

ENGINEERING EXHIBIT

Application for Minor Modification of Construction Permit Digital Replacement Translator Television Station

prepared for

Hearst Stations Inc.
WTAE-TV DRT Pittsburgh, PA
Facility ID 65681
Ch. 22 (digital) 15 kW

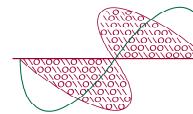
Hearst Stations Inc. (“*Hearst*”) is the licensee of Television station WTAE-TV, Pittsburgh, PA, Facility ID 65681. WTAE-TV’s operation includes a Digital Replacement Translator (“DRT”) facility on Channel 22 (BLCDT-20091223AKV) to aid in serving its principal community of Pittsburgh and other nearby communities.

Hearst recently was recent authorized by Construction Permit (“CP”, LMS file# 0000030312) to make a minor modification of the Channel 22 DRT to change its directional antenna pattern and increase effective radiated power (“ERP”). Pursuant to DA 17-442¹, the purpose of the CP was to avoid displacement by television stations that were reassigned in the incentive auction. *Hearst* herein seeks to modify the CP to specify an alternate directional antenna and associated pattern.

As proposed herein, the Channel 22 DRT will continue to operate at its existing antenna location and height. The existing tower structure is associated with FCC Antenna Structure Registration number 1022324. The proposed Channel 22 DRT facility will employ a replacement antenna system and no change to the overall structure height is proposed.

The proposed Channel 22 DRT facility will operate with a directional antenna at 15 kW ERP using a “full service” out of channel emission mask. A plot of the directional antenna’s

¹*The Incentive Auction Task Force and Media Bureau Announce Procedures for Low Power Television, Television Translator and Replacement Translator Stations During the Post-Incentive Auction Transition, Public Notice, DA 14-442, released May 12, 2017, at para. 13.*



azimuthal pattern is supplied in Figure 1. Figure 2 depicts the 51 dB μ coverage contour of the licensed, CP, and proposed facilities, demonstrating compliance with §73.3572 for a minor change. The proposed DRT coverage contour does not extend beyond WTAE-TV's former analog Grade B contour.

Interference study per OET Bulletin 69² shows that the proposal complies with the FCC's interference protection requirements toward all digital television, television translator, LPTV, and Class A stations (existing and post-auction). **FCC processing of this proposal is requested on the basis of a 1 km cell size and 0.1 km terrain increment.** The results, summarized in Table 1, show that any new interference does not exceed the FCC's interference limits (0.5 percent to full power and Class A stations, and 2.0 percent to secondary stations) to any facility.

The site is located 217 km from the U.S. – Canadian border. For Canada referral purposes, the 24.5 dB μ F(50,10) contour is relevant for digital LPTV operations on Channel 22. The 24.5 dB μ F(50,10) contour is depicted in Figure 3 and does not reach Canada. Thus, international coordination is not required.

The nearest FCC monitoring station is 304 km distant at Laurel, MD. This exceeds by a large margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with “quiet” zones specified in §73.1030(a) and (b). There are no authorized AM stations within 3 kilometers of the site.

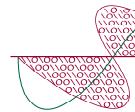
Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the FCC's OET Bulletin Number 65. Based on OET-65 equation (10),

²FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 (“OET-69”). This analysis employed the FCC's current “TVStudy” software with the default application processing template settings, 1 km cell size, and 0.1 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCCs implementation of TVStudy show excellent correlation.

Engineering Exhibit**Hearst Stations Inc.**

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**Chesapeake RF Consultants, LLC**Radiofrequency Consulting Engineers
Digital Television and Radio

and considering 20 percent antenna relative field in downward elevations, the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $1.5 \mu\text{W}/\text{cm}^2$, which is 0.4 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal's contribution is less than five percent.

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower, or antenna from RF electromagnetic field exposure in excess of FCC guidelines. This exhibit is limited to the evaluation of exposure to RF electromagnetic field. No increase in structure height is proposed.

List of Attachments

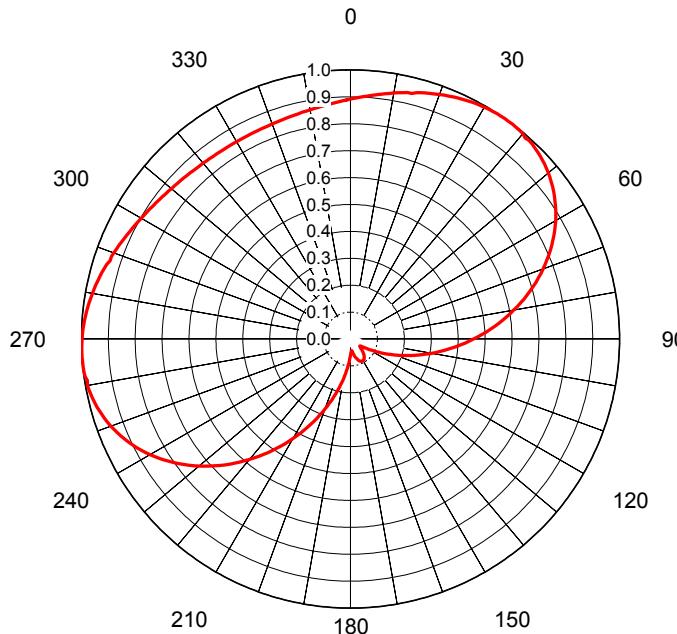
- | | |
|-----------|------------------------------------|
| Figure 1 | Antenna Azimuthal Pattern |
| Figure 2 | Coverage Contour Comparison |
| Figure 3 | Interfering Contour Towards Canada |
| Table 1 | OET Bulletin 69 Interference Study |
| Form 2100 | Engineering Data for FCC Form 2100 |

Chesapeake RF Consultants, LLCJoseph M. Davis, P.E.
207 Old Dominion Road

July 11, 2018

Yorktown, VA 23692

703-650-9600



AZIMUTH PATTERN Horizontal Polarization

Proposal No. C 70988-3
 Date 14-May-18
 Call Letters WTAE
 Channel 22
 Frequency 521 MHz
 Antenna Type TLP-16W/VP-R OS
 Gain 1.93 (2.85dB)
 Calculated

Drawing # TLP-180H OS

with offset

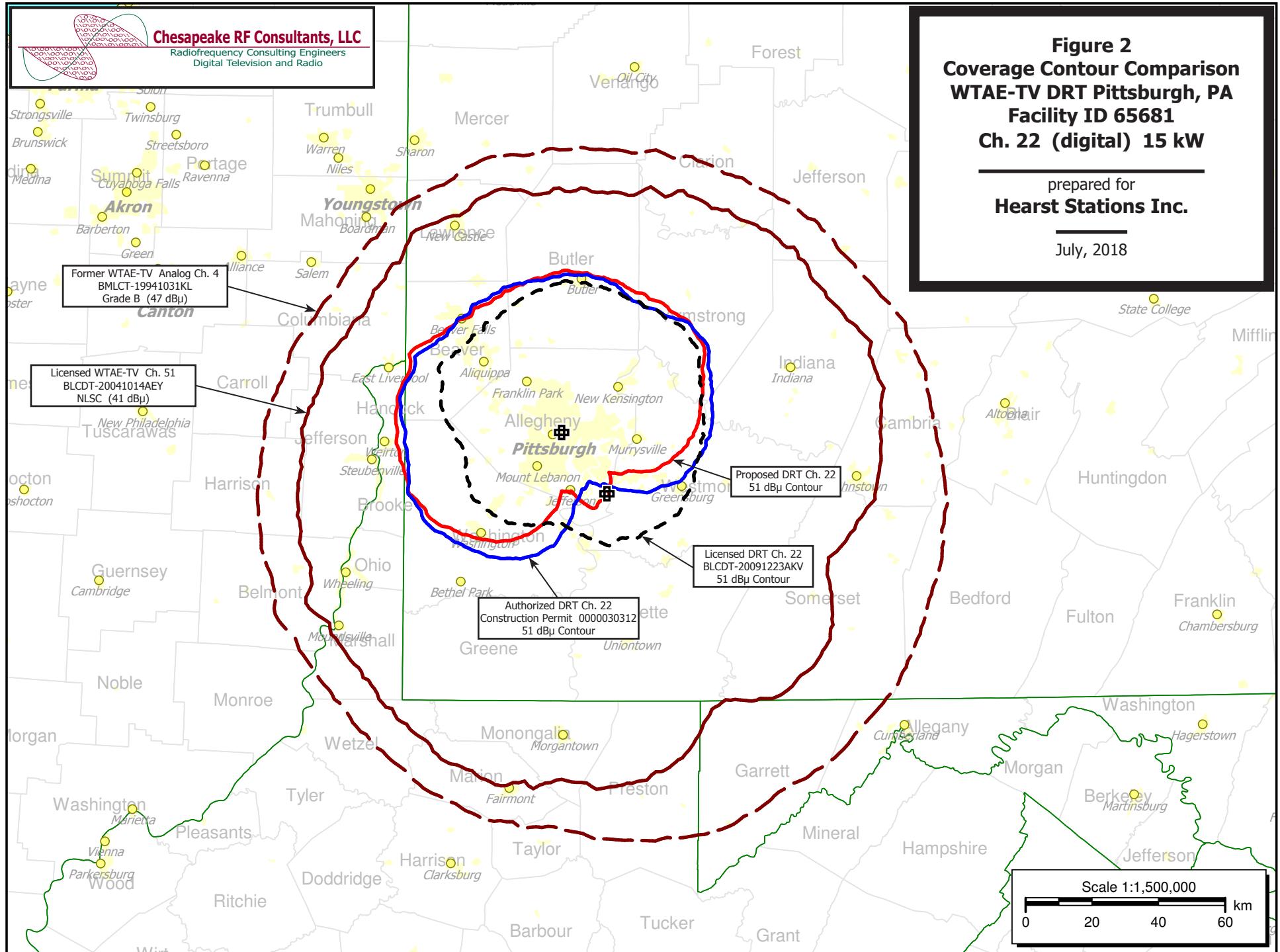
Deg	Value																		
0	0.892	36	1.000	72	0.734	108	0.197	144	0.087	180	0.060	216	0.521	252	0.960	288	0.940	324	0.849
1	0.895	37	1.000	73	0.720	109	0.185	145	0.089	181	0.066	217	0.537	253	0.966	289	0.940	325	0.848
2	0.898	38	0.999	74	0.706	110	0.173	146	0.090	182	0.073	218	0.553	254	0.971	290	0.936	326	0.848
3	0.902	39	0.998	75	0.691	111	0.161	147	0.091	183	0.081	219	0.569	255	0.975	291	0.932	327	0.847
4	0.905	40	0.996	76	0.677	112	0.150	148	0.092	184	0.090	220	0.585	256	0.980	292	0.928	328	0.847
5	0.909	41	0.990	77	0.662	113	0.139	149	0.093	185	0.098	221	0.600	257	0.984	293	0.924	329	0.847
6	0.913	42	0.992	78	0.646	114	0.128	150	0.093	186	0.108	222	0.616	258	0.987	294	0.920	330	0.847
7	0.916	43	0.990	79	0.631	115	0.118	151	0.093	187	0.118	223	0.631	259	0.990	295	0.916	331	0.847
8	0.920	44	0.987	80	0.616	116	0.108	152	0.093	188	0.128	224	0.646	260	0.992	296	0.913	332	0.847
9	0.924	45	0.984	81	0.600	117	0.098	153	0.093	189	0.139	225	0.662	261	0.990	297	0.909	333	0.847
10	0.928	46	0.980	82	0.585	118	0.090	154	0.092	190	0.150	226	0.677	262	0.996	298	0.905	334	0.847
11	0.932	47	0.975	83	0.569	119	0.081	155	0.091	191	0.161	227	0.691	263	0.998	299	0.902	335	0.847
12	0.936	48	0.971	84	0.553	120	0.073	156	0.090	192	0.173	228	0.706	264	0.999	300	0.898	336	0.848
13	0.940	49	0.966	85	0.537	121	0.066	157	0.089	193	0.185	229	0.720	265	1.000	301	0.895	337	0.848
14	0.940	50	0.960	86	0.521	122	0.060	158	0.087	194	0.197	230	0.734	266	1.000	302	0.892	338	0.849
15	0.948	51	0.954	87	0.506	123	0.054	159	0.085	195	0.210	231	0.748	267	1.000	303	0.888	339	0.850
16	0.952	52	0.947	88	0.490	124	0.050	160	0.083	196	0.223	232	0.762	268	0.999	304	0.885	340	0.851
17	0.956	53	0.941	89	0.474	125	0.046	161	0.081	197	0.236	233	0.775	269	0.999	305	0.882	341	0.852
18	0.960	54	0.933	90	0.458	126	0.045	162	0.078	198	0.249	234	0.788	270	0.998	306	0.880	342	0.853
19	0.964	55	0.926	91	0.442	127	0.043	163	0.075	199	0.263	235	0.801	271	0.997	307	0.877	343	0.854
20	0.967	56	0.917	92	0.427	128	0.044	164	0.072	200	0.277	236	0.813	272	0.995	308	0.874	344	0.855
21	0.971	57	0.909	93	0.411	129	0.045	165	0.069	201	0.291	237	0.826	273	0.993	309	0.872	345	0.856
22	0.974	58	0.900	94	0.396	130	0.047	166	0.066	202	0.306	238	0.837	274	0.991	310	0.869	346	0.858
23	0.977	59	0.890	95	0.380	131	0.050	167	0.063	203	0.320	239	0.849	275	0.989	311	0.867	347	0.859
24	0.980	60	0.880	96	0.365	132	0.053	168	0.059	204	0.335	240	0.860	276	0.986	312	0.865	348	0.861
25	0.984	61	0.870	97	0.350	133	0.056	169	0.056	205	0.350	241	0.870	277	0.984	313	0.863	349	0.863
26	0.986	62	0.860	98	0.335	134	0.059	170	0.053	206	0.365	242	0.880	278	0.980	314	0.861	350	0.865
27	0.989	63	0.849	99	0.320	135	0.063	171	0.050	207	0.380	243	0.890	279	0.977	315	0.859	351	0.867
28	0.991	64	0.837	100	0.306	136	0.066	172	0.047	208	0.396	244	0.900	280	0.974	316	0.858	352	0.869
29	0.993	65	0.826	101	0.291	137	0.069	173	0.045	209	0.411	245	0.909	281	0.971	317	0.856	353	0.872
30	0.995	66	0.813	102	0.277	138	0.072	174	0.044	210	0.427	246	0.917	282	0.967	318	0.855	354	0.874
31	0.997	67	0.801	103	0.263	139	0.075	175	0.043	211	0.442	247	0.926	283	0.964	319	0.854	355	0.877
32	0.998	68	0.788	104	0.249	140	0.078	176	0.045	212	0.458	248	0.933	284	0.960	320	0.853	356	0.880
33	0.999	69	0.775	105	0.236	141	0.081	177	0.046	213	0.474	249	0.941	285	0.956	321	0.852	357	0.882
34	0.999	70	0.762	106	0.223	142	0.083	178	0.050	214	0.490	250	0.947	286	0.952	322	0.851	358	0.885
35	1.000	71	0.748	107	0.210	143	0.085	179	0.054	215	0.506	251	0.954	287	0.948	323	0.850	359	0.888

Figure 1
Antenna Azimuthal Pattern
WTAE-TV DRT Pittsburgh, PA
Facility ID 65681
Ch. 22 (digital) 15 kW

prepared for
Hearst Stations Inc.

July, 2018





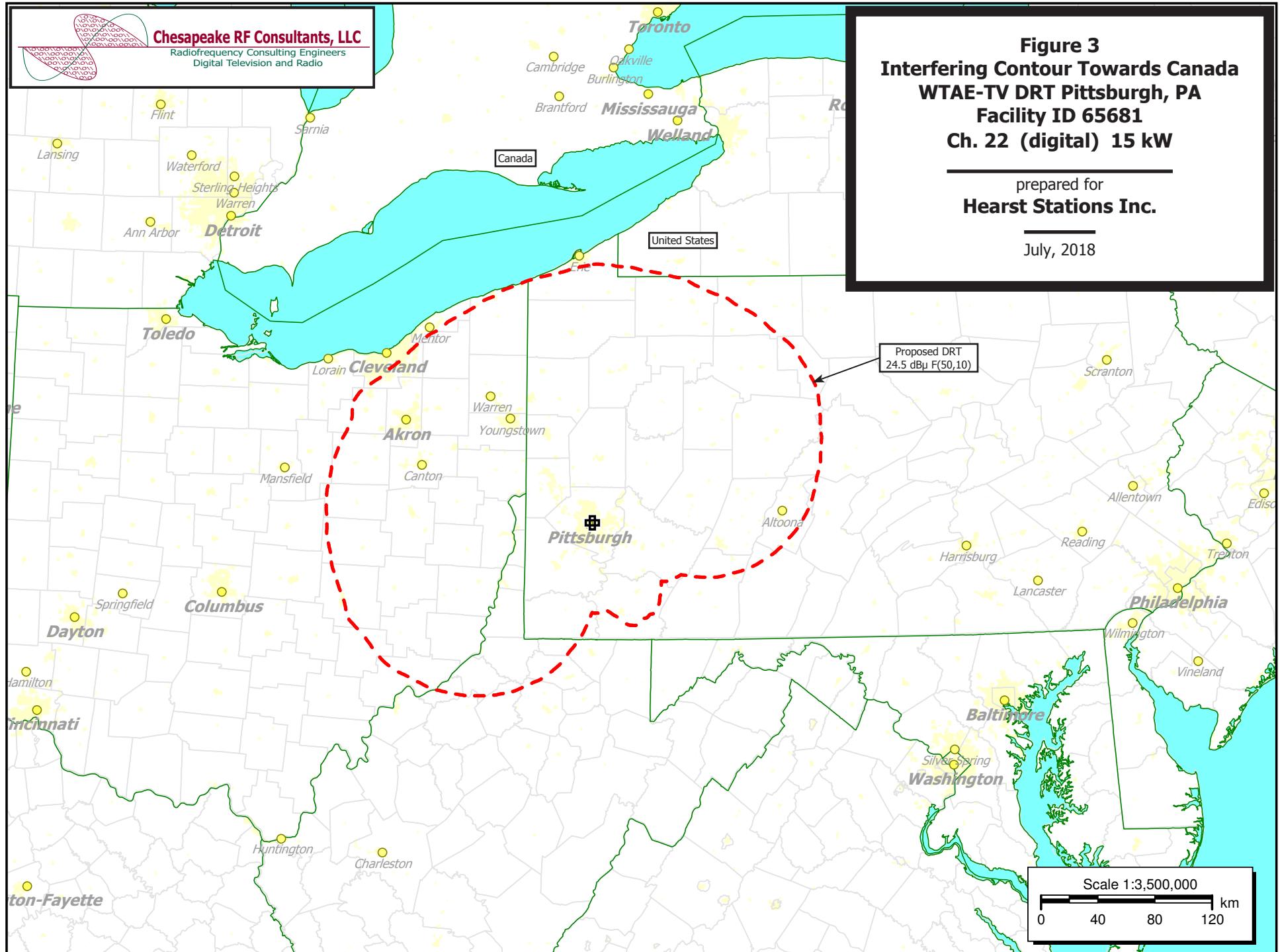
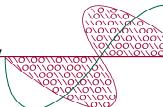


Table 1 WTAE-TV DRT OET Bulletin 69 Interference Study
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Digital Television and Radio

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: WTAE-TV DRT TLP-180H OS 1.0-0.1 all, Model: Longley-Rice
Start: 2018.07.10 16:35:36

Study created: 2018.07.10 16:35:36

Study build station data: LMS TV 2018-07-10

Proposal: WTAE-TV D22 LD APP PITTSBURGH, PA
File number: WTAE-TV DRT TLP-180H OS
Facility ID: 65681
Station data: User record
Record ID: 2065
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Search options:

Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WQDI-LD	D21	LD	LIC	CLEVELAND, OH	BLDTL20150129ABN	128.2 km
No	WJW	D21	LD	CP	CLEVELAND, OH	BDRTCCT20101123AOJ	94.8
No	WBNS-TV	D21	DT	LIC	COLUMBUS, OH	BLCDT20021025ABK	265.4
No	WSSS-LP	D21	LD	CP	STEUBENVILLE, OH	BDISDTL20121022AAR	53.7
No	W21DO-D	D21	LD	CP	DUBOIS, PA	BNPDTL20100609AGH	157.5
No	WSEE-TV	D21	DT	CP	ERIE, PA	BLANK0000034791	177.1
No	WHP-TV	D21	DT	LIC	HARRISBURG, PA	BLCDT20130703ACZ	262.2
Yes	WPXI	D21	LD	CP	PITTSBURGH, PA	BDRTCT20090610ABT	62.9
No	WPNT	D21	DT	CP	PITTSBURGH, PA	BLANK0000034376	6.4
No	WCVN-TV	D22	DT	CP	COVINGTON, KY	BLANK0000034633	418.8
No	WMPB	D22	DT	CP	BALTIMORE, MD	BLANK0000029875	293.1
No	WNEM-TV	D22	DT	LIC	BAY CITY, MI	BLCDT20050615ACI	464.5
No	WDWO-CD	D22	DC	CP	DETROIT, MI	BLANK0000028102	359.2
No	WNJS	D22	DT	LIC	CAMDEN, NJ	BLANK0000040675	442.6
No	WPHY-CD	D22	DC	CP	TRENTON, NJ	BLANK0000034674	403.6
No	WEKY-LD	D22	LD	LIC	CORNING, NY	BLANK0000024397	306.0
No	WXXI-TV	D22	DT	CP	ROCHESTER, NY	BLANK0000029838	358.1
No	WBLZ-LD	D22	LD	APP	SYRACUSE, NY	BLANK0000052577	428.2
No	WTUU-CD	D22	DC	LIC	SYRACUSE, NY	BLDTA20130603AEQ	428.2
Yes	WVPX-TV	D22	DT	CP	AKRON, OH	BLANK0000026965	152.7
Yes	WVPX-TV	D22	DT	APP	AKRON, OH	BLANK0000055357	153.0
No	WBGU-TV	D22	DT	CP	BOWLING GREEN, OH	BLANK0000027978	340.5
No	WCPO-TV	D22	DT	LIC	CINCINNATI, OH	BLCDT20101216AAF	414.2
No	W22DE	N22+	TX	LIC	DAYTON, OH	BLTTL20100511AAU	374.2
No	WOCB-CD	D22	DC	CP	MARION, OH	BLANK0000034205	261.8
Yes	WIVD-LD	D22	LD	LIC	NEWCOMERSTOWN, OH	BLDTL20090617AAR	130.4
Yes	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	83.4
Yes	WFXP	D22	DT	LIC	ERIE, PA	BLCDT20081023ABA	177.4
No	WOLF-TV	D22	DT	CP	HAZLETON, PA	BLANK0000027934	354.0
Yes	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	129.5
Yes	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20101105AAU	129.2
Yes	WWKH-CD	D22	DC	CP	UNIONTOWN, PA	BLANK0000027838	70.7
No	WRIC-TV	D22	DT	LIC	PETERSBURG, VA	BLCDT20090209ABZ	384.7
No	WCVE-TV	D22	DT	CP	RICHMOND, VA	BLANK0000034128	384.7
No	W22EX-D	D22	LD	LIC	STAUNTON, VA	BLANK0000055155	259.6
No	W22CY	D22	LD	CP	CLARKSBURG, WV	BDFCDTL20120329AOH	133.1
No	W22CY	N22-	TX	LIC	CLARKSBURG, WV	BLTTL20060120ADM	133.1
No	WSAZ-TV	D22	DT	CP	HUNTINGTON, WV	BLANK0000034103	289.4
No	W22CV-D	D22	LD	LIC	MOOREFIELD, WV	BLDTT20120608ABX	186.0
No	WOVA-LD	D22	LD	LIC	PARKERSBURG, WV	BLDTL20120904ABM	183.0
No	W22ES-D	D22	LD	CP	SUTTON, WV	BNPDTL20100514AAM	212.6
No	WDVM-TV	D23	DT	CP	HAGERSTOWN, MD	BLANK0000034764	191.1
No	WVPX-TV	D23	DT	LIC	AKRON, OH	BLANK0000050597	152.7
No	WWHO	D23	DT	CP	CHILLICOTHE, OH	BLANK0000034759	265.7
No	WTOO-CD	D23	DC	LIC	BOLIVAR, PA	BLANK000001414	119.9
No	WPXI	D23	LD	LIC	PITTSBURGH, PA	BLCDT20100429ADA	70.7
No	WPXI	D23	DT	CP	PITTSBURGH, PA	BLANK0000034876	3.9
No	W23DR-D	D23	LD	LIC	ROMNEY, WV	BLDTT20090609AAZ	165.1
No	WSSS-LP	N25z	TX	LIC	STEUBENVILLE, OH	BLTTL19980506JD	53.7

Table 1 WTAE-TV DRT OET Bulletin 69 Interference Study
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No	WWBP-LP	N25-	TX	LIC	FREEDOM, PA	BLTTL19990124JD	36.6
No	WIIC-LD	N29+	TX	LIC	PITTSBURGH, PA	BLTTL19981230JB	0.0
No	W29CO	N29z	TX	LIC	SHARON, PA	BLTTL20031216ACI	96.4
No	WHVL-LP	N29+	TX	LIC	STATE COLLEGE, ETC., PA	BLTTL19911123JH	175.8
No	WBPA-LP	N30+	TX	LIC	PITTSBURGH, PA	BLANK0000007299	7.5

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: Full Service
Latitude: 40 26 46.20 N (NAD83)
Longitude: 79 57 50.20 W
Height AMSL: 488.0 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: TLP-180H OS 20180512 0.0 deg
Elev Pattrn: Generic
Elec Tilt: 0.80

49.6 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	11.9 kW	197.6 m	50.2 km
45.0	14.3	200.4	51.3
90.0	3.15	160.5	41.1
135.0	0.059	196.3	22.8
180.0	0.054	144.5	19.3
225.0	6.52	155.5	44.6
270.0	14.9	190.8	50.9
315.0	11.1	157.3	47.4

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 175 m

Proposal 24.56 dBu contour does not cross Canadian border
Distance to Canadian border: 216.7 km

Distance to Mexican border: 2244.8 km

Conditions at FCC monitoring station: Laurel MD
Bearing: 116.9 degrees Distance: 303.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 277.4 degrees Distance: 2134.3 km

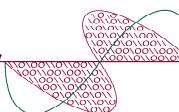
Study cell size: 1.00 km
Profile point spacing: 0.10 km

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

Interference to BDRTCT20090610ABT CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPXI	D21	LD	CP	PITTSBURGH, PA	BDRTCT20090610ABT	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	62.9 km
	WPGH-TV	D20	DT	CP	PITTSBURGH, PA	BLANK0000034375	67.4
	WMPT	D21	DT	CP	ANNAPOLIS, MD	BLANK0000029874	268.9
	WRQC-TV	D21	DT	CP	ROCHESTER, NY	BLANK0000034937	339.4
	WQDI-LD	D21	LD	LIC	Cleveland, OH	BLANK0000010838	241.9
	WSEE-TV	D21	DT	CP	ERIE, PA	BLANK0000034791	200.8
	WPNT	D21	DT	CP	PITTSBURGH, PA	BLANK0000034376	67.4
	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	21.5
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	71.7

Table 1 WTAE-TV DRT OET Bulletin 69 Interference Study
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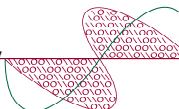


Chesapeake RF Consultants, LLC

Radiofrequency Consulting Engineers
Digital Television and Radio

W22CY	D22	LD CP	CLARKSBURG, WV	BDFCDTL20120329AOH	149.2
Service area 7766.0	1,050,029	Terrain-limited 6896.8	IX-free, before 931,868	IX-free, after 6023.4	Percent New IX 0.00 0.00
Undesired		Total IX	Unique IX, before	Unique IX, after	
WTAE-TV D22 LD APP	6.0	5,516	0.0	0.0	0 0
WPGH-TV D20 DT CP	56.0	23,920	0.0	0.0	0 0
WMPT D21 DT CP	1.0	0	0.0	0.0	0 0
WSEE-TV D21 DT CP	4.0	128	1.0	0	1.0 0
WPNT D21 DT CP	869.4	160,345	809.4	136,364	809.4 136,364
WTOO-CD D22 DC CP	7.0	104	2.0	43	2.0 43
<hr/>					
Interference to BLANK0000026965 CP scenario 1					
Desired:	Call WVPX-TV	Chan D22	Svc DT CP	City, State AKRON, OH	File Number BLANK0000026965
Undesireds:	WTAE-TV	D22	LD APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O 152.7 km
	WPNT	D21	DT CP	PITTSBURGH, PA	BLANK0000034376 147.1
	WDWO-CD	D22	DC CP	DETROIT, MI	BLANK0000028102 213.1
	WBGU-TV	D22	DT CP	BOWLING GREEN, OH	BLANK0000027978 194.8
	WOCB-CD	D22	DC CP	MARION, OH	BLANK0000034205 149.3
	WTOO-CD	D22	DC CP	BOLIVAR, PA	BLANK0000034570 232.1
	WWKH-CD	D22	DC CP	UNIONTOWN, PA	BLANK0000027838 211.2
	WSAZ-TV	D22	DT CP	HUNTINGTON, WV	BLANK0000034103 289.1
	WNWO-TV	D23	DT CP	TOLEDO, OH	BLANK0000033631 162.4
	WPXI	D23	DT CP	PITTSBURGH, PA	BLANK0000034876 148.8
Service area 25717.7	4,149,213	Terrain-limited 25320.5	IX-free, before 4,116,227	IX-free, after 24883.3	Percent New IX 0.52 0.13
239.0	0	239.0	0	239.0	0.00 0.00
(in Canada)					
Undesired		Total IX	Unique IX, before	Unique IX, after	
WTAE-TV D22 LD APP	202.1	10,726	128.4	5,239	
WPNT D21 DT CP	23.9	3,304	1.0	10	
WDWO-CD D22 DC CP	22.0	2,915	0.0	0.0	0
WBGU-TV D22 DT CP	344.5	27,581	264.5	20,691	259.5 20,508
WOCB-CD D22 DC CP	5.0	44	0.0	0	0.0 0
WTOO-CD D22 DC CP	58.8	4,700	22.9	1,971	5.0 1,329
WWKH-CD D22 DC CP	7.0	771	0.0	0	0.0 0
WSAZ-TV D22 DT CP	61.8	1,770	44.9	1,254	43.9 1,239
WNWO-TV D23 DT CP	15.1	771	0.0	0	0.0 0
WPXI D23 DT CP	18.9	1,979	3.0	446	0.0 0
<hr/>					
Interference to BLANK0000055357 APP scenario 1					
Desired:	Call WVPX-TV	Chan D22	Svc DT APP	City, State AKRON, OH	File Number BLANK0000055357
Undesireds:	WTAE-TV	D22	LD APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O 153.0 km
	WPNT	D21	DT CP	PITTSBURGH, PA	BLANK0000034376 147.5
	WDWO-CD	D22	DC CP	DETROIT, MI	BLANK0000028102 213.3
	WLLA	D22	DT CP	KALAMAZOO, MI	BLANK0000034932 361.4
	WBGU-TV	D22	DT CP	BOWLING GREEN, OH	BLANK0000027978 194.0
	WOCB-CD	D22	DC CP	MARION, OH	BLANK0000034205 148.0
	WTOO-CD	D22	DC CP	BOLIVAR, PA	BLANK0000034570 232.7
	WWKH-CD	D22	DC CP	UNIONTOWN, PA	BLANK0000027838 211.3
	WSAZ-TV	D22	DT CP	HUNTINGTON, WV	BLANK0000034103 287.9
	WNWO-TV	D23	DT CP	TOLEDO, OH	BLANK0000033631 162.0
	WPXI	D23	DT CP	PITTSBURGH, PA	BLANK0000034876 149.1
Service area 25799.6	4,152,881	Terrain-limited 25399.3	IX-free, before 4,124,655	IX-free, after 24924.7	Percent New IX 0.52 0.14
190.1	0	190.1	0	190.1	0.00 0.00
(in Canada)					
Undesired		Total IX	Unique IX, before	Unique IX, after	
WTAE-TV D22 LD APP	198.2	11,459	128.4	5,537	
WPNT D21 DT CP	20.9	2,973	7.0	973	1.0 10

Table 1 WTAE-TV DRT OET Bulletin 69 Interference Study
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WDWO-CD D22 DC CP	11.0	428	0.0	0	0.0	0
WLLA D22 DT CP	1.0	36	0.0	0	0.0	0
WBGU-TV D22 DT CP	379.9	26,813	333.9	24,494	322.9	23,535
WOCB-CD D22 DC CP	6.0	89	1.0	0	1.0	0
WTOO-CD D22 DC CP	48.8	3,501	22.9	1,177	6.0	481
WWKH-CD D22 DC CP	11.9	842	2.0	35	1.0	27
WSAZ-TV D22 DT CP	59.9	2,444	46.9	1,853	42.9	1,781
WNWO-TV D23 DT CP	11.1	739	0.0	0	0.0	0
WPXI D23 DT CP	9.0	1,311	2.0	426	1.0	42

Interference to BLDTL20090617AAR LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WIVD-LD	D22	LD	LIC	NEWCOMERSTOWN, OH	BLDTL20090617AAR	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	130.4 km
	WVPX-TV	D22	DT	CP	AKRON, OH	BLANK0000026965	78.8
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	259.8
	W22CY	D22	LD	CP	CLARKSBURG, WV	BDFCDTL20120329AOH	158.4
	WSAZ-TV	D22	DT	CP	HUNTINGTON, WV	BLANK0000034103	214.6
	WOVA-LD	D22	LD	LIC	PARKERSBURG, WV	BLDTL20120904ABM	112.3
Service area					Terrain-limited	IX-free, before	IX-free, after
1987.7	62,696	1908.5			55,402	1810.4	46,459
Undesired					Total IX	Unique IX, before	Unique IX, after
WTAE-TV D22 LD APP		4.0			19	2.0	0
WVPX-TV D22 DT CP		92.1			8,727	79.1	8,109
WSAZ-TV D22 DT CP		18.0			834	4.0	75
WOVA-LD D22 LD LIC		3.0			141	0.0	0

Interference to BLDTL20090617AAR LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WIVD-LD	D22	LD	LIC	NEWCOMERSTOWN, OH	BLDTL20090617AAR	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	130.4 km
	WQDI-LD	D21	LD	LIC	Cleveland, OH	BLDTL20150129ABN	2.4
	WVPX-TV	D22	DT	CP	AKRON, OH	BLANK0000026965	78.8
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	259.8
	W22CY	D22	LD	CP	CLARKSBURG, WV	BDFCDTL20120329AOH	158.4
	WSAZ-TV	D22	DT	CP	HUNTINGTON, WV	BLANK0000034103	214.6
	WOVA-LD	D22	LD	LIC	PARKERSBURG, WV	BLDTL20120904ABM	112.3
Service area					Terrain-limited	IX-free, before	IX-free, after
1987.7	62,696	1908.5			55,402	1807.4	46,406
Undesired					Total IX	Unique IX, before	Unique IX, after
WTAE-TV D22 LD APP		4.0			19	2.0	0
WQDI-LD D21 LD LIC		3.0			53	3.0	53
WVPX-TV D22 DT CP		92.1			8,727	79.1	8,109
WSAZ-TV D22 DT CP		18.0			834	4.0	75
WOVA-LD D22 LD LIC		3.0			141	0.0	0

Interference to BLDTL20090617AAR LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WIVD-LD	D22	LD	LIC	NEWCOMERSTOWN, OH	BLDTL20090617AAR	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	130.4 km
	WVPX-TV	D22	DT	APP	AKRON, OH	BLANK0000055357	77.8
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	259.8
	W22CY	D22	LD	CP	CLARKSBURG, WV	BDFCDTL20120329AOH	158.4
	WSAZ-TV	D22	DT	CP	HUNTINGTON, WV	BLANK0000034103	214.6
	WOVA-LD	D22	LD	LIC	PARKERSBURG, WV	BLDTL20120904ABM	112.3
Service area					Terrain-limited	IX-free, before	IX-free, after
1987.7	62,696	1908.5			55,402	1829.4	47,481
Undesired					Total IX	Unique IX, before	Unique IX, after

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Radiofrequency Consulting Engineers
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WTAE-TV D22 LD APP	4.0	19		2.0	0
WVPX-TV D22 DT APP	70.1	7,617	60.1	7,087	59.1
WSAZ-TV D22 DT CP	18.0	834	6.0	163	5.0
WOVA-LD D22 LD LIC	3.0	141	1.0	0	1.0

Interference to BLDTL20090617AAR LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WIVD-LD	D22	LD	LIC	NEWCOMERSTOWN, OH	BLDTL20090617AAR	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	130.4 km
	WQDI-LD	D21	LD	LIC	Cleveland, OH	BLDTL20150129ABN	2.4
	WVPX-TV	D22	DT	APP	AKRON, OH	BLANK0000055357	77.8
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	259.8
	W22CY	D22	LD	CP	CLARKSBURG, WV	BDFCDTL20120329AOH	158.4
	WSAZ-TV	D22	DT	CP	HUNTINGTON, WV	BLANK0000034103	214.6
	WOVA-LD	D22	LD	LIC	PARKERSBURG, WV	BLDTL20120904ABM	112.3
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
1987.7	62,696	1908.5	55,402	1826.4	47,428	1824.4	47,428
Undesired		Total	IX	Unique IX, before	Unique IX, after		
WTAE-TV D22 LD APP	4.0	19		2.0	0		
WQDI-LD D21 LD LIC	3.0	53	3.0	53	3.0	53	
WVPX-TV D22 DT APP	70.1	7,617	60.1	7,087	59.1	7,087	
WSAZ-TV D22 DT CP	18.0	834	6.0	163	5.0	144	
WOVA-LD D22 LD LIC	3.0	141	1.0	0	1.0	0	

Interference to BLANK0000034570 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	83.4 km
	WPNT	D21	DT	CP	PITTSBURGH, PA	BLANK0000034376	87.5
	WVPX-TV	D22	DT	CP	AKRON, OH	BLANK0000026965	232.1
	WOLF-TV	D22	DT	CP	HAZLETON, PA	BLANK0000027934	277.2
	WWKH-CD	D22	DC	CP	UNIONTOWN, PA	BLANK0000027838	81.1
	WDVM-TV	D23	DT	CP	HAGERSTOWN, MD	BLANK0000034764	117.1
	WPXI	D23	DT	CP	PITTSBURGH, PA	BLANK0000034876	87.0
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
9352.5	639,018	7983.4	465,905	7808.7	458,651	7775.8	456,770
Undesired		Total	IX	Unique IX, before	Unique IX, after		
WTAE-TV D22 LD APP	101.7	5,549		32.9	1,881		
WPNT D21 DT CP	21.0	1,362	1.0	11	0.0	0	
WVPX-TV D22 DT CP	40.9	903	19.0	248	16.0	47	
WOLF-TV D22 DT CP	2.0	1	0.0	0	0.0	0	
WWKH-CD D22 DC CP	133.7	6,185	97.8	4,292	76.9	3,223	
WDVM-TV D23 DT CP	2.0	0	2.0	0	2.0	0	
WPXI D23 DT CP	43.9	2,567	10.0	331	2.0	131	

Interference to BLANK0000034570 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	83.4 km
	WPNT	D21	DT	CP	PITTSBURGH, PA	BLANK0000034376	87.5
	WVPX-TV	D22	DT	APP	AKRON, OH	BLANK0000055357	232.7
	WOLF-TV	D22	DT	CP	HAZLETON, PA	BLANK0000027934	277.2
	WWKH-CD	D22	DC	CP	UNIONTOWN, PA	BLANK0000027838	81.1
	WDVM-TV	D23	DT	CP	HAGERSTOWN, MD	BLANK0000034764	117.1
	WPXI	D23	DT	CP	PITTSBURGH, PA	BLANK0000034876	87.0
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
9352.5	639,018	7983.4	465,905	7809.7	458,651	7776.8	456,770
Undesired		Total	IX	Unique IX, before	Unique IX, after		

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WTAE-TV D22 LD APP	101.7	5,549		32.9	1,881
WPNT D21 DT CP	21.0	1,362	1.0	11	0.0
WVPX-TV D22 DT APP	41.9	802	18.0	248	15.0
WOLF-TV D22 DT CP	2.0	1	0.0	0	0.0
WWKH-CD D22 DC CP	133.7	6,185	94.8	4,344	75.9
WDVM-TV D23 DT CP	2.0	0	2.0	0	2.0
WPXI D23 DT CP	43.9	2,567	10.0	331	2.0
					131

Interference to BLCDT20081023ABA LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFXP	D22	DT	LIC	ERIE, PA	BLCDT20081023ABA	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	177.4 km
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
14167.0	581,326	13923.6	574,659	13923.6	574,659	13914.5	0.07 0.05
1404.3	0	1404.3	0	1404.3	0	1404.3	0.00 0.00
(in Canada)							
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTAE-TV D22 LD APP		9.1		301		9.1	301

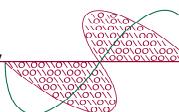
Interference to BLCDT20110105ABC LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	129.5 km
	WMPB	D22	DT	CP	BALTIMORE, MD	BLANK0000029875	188.5
	W22EW-D	D22+	LD	LIC	West Orange, NJ	BLANK0000018995	327.4
	WVPX-TV	D22	DT	CP	AKRON, OH	BLANK0000026965	270.0
	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	50.9
	WOLF-TV	D22	DT	CP	HAZLETON, PA	BLANK0000027934	226.5
	WWKH-CD	D22	DC	CP	UNIONTOWN, PA	BLANK0000027838	130.3
	W22CY	D22	LD	CP	CLARKSBURG, WV	BDFCDTL20120329AOH	213.7
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
7411.8	377,527	6000.1	318,713	5535.9	293,255	5535.9	293,255
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTAE-TV D22 LD APP		4.0	33		0.0	0	
WMPB D22 DT CP		4.0	4	1.0	0	1.0	0
WVPX-TV D22 DT CP		7.0	51	0.0	0	0.0	0
WTOO-CD D22 DC CP		459.2	25,117	439.3	24,545	438.3	24,531
WOLF-TV D22 DT CP		11.0	670	4.0	341	4.0	341
WWKH-CD D22 DC CP		9.9	235	0.0	0	0.0	0

Interference to BLCDT20110105ABC LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	129.5 km
	WMPB	D22	DT	CP	BALTIMORE, MD	BLANK0000029875	188.5
	W22EW-D	D22+	LD	LIC	West Orange, NJ	BLANK0000018995	327.4
	WVPX-TV	D22	DT	APP	AKRON, OH	BLANK0000055357	270.7
	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	50.9
	WOLF-TV	D22	DT	CP	HAZLETON, PA	BLANK0000027934	226.5
	WWKH-CD	D22	DC	CP	UNIONTOWN, PA	BLANK0000027838	130.3
	W22CY	D22	LD	CP	CLARKSBURG, WV	BDFCDTL20120329AOH	213.7
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
7411.8	377,527	6000.1	318,713	5535.9	293,255	5535.9	293,255
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTAE-TV D22 LD APP		4.0	33		0.0	0	
WMPB D22 DT CP		4.0	4	1.0	0	1.0	0
WVPX-TV D22 DT APP		8.9	156	0.0	0	0.0	0
WTOO-CD D22 DC CP		459.2	25,117	439.3	24,545	438.3	24,531

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WOLF-TV D22 DT CP	11.0	670	4.0	341	4.0	341
WWKH-CD D22 DC CP	9.9	235	0.0	0	0.0	0

Interference to BLCDT20101105AAU LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20101105AAU	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	129.2 km
	WMPB	D22	DT	CP	BALTIMORE, MD	BLANK0000029875	188.6
	W22EW-D	D22+	LD	LIC	West Orange, NJ	BLANK0000018995	327.7
	WVPX-TV	D22	DT	CP	AKRON, OH	BLANK0000026965	269.8
	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	50.6
	WOLF-TV	D22	DT	CP	HAZLETON, PA	BLANK0000027934	226.8
	WWKH-CD	D22	DC	CP	UNIONTOWN, PA	BLANK0000027838	130.0
	W22CY	D22	LD	CP	CLARKSBURG, WV	BDFCDTL20120329AOH	213.4
Service area					Terrain-limited	IX-free, before	
7556.2	371,592	6151.8			311,894	5556.5	283,194
						IX-free, after	
						5555.5	283,194
						Percent New IX	
						0.02	0.00
Undesired					Total IX	Unique IX, before	Unique IX, after
WTAE-TV D22 LD APP		13.9			312	1.0	0
WMPB D22 DT CP		1.0			14	1.0	14
WVPX-TV D22 DT CP		15.9			219	5.0	65
WTOO-CD D22 DC CP		583.4			28,101	552.5	27,727
WOLF-TV D22 DT CP		21.9			764	6.0	520
WWKH-CD D22 DC CP		13.0			144	0.0	0

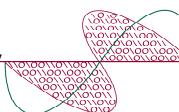
Interference to BLCDT20101105AAU LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20101105AAU	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	129.2 km
	WMPB	D22	DT	CP	BALTIMORE, MD	BLANK0000029875	188.6
	W22EW-D	D22+	LD	LIC	West Orange, NJ	BLANK0000018995	327.7
	WVPX-TV	D22	DT	APP	AKRON, OH	BLANK0000055357	270.5
	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	50.6
	WOLF-TV	D22	DT	CP	HAZLETON, PA	BLANK0000027934	226.8
	WWKH-CD	D22	DC	CP	UNIONTOWN, PA	BLANK0000027838	130.0
	W22CY	D22	LD	CP	CLARKSBURG, WV	BDFCDTL20120329AOH	213.4
Service area					Terrain-limited	IX-free, before	
7556.2	371,592	6151.8			311,894	5555.5	283,194
						IX-free, after	
						5554.5	283,194
						Percent New IX	
						0.02	0.00
Undesired					Total IX	Unique IX, before	Unique IX, after
WTAE-TV D22 LD APP		13.9			312	1.0	0
WMPB D22 DT CP		1.0			14	1.0	14
WVPX-TV D22 DT APP		17.9			219	6.0	65
WTOO-CD D22 DC CP		583.4			28,101	552.5	27,727
WOLF-TV D22 DT CP		21.9			764	5.0	520
WWKH-CD D22 DC CP		13.0			144	0.0	0

Interference to BLANK0000027838 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWKH-CD	D22	DC	CP	UNIONTOWN, PA	BLANK0000027838	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	70.7 km
	WPNT	D21	DT	CP	PITTSBURGH, PA	BLANK0000034376	77.1
	WVPX-TV	D22	DT	CP	AKRON, OH	BLANK0000026965	211.2
	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	81.1
	WSAZ-TV	D22	DT	CP	HUNTINGTON, WV	BLANK0000034103	266.6
	WPXI	D23	DT	CP	PITTSBURGH, PA	BLANK0000034876	73.8
Service area					Terrain-limited	IX-free, before	
3716.1	415,708	3430.9			389,192	3367.7	382,233
						IX-free, after	
						3361.7	381,539
						Percent New IX	
						0.18	0.18
Undesired					Total IX	Unique IX, before	Unique IX, after
WTAE-TV D22 LD APP		22.1			3,375	6.0	694

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WPNT D21 DT CP	21.0	4,215	3.0	127	2.0	60
WVPX-TV D22 DT CP	9.0	1,938	1.0	0	1.0	0
WTOO-CD D22 DC CP	41.1	3,263	36.1	1,717	35.1	1,717
WSAZ-TV D22 DT CP	2.0	26	1.0	0	1.0	0
WPXI D23 DT CP	19.0	4,583	3.0	1,001	2.0	758

Interference to BLANK0000027838 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWKH-CD	D22	DC	CP	UNIONTOWN, PA	BLANK0000027838	
Undesireds:	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	70.7 km
	WPNT	D21	DT	CP	PITTSBURGH, PA	BLANK0000034376	77.1
	WVPX-TV	D22	DT	APP	AKRON, OH	BLANK0000055357	211.3
	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	81.1
	WSAZ-TV	D22	DT	CP	HUNTINGTON, WV	BLANK0000034103	266.6
	WPXI	D23	DT	CP	PITTSBURGH, PA	BLANK0000034876	73.8
Service area			Terrain-limited		IX-free, before	IX-free, after	Percent New IX
3716.1	415,708	3430.9	389,192	3367.7	382,086	3362.7	381,539
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTAE-TV D22 LD APP		22.1	3,375			5.0	547
WPNT D21 DT CP		21.0	4,215	3.0	127	2.0	60
WVPX-TV D22 DT APP		10.0	2,800	1.0	147	0.0	0
WTOO-CD D22 DC CP		41.1	3,263	36.1	1,717	35.1	1,717
WSAZ-TV D22 DT CP		2.0	26	1.0	0	1.0	0
WPXI D23 DT CP		19.0	4,583	2.0	286	1.0	43

Interference to proposal scenario 1
16.42% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTAE-TV	D22	LD	APP	PITTSBURGH, PA	WTAE-TV DRT TLP-180H O	
Undesireds:	WPXI	D21	LD	CP	PITTSBURGH, PA	BDRTCT20090610ABT	62.9 km
	WPNT	D21	DT	CP	PITTSBURGH, PA	BLANK0000034376	6.4
	WVPX-TV	D22	DT	CP	AKRON, OH	BLANK0000026965	152.7
	WTOO-CD	D22	DC	CP	BOLIVAR, PA	BLANK0000034570	83.4
	WJAC-TV	D22	LD	LIC	JOHNSTOWN, PA	BLCDT20110105ABC	129.5
	WWKH-CD	D22	DC	CP	UNIONTOWN, PA	BLANK0000027838	70.7
	W22CY	D22	LD	CP	CLARKSBURG, WV	BDFCDTL20120329AOH	133.1
	WSAZ-TV	D22	DT	CP	HUNTINGTON, WV	BLANK0000034103	289.4
	WPXI	D23	DT	CP	PITTSBURGH, PA	BLANK0000034876	3.9
Service area			Terrain-limited		IX-free	Percent IX	
5833.8	1,794,695	5635.4	1,748,989	4543.2	1,461,728	19.38	16.42
Undesired			Total IX		Unique IX	Prcnt Unique IX	
WPXI D21 LD CP		15.0	1,954	0.0	0	0.00	0.00
WPNT D21 DT CP		600.4	185,284	55.9	28,397	0.99	1.62
WVPX-TV D22 DT CP		83.8	14,996	14.0	869	0.25	0.05
WTOO-CD D22 DC CP		186.0	19,985	53.7	6,686	0.95	0.38
WWKH-CD D22 DC CP		237.0	54,877	25.9	4,835	0.46	0.28
WSAZ-TV D22 DT CP		1.0	36	1.0	36	0.02	0.00
WPXI D23 DT CP		874.1	239,624	276.8	77,948	4.91	4.46

Section	Question	Response
Proposed Community of License	Facility ID	65681
	State	Pennsylvania
	City	PITTSBURGH
	DRT Channel	22

Section	Question	Response
Antenna Location Data	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1022324
Coordinates (NAD83)	Latitude	40° 26' 46.2" N+
	Longitude	079° 57' 50.2" W-
	Structure Type	LTOWER-Lattice Tower
	Overall Structure Height	181.1 meters
	Support Structure Height	157.3 meters
	Ground Elevation (AMSL)	355.0 meters
Antenna Data	Height of Radiation Center Above Ground Level	133 meters
	Height of Radiation Center Above Mean Sea Level	488.0 meters
	Effective Radiated Power	15 kW

Antenna Technical Data	Section	Question	Response
	Antenna Type	Antenna Type	Directional Custom
		Do you have an Antenna ID?	No
		Antenna ID	
	Antenna Manufacturer and Model	Manufacturer:	DIE
		Model	TLP-16W/VP-R OS
		Rotation	0 degrees
		Electrical Beam Tilt	0.80
		Mechanical Beam Tilt	Not Applicable
		toward azimuth	
		Polarization	Elliptical
	Elevation Radiation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
		Uploaded file for elevation antenna (or radiation) pattern data	
		Out-of-Channel Emission Mask:	Full Service

Directional Antenna Relative Field Values (Pre-rotated Pattern)

Degree	V _A (Authorized Value)						
0	0.892	90	0.458	180	0.060	270	0.998
10	0.928	100	0.306	190	0.150	280	0.974
20	0.967	110	0.173	200	0.277	290	0.936
30	0.995	120	0.073	210	0.427	300	0.898
40	0.996	130	0.047	220	0.585	310	0.869
50	0.960	140	0.078	230	0.734	320	0.853
60	0.880	150	0.093	240	0.860	330	0.847
70	0.762	160	0.083	250	0.947	340	0.851
80	0.616	170	0.053	260	0.992	350	0.865

Additional Azimuths

Degree	V _A
36	1.000
266	1.000