tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: aPhil10d2kwDir105IncF, Model: Longley-Rice
Start: 2023.01.18 08:15:32

Study created: 2023.01.18 08:15:32

Study build station data: LMS TV 2023-01-17

    Proposal: WSJT-LD D10 LD APP PHILADELPHIA, PA
 Facility ID: New DTS
Station data: User record
   Record ID: 1027
     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	WUSA	D9	DT	LIC	WASHINGTON, DC	BLANK0000153713	199.5 km
No	W09CZ-D	D9	LD	LIC	ROSLYN, NY	BLANK0000004283	157.0
No	W09CZ-D	D9	LD	CP	ROSLYN, NY	BLANK0000159477	135.6
Yes	WBPH-TV	D9	DT	LIC	BETHLEHEM, PA	BLANK0000064341	73.3
Yes	WBPH-TV	D9	DT	CP	BETHLEHEM, PA	BLANK0000202177	73.3
No	W09DJ-D	D9-	DC	LIC	WILKES-BARRE, ETC., PA	BLANK0000113176	150.5
No	WTNH	D10	DT	LIC	NEW HAVEN, CT	BLANK0000160005	247.2
No	W45DN-D	D10	LD	CP	WASHINGTON, DC	BLANK0000194086	168.4
No	W45DN-D	D10	LD	LIC	WASHINGTON, DC	BLANK0000199355	168.4
No	WWDP	D10	DT	LIC	NORWELL, MA	BLANK0000059580	413.5
No	WHTX-LD	N10z	TX	LIC	SPRINGFIELD, MA	BLTVL19950228IL	289.7
Yes	WSJT-LD	D10	LD	LIC	ATLANTIC CITY, NJ	BLANK0000080472	35.2
No	DDWBPN-LP	N10z	TX	APP	BINGHAMTON, NY	BLTVL20000824ADL	244.1
No	WNXY-LD	D10	LD	LIC	NEW YORK, NY	BLANK0000063306	135.3
No	WNXY-LD	D10	LD	CP	NEW YORK, NY	BLANK0000178116	132.7
No	WHEC-TV	D10	DT	LIC	ROCHESTER, NY	BMLCDT20111228ABJ	408.6
No	WHTM-TV	D10	DT	LIC	HARRISBURG, PA	BLANK0000176940	158.9
No	W10CP-D	D10	LD	LIC	TOWANDA, PA	BLDTV20090806AAV	223.4

No	WWBT	D10	DT	LIC	RICHMOND, VA	BLANK0000185198	339.6
No	WVER	D10	DD	LIC	RUTLAND, VT	BLANK0000123122	445.9
No	WJZ-TV	D11	DT	LIC	BALTIMORE, MD	BLANK0000119745	145.7
No	WPIX	D11	DT	LIC	NEW YORK, NY	BLANK0000163151	132.7
No	WBRE-TV	D11	DT	LIC	WILKES-BARRE, PA	BLCDT20051123AJX	150.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D10
       Mask: Full Service
   Latitude:  39 56 42.00 N (NAD83)
  Longitude:  75  8 38.20 W
Height AMSL: 108.2 m
       HAAT: 0.0 m
   Peak ERP: 2.00 kW
    Antenna: 2 Rear-reduced stacked HDCA10s 105.0 deg
Elev Pattrn: Generic
```

48.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.000 kW	58.7 m	4.0 km
45.0	0.000	100.8	6.9
90.0	1.43	96.8	40.1
135.0	0.572	92.7	33.2
180.0	0.000	98.0	4.9
225.0	0.000	105.5	5.1
270.0	0.000	71.6	4.3
315.0	0.000	44.4	4.2

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 84 m

Distance to Canadian border: 432.0 km

Distance to Mexican border: 2544.7 km

Conditions at FCC monitoring station: Laurel MD
Bearing: 239.4 degrees Distance: 167.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 280.3 degrees Distance: 2547.2 km

Study cell size: 1.00 km
Profile point spacing: 0.10 km

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

Interference to BLANK0000064341 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WBPH-TV	D9	DT	LIC	BETHLEHEM, PA	BLANK0000064341	
Undesireds:	WSJT-LD	D10	LD	APP	PHILADELPHIA, PA		73.3 km
	WNJB	D8	DT	LIC	NEW BRUNSWICK, NJ	BLANK0000040678	79.3
	WBNG-TV	D8	DT	LIC	BINGHAMTON, NY	BLANK0000117137	171.5
	WGAL	D8	DT	LIC	LANCASTER, PA	BLANK0000129691	116.0
	WEDN	D9	DT	LIC	NORWICH, CT	BLEDT20090618ACB	294.2
	WUSA	D9	DT	LIC	WASHINGTON, DC	BLANK0000153713	227.6
	WHAM-TV	D9	DT	LIC	ROCHESTER, NY	BLANK0000094853	336.4
	W09DJ-D	D9-	DC	LIC	WILKES-BARRE, ETC., PA	BLANK0000113176	77.3
	W09DB-D	D9z	DC	LIC	WILLIAMSPORT, PA	BLANK0000001611	146.8
	WVER	D9	DT	LIC	RUTLAND, VT	BLANK0000079969	394.0
	WHTM-TV	D10	DT	LIC	HARRISBURG, PA	BLANK0000176940	130.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
37866.2	13,204,034	33955.8	11,481,853	30593.3	9,682,994	30580.2	9,649,474	0.04	0.35

Undesired		Total IX		Unique IX, before		Unique IX, after	
WSJT-LD D10 LD APP	13.1	33,520				13.1	33,520
WNJB D8 DT LIC	1053.6	1,208,820	1024.7	1,184,436		1024.7	1,184,436
WBNG-TV D8 DT LIC	5.0	50	2.0	13		2.0	13
WGAL D8 DT LIC	834.4	263,892	414.4	137,480		414.4	137,480
WEDN D9 DT LIC	2.0	1,156	0.0	0		0.0	0
WUSA D9 DT LIC	1388.6	411,353	977.6	279,521		977.6	279,521
WHAM-TV D9 DT LIC	19.1	784	10.1	684		10.1	684
W09DJ-D D9- DC LIC	342.9	27,969	276.3	24,355		276.3	24,355
W09DB-D D9z DC LIC	110.5	12,068	52.0	8,660		52.0	8,660
WVER D9 DT LIC	14.1	277	10.1	237		10.1	237
WHTM-TV D10 DT LIC	195.0	38,114	64.0	8,431		64.0	8,431

Interference to BLANK0000202177 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WBPH-TV	D9	DT	CP	BETHLEHEM, PA	BLANK0000202177	
Undesireds:	WSJT-LD	D10	LD	APP	PHILADELPHIA, PA		73.3 km
	WNJB	D8	DT	LIC	NEW BRUNSWICK, NJ	BLANK0000040678	79.3
	WBNG-TV	D8	DT	LIC	BINGHAMTON, NY	BLANK0000117137	171.5
	WGAL	D8	DT	LIC	LANCASTER, PA	BLANK0000129691	116.0
	WEDN	D9	DT	LIC	NORWICH, CT	BLEDT20090618ACB	294.2
	WUSA	D9	DT	LIC	WASHINGTON, DC	BLANK0000153713	227.6
	WHAM-TV	D9	DT	LIC	ROCHESTER, NY	BLANK0000094853	336.4
	W09DJ-D	D9-	DC	LIC	WILKES-BARRE, ETC., PA	BLANK0000113176	77.3
	W09DB-D	D9z	DC	LIC	WILLIAMSPORT, PA	BLANK0000001611	146.8
	WVER	D9	DT	LIC	RUTLAND, VT	BLANK0000079969	394.0
	WHTM-TV	D10	DT	LIC	HARRISBURG, PA	BLANK0000176940	130.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
39114.8	13,234,202	34977.1	11,504,525	31388.1	9,716,980	31373.0	9,673,869	0.05	0.44

Undesired		Total IX		Unique IX, before		Unique IX, after	
WSJT-LD D10 LD APP	15.1	43,111				15.1	43,111
WNJB D8 DT LIC	1022.8	1,156,456	996.9	1,122,205		996.9	1,122,205

WBNG-TV D8 DT LIC	6.0	13	2.0	13	2.0	13
WGAL D8 DT LIC	964.0	284,179	553.0	192,405	553.0	192,405
WEDN D9 DT LIC	3.0	11,900	0.0	0	0.0	0
WUSA D9 DT LIC	1389.6	394,148	1007.5	298,470	1007.5	298,470
WHAM-TV D9 DT LIC	18.1	922	9.0	661	9.0	661
W09DJ-D D9- DC LIC	433.5	27,268	348.8	23,532	348.8	23,532
W09DB-D D9z DC LIC	119.6	7,355	62.0	4,055	62.0	4,055
WVER D9 DT LIC	11.1	183	7.0	144	7.0	144
WHTM-TV D10 DT LIC	251.2	50,422	66.0	15,215	66.0	15,215

Interference to BLANK0000080472 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WSJT-LD	D10	LD	LIC	ATLANTIC CITY, NJ	BLANK0000080472	

PART OF PROPOSED DTS OPERATION. STUDY REMOVED.