tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Roanoke14d15kwTUA80T, Model: Longley-Rice
Start: 2021.06.22 07:35:35

Study created: 2021.06.22 07:35:35

Study build station data: LMS TV 2021-06-21

    Proposal: W45EF-D D14 LD APP ROANOKE, WV
 Facility ID: 186775
Station data: User record
   Record ID: 275
     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	WWTD-LD	D14	LD	LIC	WASHINGTON, DC	BLDTL20140320ADR	298.0 km
No	WLKY	D14	DT	LIC	LOUISVILLE, KY	BLANK0000088726	464.7
No	WRDC	D14	DT	LIC	DURHAM, NC	BLANK0000125503	405.8
No	WHKY-TV	D14	DD	LIC	HICKORY, NC	BLANK0000109333	389.2
No	WDYC-LD	D14	LD	CP	CINCINNATI, OH	BLANK0000145362	347.4
No	WCMH-TV	D14	DT	LIC	COLUMBUS, OH	BLANK0000129771	242.0
No	WLZH-LD	D14	LD	LIC	RED LION, PA	BLANK0000080013	354.6
No	WLZH-LD	D14	LD	CP	RED LION, PA	BLANK0000146800	347.2
No	WLFG	D14	DD	LIC	GRUNDY, VA	BLANK0000071597	273.1
No	WNLO-CD	D14	DC	LIC	NORFOLK, VA	BLANK0000125110	425.1
No	WXOB-LD	D14	LD	CP	RICHMOND, VA	BDCCDTL20100726AIN	302.5
No	W16CV-D	D14	LD	CP	PARKERSBURG, WV	BLANK0000064461	99.2
No	WQCW	D15	DT	LIC	PORTSMOUTH, OH	BLANK0000100248	154.9
No	WHSV-TV	D15	LD	CP	Massanutten, VA	BLANK0000071679	146.3
No	WVPT	D15	DT	APP	STAUNTON, VA	BLANK0000149712	137.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D14
       Mask: Stringent
   Latitude:  38 57 39.70 N (NAD83)
  Longitude:  80 31 43.80 W
Height AMSL: 469.0 m
       HAAT: 0.0 m
   Peak ERP: 15.0 kW
    Antenna: DIE-TUA (ID 120649) 80.0 deg
Elev Pattrn: Generic
```

48.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.013 kW	84.9 m	10.8 km
45.0	5.59	92.9	39.6
90.0	13.9	80.5	42.3
135.0	1.15	80.6	30.0
180.0	0.044	124.5	17.5
225.0	0.030	139.8	16.9
270.0	0.045	140.7	19.1
315.0	0.057	122.5	18.7

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 108 m

Distance to Canadian border: 340.8 km

Distance to Mexican border: 2102.4 km

Conditions at FCC monitoring station: Laurel MD
Bearing: 84.8 degrees Distance: 320.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 281.5 degrees Distance: 2113.7 km

No land mobile station failures found

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 proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W45EF-D	D14	LD	APP	ROANOKE, WV		
Undesireds:	WCMH-TV	D14	DT	LIC	COLUMBUS, OH	BLANK0000129771	242.0 km
	WLFG	D14	DD	LIC	GRUNDY, VA	BLANK0000071597	273.1

Service area		Terrain-limited		IX-free		Percent IX	
2267.7	51,031	2060.7	46,503	2012.9	45,872	2.32	1.36

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WCMH-TV D14 DT LIC	37.9	538	36.9	538	1.79	1.16
WLFG D14 DD LIC	10.9	93	9.9	93	0.48	0.20