

1990 Census data selected

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 04-16-2009 Time: 06:32:10

Record Selected for Analysis

WDCN-LP USERRECORD-01 FAIRFAX VI US  
Channel 06 ERP 3. kW HAAT 178. m RCAMSL 00198 m  
Latitude 038-53-45 Longitude 0077-08-08  
Status APP Zone 1 Border Offset +  
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kW)	HAAT (m)	62.0 dBu F(50,50) (km)
0.0	1.191	123.6	19.3
45.0	0.189	119.9	11.7
90.0	1.891	178.4	25.4
135.0	3.000	174.3	27.9
180.0	3.000	140.1	25.3
225.0	3.000	111.3	22.9
270.0	3.000	77.1	19.1
315.0	3.000	116.4	23.4

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite 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 2.71km from AM station

ARLINGTON VA WZHF Status: L Antenna: DA2

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Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
06	WDCN-LP	FAIRFAX VI	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	WTTG	WASHINGTON DC	8.1	CP	BPCT	-20060519ACI
05	WTTG	WASHINGTON DC	8.1	LIC	BMLCT	-223
06	WPVI-TV	PHILADELPHIA PA	206.7	CP	BPCDT	-20080208ADW
06	WDCN-LP	FAIRFAX VA	0.0	CP MOD	BMPTVL	-20060830ABD
06	WDCN-LP	FAIRFAX VA	0.0	LIC	BLTVL	-20070410ACR
06	W06CP	MT. OLIVE VA	113.2	CP	BNPTVL	-20000831CKO

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Analysis of Interference to Affected Station 1

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
05	WTTG	WASHINGTON DC	DTVPLN	-NPLN0344

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	WRALTV	RALEIGH NC	386.5	PLN	DTVPLN	-NPLN0362
05	WNYW	NEW YORK NY	326.6	PLN	DTVPLN	-NPLN0368
05	WDTV	WESTON WV	288.9	PLN	DTVPLN	-NPLN0389
06	WJACTV	JOHNSTOWN PA	226.2	PLN	DTVPLN	-NPLN0436
06	WPVITV	PHILADELPHIA PA	199.0	PLN	DTVPLN	-NPLN0437
06	WTVRTV	RICHMOND VA	158.2	PLN	DTVPLN	-NPLN0448

Results for:	5N DC WASHINGTON	DTVPLN	NPLN0344	PLN
		POPULATION	AREA (sq km)	
within Noise Limited Contour	6828546	30001.3		
not affected by terrain losses	6615217	27813.8		
lost to NTSC IX	79018	1130.1		
lost to additional IX by ATV	0	0.0		
lost to all IX	79018	1130.1		

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
05	WTTG	WASHINGTON DC	BPCT	-20060519ACI

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	WRAL-TV	RALEIGH NC	386.5	LIC	BLCT	-19901114KF
05	WNYW	NEW YORK NY	326.7	LIC	BLCT	-19800328KE
05	WDTV	WESTON WV	288.8	LIC	BLCT	-1745
05	WDTV	WESTON WV	283.7	CP MOD	BMPCDT	-20080618ACH
06	WPVI-TV	PHILADELPHIA PA	199.0	CP	BPCDT	-20080208ADW
06	WDCN-LP	FAIRFAX VI	8.1	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
05	WTTG	WASHINGTON DC	BMLCT	-223

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	WRAL-TV	RALEIGH NC	386.5	LIC	BLCT	-19901114KF
05	WNYW	NEW YORK NY	326.7	LIC	BLCT	-19800328KE
05	WDTV	WESTON WV	288.8	LIC	BLCT	-1745
05	WDTV	WESTON WV	283.7	CP MOD	BMPCDT	-20080618ACH
06	WPVI-TV	PHILADELPHIA PA	199.0	CP	BPCDT	-20080208ADW
06	WDCN-LP	FAIRFAX VI	8.1	APP	USERRECORD-01	

Total scenarios = 2

Result key: 1

Scenario 1 Affected station 2

Before Analysis

Results for:	5N DC WASHINGTON	BMLCT	223	LIC
	POPULATION	AREA (sq km)		
within Noise Limited Contour	6830033	29999.2		
not affected by terrain losses	6612425	27781.8		
lost to NTSC IX	75579	1036.4		
lost to additional IX by ATV	795	25.9		
lost to all IX	76374	1062.4		

Potential Interfering Stations Included in above Scenario 1

5N NC RALEIGH	BLCT	19901114KF	LIC
5N NY NEW YORK	BLCT	19800328KE	LIC
5N WV WESTON	BLCT	1745	LIC
5A WV WESTON	BMPCDT	20080618ACH	CP

After Analysis

Results for:	5N DC WASHINGTON	BMLCT	223	LIC
	POPULATION	AREA (sq km)		
within Noise Limited Contour	6830033	29999.2		
not affected by terrain losses	6612425	27781.8		
lost to NTSC IX	78076	1037.4		
lost to additional IX by ATV	795	25.9		
lost to all IX	78871	1063.4		

Potential Interfering Stations Included in above Scenario 1

5N NC RALEIGH	BLCT	19901114KF	LIC
5N NY NEW YORK	BLCT	19800328KE	LIC
5N WV WESTON	BLCT	1745	LIC
5A WV WESTON	BMPCDT	20080618ACH	CP
6N VI FAIRFAX	USERRECORD01	APP	
*Percent Service lost without proposal:	1.1	to BMLCT	223
*Percent Service lost with proposal:	1.2	to BMLCT	223

Result key: 2  
 Scenario 2 Affected station 2  
 Before Analysis

Results for: 5N DC WASHINGTON	BMLCT	223	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	6830033	29999.2	
not affected by terrain losses	6612425	27781.8	
lost to NTSC IX	75579	1036.4	
lost to additional IX by ATV	795	25.9	
lost to all IX	76374	1062.4	

Potential Interfering Stations Included in above Scenario 2

5N NC RALEIGH	BLCT	19901114KF	LIC
5N NY NEW YORK	BLCT	19800328KE	LIC
5N WV WESTON	BLCT	1745	LIC
5A WV WESTON	BMPCDT	20080618ACH	CP

After Analysis

Results for: 5N DC WASHINGTON	BMLCT	223	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	6830033	29999.2	
not affected by terrain losses	6612425	27781.8	
lost to NTSC IX	78076	1037.4	
lost to additional IX by ATV	795	25.9	
lost to all IX	78871	1063.4	

Potential Interfering Stations Included in above Scenario 2

5N NC RALEIGH	BLCT	19901114KF	LIC
5N NY NEW YORK	BLCT	19800328KE	LIC
5N WV WESTON	BLCT	1745	LIC
5A WV WESTON	BMPCDT	20080618ACH	CP
6N VI FAIRFAX	USERRECORD01		APP
*Percent Service lost without proposal:	1.1	to BMLCT	223
*Percent Service lost with proposal:	1.2	to BMLCT	223

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
06	WPVI-TV	PHILADELPHIA PA	BPCDT	-20080208ADW

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	WTTG	WASHINGTON DC	199.0	CP	BPCT	-20060519ACI
05	WNYW	NEW YORK NY	127.7	LIC	BLCT	-19800328KE
06	WBNE-DT	NEW HAVEN CT	246.3	PLN	DTVPLN	-DTVP0027
06	WLNE-TV	NEW BEDFORD MA	381.9	LIC	BLCT	-19920604KF
06	WRGB	SCHENECTADY NY	306.3	LIC	BLCT	-2492
06	WRGB	SCHENECTADY NY	304.7	CP	BPCDT	-20080307AAK
06	WDCN-LP	FAIRFAX VI	206.7	APP	USERRECORD-01	

Total scenarios = 2

Result key: 3

Scenario 1 Affected station 3  
Before Analysis

Results for: 6A PA PHILADELPHIA BPCDT 20080208ADW CP

HAAT	332.0 m, ATV ERP	7.6 kW	POPULATION	AREA (sq km)
within Noise Limited Contour			10046595	35374.5
not affected by terrain losses			9926064	34369.1
lost to NTSC IX			136752	271.7
lost to additional IX by ATV			129351	170.7
lost to ATV IX only			228256	313.9
lost to all IX			266103	442.4

Potential Interfering Stations Included in above Scenario 1

5N NY NEW YORK	BLCT	19800328KE	LIC
6N MA NEW BEDFORD	BLCT	19920604KF	LIC
6N NY SCHENECTADY	BLCT	2492	LIC
6A CT NEW HAVEN	DTVPLN	DTVP0027	PLN
6A NY SCHENECTADY	BPCDT	20080307AAK	CP

After Analysis

Results for: 6A PA PHILADELPHIA BPCDT 20080208ADW CP

HAAT	332.0 m, ATV ERP	7.6 kW	POPULATION	AREA (sq km)
within Noise Limited Contour			10046595	35374.5
not affected by terrain losses			9926064	34369.1
lost to NTSC IX			145683	317.8
lost to additional IX by ATV			129176	169.7
lost to ATV IX only			228256	313.9
lost to all IX			274859	487.5

Potential Interfering Stations Included in above Scenario 1

5N NY NEW YORK	BLCT	19800328KE	LIC
6N MA NEW BEDFORD	BLCT	19920604KF	LIC
6N NY SCHENECTADY	BLCT	2492	LIC
6A CT NEW HAVEN	DTVPLN	DTVP0027	PLN
6A NY SCHENECTADY	BPCDT	20080307AAK	CP
6N VI FAIRFAX	USERRECORD01		APP

*Percent Service lost without proposal:	0.0	to BPCDT	20080208ADW
*Percent Service lost with proposal:	0.1	to BPCDT	20080208ADW

Result key: 4  
Scenario 2 Affected station 3  
Before Analysis

Results for: 6A PA PHILADELPHIA BPCDT 20080208ADW CP  
HAAT 332.0 m, ATV ERP 7.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	10046595	35374.5
not affected by terrain losses	9926064	34369.1
lost to NTSC IX	136752	271.7
lost to additional IX by ATV	129351	170.7
lost to ATV IX only	228256	313.9
lost to all IX	266103	442.4

Potential Interfering Stations Included in above Scenario 2

5N NY NEW YORK	BLCT	19800328KE	LIC
6N MA NEW BEDFORD	BLCT	19920604KF	LIC
6N NY SCHENECTADY	BLCT	2492	LIC
6A CT NEW HAVEN	DTVPLN	DTVP0027	PLN
6A NY SCHENECTADY	BPCDT	20080307AAK	CP

After Analysis

Results for: 6A PA PHILADELPHIA BPCDT 20080208ADW CP  
HAAT 332.0 m, ATV ERP 7.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	10046595	35374.5
not affected by terrain losses	9926064	34369.1
lost to NTSC IX	145683	317.8
lost to additional IX by ATV	129176	169.7
lost to ATV IX only	228256	313.9
lost to all IX	274859	487.5

Potential Interfering Stations Included in above Scenario 2

5N NY NEW YORK	BLCT	19800328KE	LIC
6N MA NEW BEDFORD	BLCT	19920604KF	LIC
6N NY SCHENECTADY	BLCT	2492	LIC
6A CT NEW HAVEN	DTVPLN	DTVP0027	PLN
6A NY SCHENECTADY	BPCDT	20080307AAK	CP
6N VI FAIRFAX	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BPCDT	20080208ADW
*Percent Service lost with proposal:	0.1	to BPCDT	20080208ADW

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