0062	99.8	-22.09	42.40
020	912.4	425.6	0.0041	-23.86	0.717	0.571	0.998	0.0041	99.8	-23.86	41.21
030	981.2	356.8	0.0019	-27.15	0.491	0.523	0.998	0.0019	99.8	-27.15	31.53
040	1049.4	288.6	0.0004	-34.00	0.223	0.471	0.998	0.0004	99.8	-34.00	20.39
050	993.3	344.7	0.0000	-47.34	0.048	0.514	0.998	0.0000	99.8	-47.34	9.56
060	874.0	464.0	0.0000	-60.97	0.010	0.597	0.998	0.0000	99.8	-60.97	2.85
070	830.5	507.5	0.0000	-60.97	0.010	0.624	0.998	0.0000	99.8	-60.97	2.88
080	802.8	535.2	0.0000	-60.97	0.010	0.641	0.998	0.0000	99.8	-60.97	2.90
090	767.1	570.9	0.0000	-60.97	0.010	0.662	0.998	0.0000	99.8	-60.97	2.92
100	744.9	593.1	0.0000	-60.97	0.010	0.675	0.998	0.0000	99.8	-60.97	2.93
110	733.5	604.5	0.0000	-60.97	0.010	0.681	0.998	0.0000	99.8	-60.97	2.93
120	707.3	630.7	0.0000	-60.97	0.010	0.696	0.998	0.0000	99.8	-60.97	2.94
130	701.3	636.7	0.0000	-60.97	0.010	0.699	0.998	0.0000	99.8	-60.97	2.94
140	680.9	657.1	0.0000	-60.97	0.010	0.710	0.998	0.0000	99.8	-60.97	2.94
150	678.0	660.0	0.0000	-60.97	0.010	0.712	0.998	0.0000	99.8	-60.97	2.94
160	690.6	647.4	0.0000	-60.97	0.010	0.705	0.998	0.0000	99.8	-60.97	2.94
170	723.3	614.7	0.0000	-60.97	0.010	0.687	0.998	0.0000	99.8	-60.97	2.93
180	763.3	574.7	0.0000	-60.97	0.010	0.664	0.998	0.0000	99.8	-60.97	2.92
190	844.9	493.1	0.0000	-60.97	0.010	0.615	0.998	0.0000	99.8	-60.97	2.87
200	840.5	497.5	0.0000	-60.97	0.010	0.618	0.998	0.0000	99.8	-60.97	2.87
210	840.8	497.2	0.0000	-60.97	0.010	0.618	0.998	0.0000	99.8	-60.97	2.87
220	758.2	579.8	0.0000	-60.97	0.010	0.667	0.998	0.0000	99.8	-60.97	2.92
230	873.1	464.9	0.0000	-60.97	0.010	0.597	0.998	0.0000	99.8	-60.97	2.85
240	847.9	490.1	0.0000	-60.97	0.010	0.613	0.998	0.0000	99.8	-60.97	2.87
250	827.4	510.6	0.0000	-60.97	0.010	0.626	0.998	0.0000	99.8	-60.97	2.88
260	895.4	442.6	0.0000	-60.97	0.010	0.583	0.998	0.0000	99.8	-60.97	2.83
270	959.2	378.8	0.0000	-60.97	0.010	0.539	0.998	0.0000	99.8	-60.97	2.78
280	980.0	358.0	0.0000	-60.97	0.010	0.524	0.998	0.0000	99.8	-60.97	2.76
290	1039.5	298.5	0.0000	-60.97	0.010	0.479	0.998	0.0000	99.8	-60.97	2.69
300	1009.2	328.8	0.0000	-47.34	0.048	0.502	0.998	0.0000	99.8	-47.34	9.31
310	1001.9	336.1	0.0004	-34.00	0.223	0.508	0.998	0.0004	99.8	-34.00	21.93
320	1013.0	325.0	0.0019	-27.15	0.491	0.499	0.998	0.0019	99.8	-27.15	30.08
330	1017.7	320.3	0.0041	-23.86	0.717	0.496	0.998	0.0041	99.8	-23.86	35.58
340	1005.5	332.5	0.0062	-22.09	0.879	0.505	0.998	0.0062	99.8	-22.09	39.31
350	968.3	369.7	0.0076	-21.20	0.974	0.533	0.998	0.0076	99.8	-21.20	42.80

Additional Radials (Not Considered in Average):

355	963.2	374.8	0.0080	-20.97	1.000	0.536	0.998	0.0080	99.8	-20.97	43.47

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

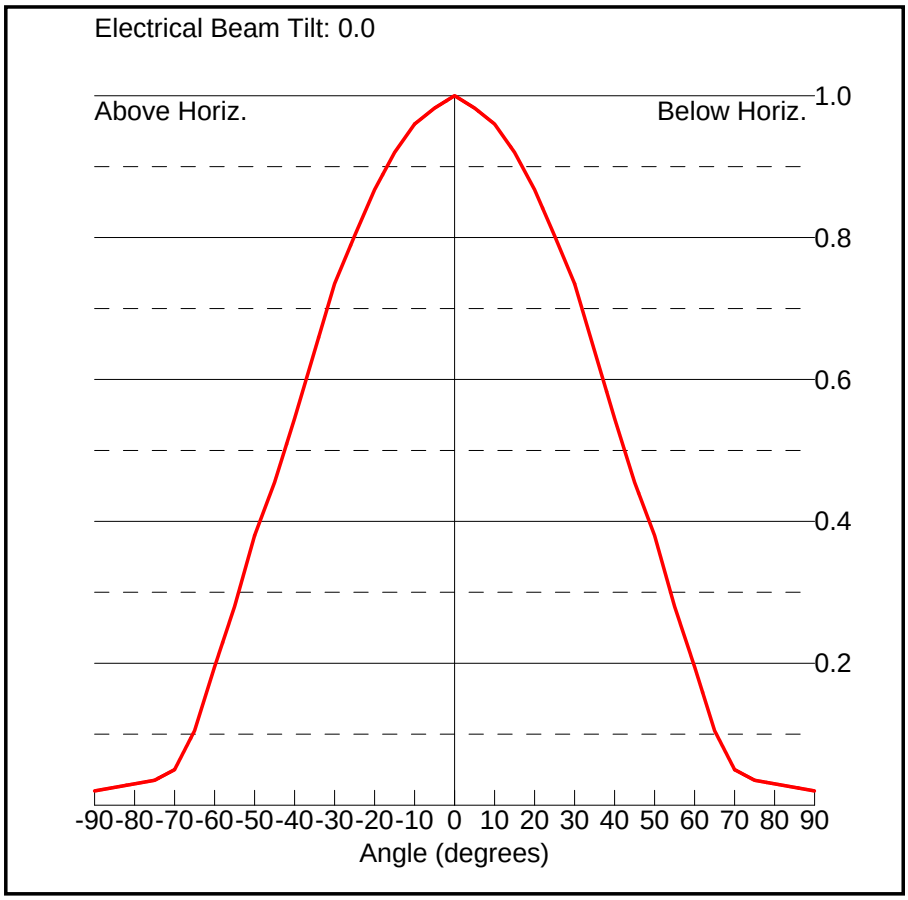


Azi	Rel	dBk	kW	dB
0	0.974	-21.20	0.008	-0.23
10	0.879	-22.08	0.006	-1.12
20	0.717	-23.86	0.004	-2.89
30	0.491	-27.14	0.002	-6.17
40	0.224	-33.98	0.000	-13.01
50	0.048	-47.34	0.000	-26.38
60	0.010	-60.97	0.000	-40.00
70	0.010	-60.97	0.000	-40.00
80	0.010	-60.97	0.000	-40.00
90	0.010	-60.97	0.000	-40.00
100	0.010	-60.97	0.000	-40.00
110	0.010	-60.97	0.000	-40.00
120	0.010	-60.97	0.000	-40.00
130	0.010	-60.97	0.000	-40.00
140	0.010	-60.97	0.000	-40.00
150	0.010	-60.97	0.000	-40.00
160	0.010	-60.97	0.000	-40.00
170	0.010	-60.97	0.000	-40.00

Azi	Rel	dBk	kW	dB
180	0.010	-60.97	0.000	-40.00
190	0.010	-60.97	0.000	-40.00
200	0.010	-60.97	0.000	-40.00
210	0.010	-60.97	0.000	-40.00
220	0.010	-60.97	0.000	-40.00
230	0.010	-60.97	0.000	-40.00
240	0.010	-60.97	0.000	-40.00
250	0.010	-60.97	0.000	-40.00
260	0.010	-60.97	0.000	-40.00
270	0.010	-60.97	0.000	-40.00
280	0.010	-60.97	0.000	-40.00
290	0.010	-60.97	0.000	-40.00
300	0.048	-47.34	0.000	-26.38
310	0.224	-33.98	0.000	-13.01
320	0.491	-27.14	0.002	-6.17
330	0.717	-23.86	0.004	-2.89
340	0.879	-22.08	0.006	-1.12
350	0.974	-21.20	0.008	-0.23

Rotation Angle = 0

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	0.41
-47.0	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

12/20/2011

-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

KATHREIN
SCALA DIVISION

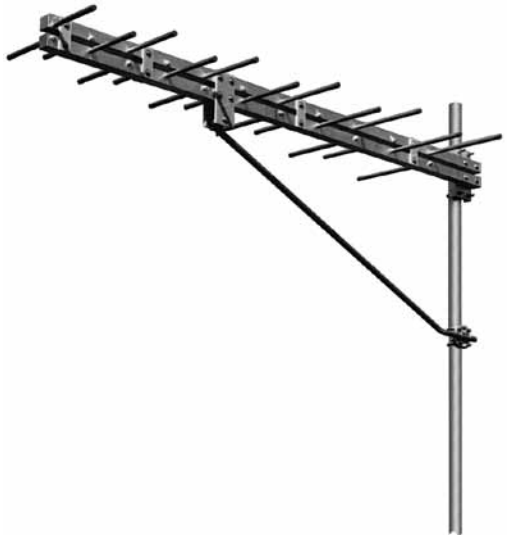
CL-713

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.

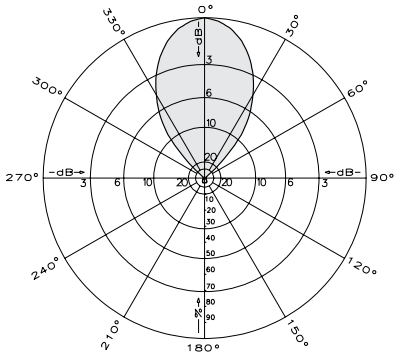
Like all Kathrein Scala Division antennas, the CL-713 is made of the finest materials using state of the art electrical and mechanical designs, resulting in superior performance and long service life.

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 (50Ω or 75Ω)
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 information.		



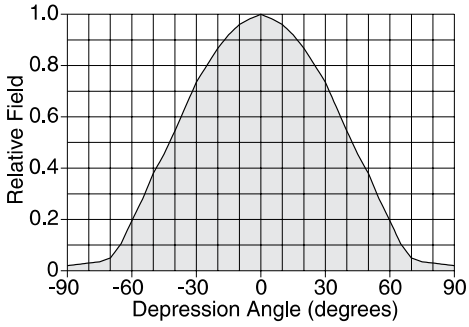
Azimuth pattern (E-plane)

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)



Elevation pattern (H-plane)

RoHS Lead-Free

10280-D

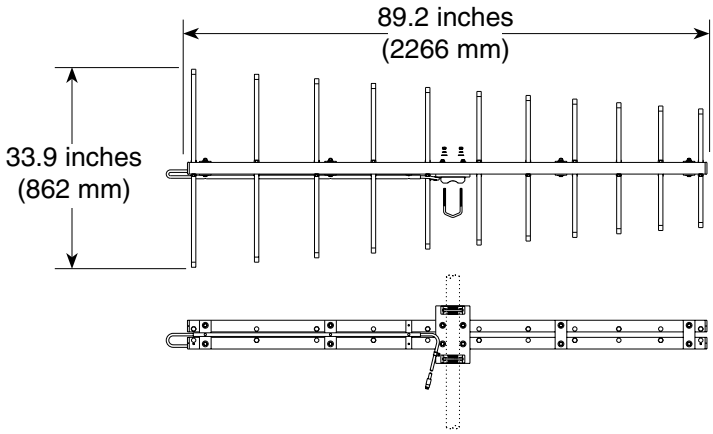
*Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

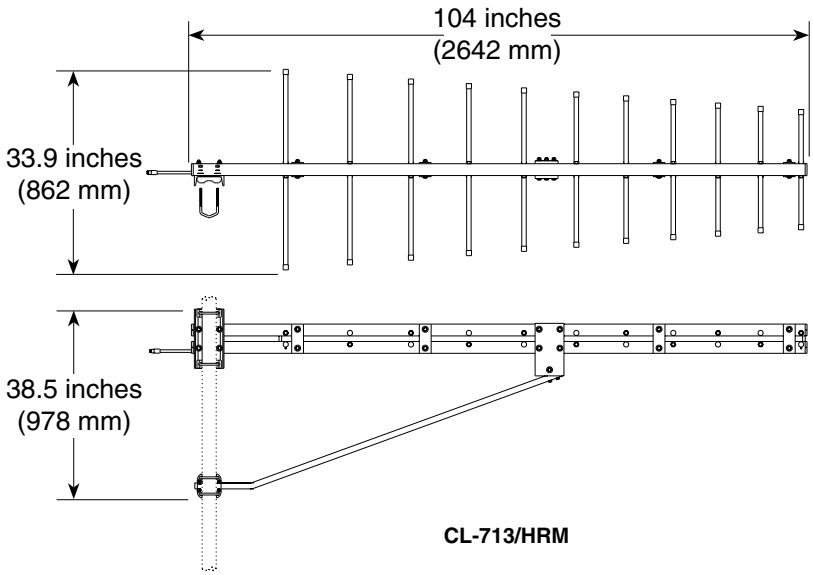
KATHREIN
SCALA DIVISION

CL-713

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



CL-713/HCM



CL-713/HRM

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

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-10	0.84
-8	0.895
-6	0.95
-5	0.963
-4.5	0.969
-4	0.975
-3.5	0.979
-3	0.983
-2.5	0.989
-2	0.994
-1.5	0.99
-1	0.995
-0.5	0.994
0	0.995
0.5	0.998
1	1
1.5	0.995
2	0.99
2.5	0.986
3	0.983
3.5	0.979
4	0.975
4.5	0.969
5	0.963
5.5	0.956
6	0.95
6.5	0.936
7	0.922
7.5	0.909
8	0.895
8.5	0.881
9	0.868
9.5	0.859
10	0.84
12	0.76
14	0.68
16	0.585
18	0.495
20	0.4
22	0.31
24	0.22
26	0.13
28	0.06
30	0.012
32	0.075
34	0.135
36	0.18
38	0.21
40	0.24

42	0.26
46	0.27

-10	0.955
-5	0.985
-4.5	0.986
-4	0.987
-3.5	0.987
-3	0.988
-2.5	0.989
-2	0.99
-1.5	0.993
-1	0.995
-0.5	0.989
0	1
0.5	0.989
1	0.995
1.5	0.993
2	0.99
2.5	0.989
3	0.988
3.5	0.987
4	0.987
4.5	0.986
5	0.985
5.5	0.982
6	0.979
6.5	0.976
7	0.973
7.5	0.97
8	0.967
8.5	0.964
9	0.961
9.5	0.958
10	0.955
20	0.845
30	0.7
40	0.54
50	0.39
60	0.25
70	0.15
80	0.09
90	0.072

-10	0.96
-9	0.965
-8	0.969
-7	0.974
-6	0.978
-5	0.983
-4.5	0.986
-4	0.986
-3.5	0.988
-3	0.99
-2.5	0.991
-2	0.993
-1.5	0.995
-1	0.997
-0.05	0.998
0	1
0.5	0.998
1	0.997
1.5	0.995
2	0.993
2.5	0.991
3	0.99
3.5	0.988
4	0.986
4.5	0.985
5	0.983
5.5	0.98
6	0.978
6.5	0.973
7	0.974
7.5	0.971
8	0.969
8.5	0.967
9	0.965
9.5	0.962
10	0.96
11	0.952
12	0.944
13	0.936
14	0.928
15	0.92
16	0.909
17	0.899
18	0.888
19	0.878
20	0.868
21	0.855
22	0.842
23	0.829

24	0.816
25	0.802
26	0.789
27	0.775
28	0.762
29	0.749
30	0.735
31	0.716
32	0.697
33	0.678
34	0.659
35	0.64
36	0.621
37	0.602
38	0.583
39	0.564
40	0.545
41	0.527
42	0.509
43	0.491
44	0.473
45	0.455
46	0.44
47	0.425
48	0.41
49	0.395
50	0.38
51	0.36
52	0.34
53	0.32
54	0.3
55	0.28
56	0.263
57	0.246
58	0.229
59	0.212
60	0.195
61	0.177
62	0.159
63	0.141
64	0.123
65	0.105
66	0.094
67	0.083
68	0.072
69	0.061
70	0.05
71	0.047
72	0.044

73	0.041
74	0.038
75	0.035
76	0.034
77	0.033
78	0.032
79	0.031
80	0.03
81	0.029
82	0.028
83	0.027
84	0.026
85	0.025
86	0.024
87	0.023
88	0.022
89	0.021
90	0.02