tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: aDubios22d1kwTUA170T, Model: Longley-Rice
Start: 2021.04.13 12:01:57

Study created: 2021.04.13 12:01:57

Study build station data: LMS TV 2021-04-13

    Proposal: W21DO-D D22 LD APP DUBOIS, PA
 Facility ID: 187453
Station data: User record
   Record ID: 2087
     Country: U.S.

Build options:
Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WWHC-LD	N20	TX	LIC	OLEAN, NY	BLANK0000022154	67.0 km
No	WROC-TV	D21	DT	LIC	ROCHESTER, NY	BLANK0000079899	204.9
No	WJW	D21	LD	CP	CLEVELAND, OH	BDRTCDT20101123AOJ	196.8
No	WSEE-TV	D21	DT	LIC	ERIE, PA	BLANK0000074552	129.7
No	WHLZ-LD	D21	LD	LIC	Harrisburg, PA	BLANK0000080536	195.0
No	WPNT	D21	DT	LIC	PITTSBURGH, PA	BLANK0000112577	155.8
No	WNEP-TV	D21	DT	LIC	SCRANTON, PA	BLANK0000117109	237.3
No	WMPB	D22	DT	LIC	BALTIMORE, MD	BLANK0000107690	277.7
No	WBOC-LD	D22	LD	CP	Cambridge, MD	BLANK0000140180	420.2
No	WDWO-CD	D22	DC	CP	DETROIT, MI	BLANK0000127531	398.0
No	WDWO-CD	D22	DC	LIC	DETROIT, MI	BLANK0000074926	398.0
No	WDVB-CD	D22	DC	LIC	EDISON, NJ	BLANK0000080314	401.9
No	WPHY-CD	D22	DC	LIC	TRENTON, NJ	BLANK0000079874	331.6
No	WECY-LD	D22	LD	LIC	CORNING, NY	BLANK0000024397	152.1
No	WXXI-TV	D22	DT	LIC	ROCHESTER, NY	BLANK0000086491	204.9
No	WCWN	D22	DT	LIC	SCHENECTADY, NY	BLANK0000083798	406.2
No	WBLZ-LD	D22	LD	LIC	SYRACUSE, NY	BLANK0000108479	271.4
No	W22DO-D	D22	LD	LIC	UTICA, NY	BLDTT20111024AES	342.4

No	WVPX-TV	D22	DT	LIC	AKRON, OH	BLANK0000080180	247.5
No	WBGU-TV	D22	DT	LIC	BOWLING GREEN, OH	BLANK0000063785	437.5
No	WOCB-CD	D22	DC	LIC	MARION, OH	BLANK0000072129	389.0
No	WTOO-CD	D22	DC	LIC	BOLIVAR, PA	BLANK0000099914	126.0
No	WOLF-TV	D22	DT	LIC	HAZLETON, PA	BLANK0000086376	237.4
Yes	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	103.5
Yes	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20101105AAU	103.6
No	WWKH-CD	D22	DC	CP	PITTSBURG, PA	BLANK0000127565	198.5
No	WWKH-CD	D22	DC	LIC	PITTSBURG, PA	BLANK0000079948	198.5
No	WTAE-TV	D22	LD	LIC	PITTSBURGH, PA	BLANK0000088086	157.3
No	WCVE-TV	D22	DT	LIC	RICHMOND, VA	BLANK0000112529	450.9
No	W22EX-D	D22	LD	LIC	STAUNTON, VA	BLANK0000055155	372.5
No	W22CY	D22	LD	CP	CLARKSBURG, WV	BLANK0000068832	280.1
No	W22CY	D22-	LD	LIC	CLARKSBURG, WV	BLTTL20060120ADM	280.5
No	WSAZ-TV	D22	DT	LIC	HUNTINGTON, WV	BLANK0000100249	446.7
No	W22CV-D	D22	LD	LIC	MOOREFIELD, WV	BLDTT20120608ABX	278.4
No	W22ES-D	D22	LD	CP	SUTTON, WV	BNPDTL20100514AAM	361.3
No	WDVM-TV	D23	DT	LIC	HAGERSTOWN, MD	BLANK0000080408	211.2
No	WDVM-TV	D23	DT	APP	HAGERSTOWN, MD	BLANK0000127595	270.4
No	WBXZ-LD	D23	LD	LIC	BUFFALO, NY	BLANK0000116112	156.2
No	WETM-TV	D23	DT	LIC	ELMIRA, NY	BLANK0000129877	165.6
No	K23PO-D	D23	LD	CP	ERIE, PA	BNPDTL20090825BRL	129.7
No	WPXI	D23	DT	LIC	PITTSBURGH, PA	BLANK0000080213	158.3
No	WIIC-LD	N29+	TX	LIC	PITTSBURGH, PA	BLTTL19981230JB	157.3
No	WHVL-LP	N29+	TX	LIC	STATE COLLEGE, ETC., PA	BLTTL19911123JH	86.3
No	WBUO-LD	N30+	TX	LIC	OLEAN, NY	BLTT20020307ABR	67.0

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D22
       Mask: Stringent
   Latitude:  41 28 55.00 N (NAD83)
  Longitude:  78 41 10.00 W
Height AMSL: 593.3 m (Adjusted based on actual ground elevation calculation)
```

HAAT: 0.0 m
Peak ERP: 1.00 kW
Antenna: DIE-TUA (ID 120649) 170.0 deg
Elev Pattrn: Generic

49.6 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.003 kW	80.7 m	7.0 km
45.0	0.004	50.0	5.9
90.0	0.000	15.9	3.2
135.0	0.373	38.0	15.7
180.0	0.925	12.3	18.0
225.0	0.076	88.6	15.9
270.0	0.003	78.6	6.9
315.0	0.002	40.0	4.5

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 51 m

Proposal 24.56 dBu contour does not cross Canadian border
Distance to Canadian border: 151.0 km

Distance to Mexican border: 2401.0 km

Conditions at FCC monitoring station: Canandaigua NY
Bearing: 35.8 degrees Distance: 197.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 275.0 degrees Distance: 2228.5 km

Study cell size: 1.00 km
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BLCDT20110105ABC LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	
Undesireds:	W21DO-D	D22	LD	APP	DUBOIS, PA		103.5 km
	WMPB	D22	DT	LIC	BALTIMORE, MD	BLANK0000107690	188.5
	WVPX-TV	D22	DT	LIC	AKRON, OH	BLANK0000080180	270.7
	WTOO-CD	D22	DC	LIC	BOLIVAR, PA	BLANK0000099914	51.0
	WOLF-TV	D22	DT	LIC	HAZLETON, PA	BLANK0000086376	226.5
	WWKH-CD	D22	DC	CP	PITTSBURG, PA	BLANK0000127565	130.2
	WTAE-TV	D22	LD	LIC	PITTSBURGH, PA	BLANK0000088086	129.5
	W22CY	D22	LD	CP	CLARKSBURG, WV	BLANK0000068832	214.9
	WDVM-TV	D23	DT	LIC	HAGERSTOWN, MD	BLANK0000080408	108.6
	W23DR-D	D23	LD	LIC	ROMNEY, WV	BLDTT20090609AAZ	142.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7411.8	377,527	5556.4	304,278	4814.4	276,103	4814.4	276,103	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
W21DO-D D22 LD APP	2.0	0			0.0	0
WMPB D22 DT LIC	5.0	56	0.0	0	0.0	0
WVPX-TV D22 DT LIC	19.9	423	1.0	0	1.0	0
WTOO-CD D22 DC LIC	730.0	27,948	688.1	26,660	688.1	26,660
WOLF-TV D22 DT LIC	25.9	1,044	5.0	159	5.0	159
WWKH-CD D22 DC CP	12.0	376	1.0	11	1.0	11
WTAE-TV D22 LD LIC	9.0	330	0.0	0	0.0	0
WDVM-TV D23 DT LIC	3.0	1	3.0	1	3.0	1

Interference to BLCDT20110105ABC LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	

Undesireds:	W21DO-D	D22	LD	APP	DUBOIS, PA		103.5 km
	WMPB	D22	DT	LIC	BALTIMORE, MD	BLANK0000107690	188.5
	WVPX-TV	D22	DT	LIC	AKRON, OH	BLANK0000080180	270.7
	WTOO-CD	D22	DC	LIC	BOLIVAR, PA	BLANK0000099914	51.0
	WOLF-TV	D22	DT	LIC	HAZLETON, PA	BLANK0000086376	226.5
	WWKH-CD	D22	DC	LIC	PITTSBURG, PA	BLANK0000079948	130.2
	WTAE-TV	D22	LD	LIC	PITTSBURGH, PA	BLANK0000088086	129.5
	W22CY	D22	LD	CP	CLARKSBURG, WV	BLANK0000068832	214.9
	WDVM-TV	D23	DT	LIC	HAGERSTOWN, MD	BLANK0000080408	108.6
	W23DR-D	D23	LD	LIC	ROMNEY, WV	BLDTT20090609AAZ	142.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7411.8	377,527	5556.4	304,278	4811.4	276,039	4811.4	276,039	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
W21DO-D D22 LD APP	2.0	0			0.0	0
WMPB D22 DT LIC	5.0	56	0.0	0	0.0	0
WVPX-TV D22 DT LIC	19.9	423	1.0	0	1.0	0
WTOO-CD D22 DC LIC	730.0	27,948	685.2	26,641	685.2	26,641
WOLF-TV D22 DT LIC	25.9	1,044	5.0	159	5.0	159
WWKH-CD D22 DC LIC	20.9	622	4.0	75	4.0	75
WTAE-TV D22 LD LIC	9.0	330	0.0	0	0.0	0
WDVM-TV D23 DT LIC	3.0	1	3.0	1	3.0	1

Interference to BLCDT20110105ABC LIC scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	
Undesireds:	W21DO-D	D22	LD	APP	DUBOIS, PA		103.5 km
	WMPB	D22	DT	LIC	BALTIMORE, MD	BLANK0000107690	188.5
	WVPX-TV	D22	DT	LIC	AKRON, OH	BLANK0000080180	270.7
	WTOO-CD	D22	DC	LIC	BOLIVAR, PA	BLANK0000099914	51.0
	WOLF-TV	D22	DT	LIC	HAZLETON, PA	BLANK0000086376	226.5
	WWKH-CD	D22	DC	CP	PITTSBURG, PA	BLANK0000127565	130.2
	WTAE-TV	D22	LD	LIC	PITTSBURGH, PA	BLANK0000088086	129.5
	W22CY	D22	LD	CP	CLARKSBURG, WV	BLANK0000068832	214.9

	W23DR-D	D23	LD	LIC	ROMNEY, WV		BLDTT20090609AAZ		142.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7411.8	377,527	5556.4	304,278	4817.4	276,104	4817.4	276,104	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
W21DO-D D22 LD APP	2.0	0			0.0	0
WMPB D22 DT LIC	5.0	56	0.0	0	0.0	0
WVPX-TV D22 DT LIC	19.9	423	1.0	0	1.0	0
WTOO-CD D22 DC LIC	730.0	27,948	688.1	26,660	688.1	26,660
WOLF-TV D22 DT LIC	25.9	1,044	5.0	159	5.0	159
WWKH-CD D22 DC CP	12.0	376	1.0	11	1.0	11
WTAE-TV D22 LD LIC	9.0	330	0.0	0	0.0	0

Interference to BLCDT20110105ABC LIC scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	
Undesireds:	W21DO-D	D22	LD	APP	DUBOIS, PA		103.5 km
	WMPB	D22	DT	LIC	BALTIMORE, MD	BLANK0000107690	188.5
	WVPX-TV	D22	DT	LIC	AKRON, OH	BLANK0000080180	270.7
	WTOO-CD	D22	DC	LIC	BOLIVAR, PA	BLANK0000099914	51.0
	WOLF-TV	D22	DT	LIC	HAZLETON, PA	BLANK0000086376	226.5
	WWKH-CD	D22	DC	LIC	PITTSBURG, PA	BLANK0000079948	130.2
	WTAE-TV	D22	LD	LIC	PITTSBURGH, PA	BLANK0000088086	129.5
	W22CY	D22	LD	CP	CLARKSBURG, WV	BLANK0000068832	214.9
	W23DR-D	D23	LD	LIC	ROMNEY, WV	BLDTT20090609AAZ	142.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7411.8	377,527	5556.4	304,278	4814.4	276,040	4814.4	276,040	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
W21DO-D D22 LD APP	2.0	0			0.0	0
WMPB D22 DT LIC	5.0	56	0.0	0	0.0	0
WVPX-TV D22 DT LIC	19.9	423	1.0	0	1.0	0
WTOO-CD D22 DC LIC	730.0	27,948	685.2	26,641	685.2	26,641

WOLF-TV D22 DT LIC	25.9	1,044	5.0	159	5.0	159
WWKH-CD D22 DC LIC	20.9	622	4.0	75	4.0	75
WTAE-TV D22 LD LIC	9.0	330	0.0	0	0.0	0

Interference to BLCDT20101105AAU LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20101105AAU	
Undesireds:	W21DO-D	D22	LD	APP	DUBOIS, PA		103.6 km
	WMPB	D22	DT	LIC	BALTIMORE, MD	BLANK0000107690	188.6
	WVPX-TV	D22	DT	LIC	AKRON, OH	BLANK0000080180	270.5
	WTOO-CD	D22	DC	LIC	BOLIVAR, PA	BLANK0000099914	50.6
	WOLF-TV	D22	DT	LIC	HAZLETON, PA	BLANK0000086376	226.8
	WWKH-CD	D22	DC	CP	PITTSBURG, PA	BLANK0000127565	129.9
	WTAE-TV	D22	LD	LIC	PITTSBURGH, PA	BLANK0000088086	129.2
	W22CY	D22	LD	CP	CLARKSBURG, WV	BLANK0000068832	214.6
	WDVM-TV	D23	DT	LIC	HAGERSTOWN, MD	BLANK0000080408	108.5
	W23DR-D	D23	LD	LIC	ROMNEY, WV	BLDTT20090609AAZ	141.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7556.2	371,592	5752.2	303,042	4711.2	265,231	4711.2	265,231	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
W21DO-D D22 LD APP	1.0	0				0.0	0
WMPB D22 DT LIC	7.0	318		4.0	77	4.0	77
WVPX-TV D22 DT LIC	38.8	828		7.9	43	7.9	43
WTOO-CD D22 DC LIC	1017.1	37,087		948.3	35,625	948.3	35,625
WOLF-TV D22 DT LIC	31.9	707		7.0	407	7.0	407
WWKH-CD D22 DC CP	14.0	242		0.0	0	0.0	0
WTAE-TV D22 LD LIC	30.9	709		4.0	0	4.0	0

Interference to BLCDT20101105AAU LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20101105AAU	

Undesireds:	W21DO-D	D22	LD	APP	DUBOIS, PA		103.6 km
	WMPB	D22	DT	LIC	BALTIMORE, MD	BLANK0000107690	188.6
	WVPX-TV	D22	DT	LIC	AKRON, OH	BLANK0000080180	270.5
	WTOO-CD	D22	DC	LIC	BOLIVAR, PA	BLANK0000099914	50.6
	WOLF-TV	D22	DT	LIC	HAZLETON, PA	BLANK0000086376	226.8
	WWKH-CD	D22	DC	LIC	PITTSBURG, PA	BLANK0000079948	129.9
	WTAE-TV	D22	LD	LIC	PITTSBURGH, PA	BLANK0000088086	129.2
	W22CY	D22	LD	CP	CLARKSBURG, WV	BLANK0000068832	214.6
	WDVM-TV	D23	DT	LIC	HAGERSTOWN, MD	BLANK0000080408	108.5
	W23DR-D	D23	LD	LIC	ROMNEY, WV	BLDTT20090609AAZ	141.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7556.2	371,592	5752.2	303,042	4708.2	265,175	4708.2	265,175	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
W21DO-D D22 LD APP	1.0	0			0.0	0
WMPB D22 DT LIC	7.0	318	4.0	77	4.0	77
WVPX-TV D22 DT LIC	38.8	828	7.0	43	7.0	43
WTOO-CD D22 DC LIC	1017.1	37,087	935.4	35,412	935.4	35,412
WOLF-TV D22 DT LIC	31.9	707	7.0	407	7.0	407
WWKH-CD D22 DC LIC	38.8	627	3.0	56	3.0	56
WTAE-TV D22 LD LIC	30.9	709	4.0	0	4.0	0

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W21DO-D	D22	LD	APP	DUBOIS, PA		
Undesireds:	WTOO-CD	D22	DC	LIC	BOLIVAR, PA	BLANK0000099914	126.0 km
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	103.5
	WWKH-CD	D22	DC	CP	PITTSBURG, PA	BLANK0000127565	198.5
	W22CY	D22	LD	CP	CLARKSBURG, WV	BLANK0000068832	280.1

Service area		Terrain-limited		IX-free		Percent IX	
386.6	13,177	356.4	11,754	349.3	11,721	1.98	0.28

Undesired		Total IX		Unique IX	Prcnt Unique IX	
WTOO-CD D22 DC LIC	3.0	0	2.0	0	0.57	0.00
WJAC-TV D22 LD LIC	5.0	33	4.0	33	1.13	0.28

Interference to proposal scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W21DO-D	D22	LD	APP	DUBOIS, PA		
Undesireds:	WTOO-CD	D22	DC	LIC	BOLIVAR, PA	BLANK0000099914	126.0 km
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20101105AAU	103.6
	WWKH-CD	D22	DC	CP	PITTSBURG, PA	BLANK0000127565	198.5
	W22CY	D22	LD	CP	CLARKSBURG, WV	BLANK0000068832	280.1

Service area		Terrain-limited		IX-free		Percent IX	
386.6	13,177	356.4	11,754	349.3	11,721	1.98	0.28

Undesired		Total IX		Unique IX	Prcnt Unique IX	
WTOO-CD D22 DC LIC	3.0	0	1.0	0	0.28	0.00
WJAC-TV D22 LD LIC	6.0	33	4.0	33	1.13	0.28