

## **ENGINEERING EXHIBIT**

### **Incentive Auction Channel Reassignment**

### **Amendment to Application for Modification of Digital Television Station Construction Permit**

prepared for

**Hearst Properties Inc.**  
WXII-TV Winston-Salem, NC  
Facility ID 53921  
Ch. 16 1000 kW 572 m

*Hearst Properties Inc.* (“Hearst”) is the licensee of digital television station WXII-TV, Channel 31, Facility ID 53921, Winston-Salem, NC. Reassignment of WXII-TV from Channel 31 to Channel 16 was specified in the *Incentive Auction Closing and Channel Reassignment Public Notice* (“CCRPN”, DA 17-317, released April 13, 2017). A Construction Permit (“CP”, file# 0000024623) authorizes WXII-TV’s post-auction operation as nondirectional with an effective radiated power (“ERP”) of 640 kW at 572 meters antenna height above average terrain. During the second filing window<sup>1</sup>, *Hearst* submitted a minor change application (LMS file# 0000034697) to increase the ERP to 975 kW. *Hearst* herein amends the WXII-TV application 0000034697 to specify a directional antenna at 1000 kW ERP.

As with the current authorization, the proposed Channel 16 operation will employ a new antenna to be side-mounted on the WXII-TV tower in lieu of the existing Channel 31 antenna. The existing tower structure corresponds to FCC Antenna Structure Registration number 1008241.

The proposed antenna is a horizontally polarized Dielectric model TFU-30DSC-R C135. The directional antenna’s azimuthal pattern is supplied in Figure 1 and the elevation pattern is depicted in Figure 2.

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<sup>1</sup>Public Notice “*Incentive Auction Task Force and Media Bureau Announce the Opening of the Second Filing Window for Eligible Full Power and Class A Television Station—October 3 Through November 2, 2017*” DA 17-911, released September 20, 2017.

Figure 3 supplies a map that demonstrates compliance with §73.625(a)(1) regarding coverage of the entire principal community<sup>2</sup>. The proposed facility's predicted population exceeds 95 percent of the *CCRPN* baseline facility's population.

Interference study per FCC OET Bulletin 69<sup>3</sup> shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby post-auction full service and Class A television stations and reassignments as required by §73.616. The interference study output report is provided as Table 1.

The proposed 1000 kW ERP exceeds the maximum allowed for the proposed antenna HAAT of 572 meters permitted by §73.622(f)(8)(i). Section 73.622(f)(5) permits the maximum ERP to be exceeded in order to provide the same geographic coverage area as the largest station within the same market. The total area within the proposed WXII-TV NLSC is 41,875 square kilometers, which does not exceed the NLSC area of WFMY-TV (42,268 sq. km, repack Ch. 35, Greensboro NC, CP file# 0000028086). Thus, the 1000 kW ERP specified herein is in compliance with §73.622(f)(5) of the FCC's Rules.

The nearest FCC monitoring station is 440 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. The site location is beyond the border areas requiring international coordination.

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<sup>2</sup>WXII-TV is a channel sharing host facility for WCWG, Facility ID 35385, Lexington NC. Figure 3 also shows that the proposed facility complies with §73.625(a)(1) regarding WCWG's principal community.

<sup>3</sup>FCC 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, 2 km cell size, and 2 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCC's implementation of TVStudy show excellent correlation.

### **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), and considering 10 percent antenna relative field in downward elevations (pattern data shows less than 10 percent relative field at angles 10 to 90 degrees below the antenna), the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is  $13.4 \mu\text{W}/\text{cm}^2$ , which is 4.1 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.

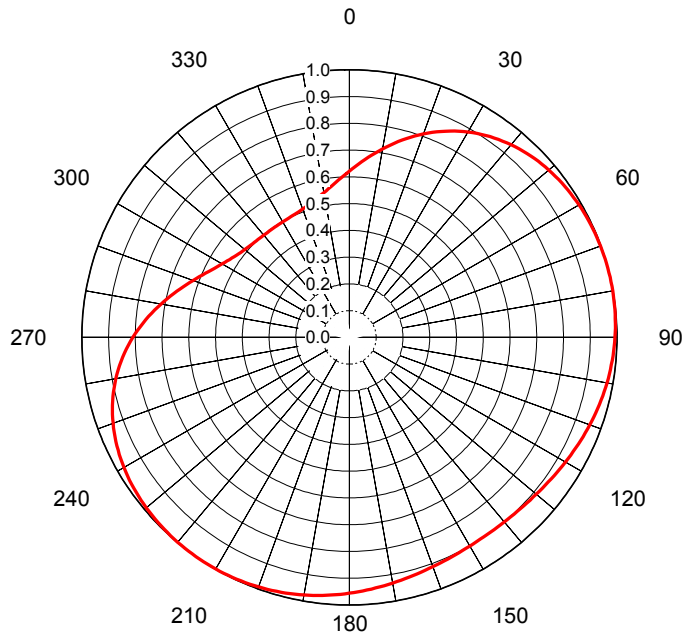
The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power 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	Antenna Elevation Pattern
Figure 3	Proposed Coverage Contours
Figure 4	Maximum ERP per §73.622(f)
Table 1	OET Bulletin 69 Interference Study
Form 2100	Saved Version of Engineering Sections from FCC Form at Time of Upload

#### **Chesapeake RF Consultants, LLC**

Joseph M. Davis, P.E.	March 26, 2018	
207 Old Dominion Road	Yorktown, VA 23692	703-650-9600



## AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-70124-4**  
Date **9-Mar-18**  
Call Letters **WXII 16**  
Frequency **485 MHz**  
Antenna Type **TFU-30DSC-R C135**

Gain **1.35 (1.31dB)**  
**Calculated**

Directional  
Drawing # **C135**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.622	36	0.921	72	0.999	108	0.961	144	0.899	180	0.956	216	1.000	252	0.931	288	0.639
1	0.630	37	0.926	73	1.000	109	0.958	145	0.899	181	0.958	217	1.000	253	0.926	289	0.630
2	0.639	38	0.931	74	1.000	110	0.956	146	0.899	182	0.961	218	0.999	254	0.921	290	0.622
3	0.648	39	0.936	75	1.000	111	0.954	147	0.899	183	0.963	219	0.999	255	0.916	291	0.613
4	0.658	40	0.940	76	1.000	112	0.951	148	0.899	184	0.965	220	0.999	256	0.910	292	0.605
5	0.667	41	0.944	77	1.000	113	0.949	149	0.900	185	0.967	221	0.998	257	0.905	293	0.597
6	0.677	42	0.948	78	1.000	114	0.947	150	0.900	186	0.970	222	0.998	258	0.899	294	0.589
7	0.686	43	0.952	79	1.000	115	0.944	151	0.901	187	0.972	223	0.997	259	0.892	295	0.581
8	0.696	44	0.955	80	0.999	116	0.942	152	0.902	188	0.974	224	0.996	260	0.886	296	0.574
9	0.706	45	0.959	81	0.999	117	0.939	153	0.903	189	0.976	225	0.996	261	0.879	297	0.567
10	0.716	46	0.962	82	0.999	118	0.937	154	0.904	190	0.978	226	0.995	262	0.872	298	0.561
11	0.725	47	0.965	83	0.998	119	0.935	155	0.905	191	0.979	227	0.994	263	0.865	299	0.555
12	0.735	48	0.968	84	0.998	120	0.932	156	0.906	192	0.981	228	0.993	264	0.858	300	0.549
13	0.745	49	0.970	85	0.997	121	0.930	157	0.907	193	0.983	229	0.992	265	0.850	301	0.544
14	0.754	50	0.973	86	0.996	122	0.928	158	0.909	194	0.985	230	0.991	266	0.842	302	0.539
15	0.764	51	0.975	87	0.995	123	0.925	159	0.910	195	0.986	231	0.989	267	0.834	303	0.534
16	0.773	52	0.977	88	0.995	124	0.923	160	0.912	196	0.988	232	0.988	268	0.826	304	0.530
17	0.782	53	0.980	89	0.994	125	0.921	161	0.914	197	0.989	233	0.987	269	0.818	305	0.526
18	0.791	54	0.981	90	0.993	126	0.919	162	0.915	198	0.990	234	0.985	270	0.809	306	0.522
19	0.800	55	0.983	91	0.991	127	0.917	163	0.917	199	0.991	235	0.983	271	0.800	307	0.519
20	0.809	56	0.985	92	0.990	128	0.915	164	0.919	200	0.993	236	0.981	272	0.791	308	0.516
21	0.818	57	0.987	93	0.989	129	0.914	165	0.921	201	0.994	237	0.980	273	0.782	309	0.513
22	0.826	58	0.988	94	0.988	130	0.912	166	0.923	202	0.995	238	0.977	274	0.773	310	0.511
23	0.834	59	0.989	95	0.986	131	0.910	167	0.925	203	0.995	239	0.975	275	0.764	311	0.508
24	0.842	60	0.991	96	0.985	132	0.909	168	0.928	204	0.996	240	0.973	276	0.754	312	0.507
25	0.850	61	0.992	97	0.983	133	0.907	169	0.930	205	0.997	241	0.970	277	0.745	313	0.505
26	0.858	62	0.993	98	0.981	134	0.906	170	0.932	206	0.998	242	0.968	278	0.735	314	0.503
27	0.865	63	0.994	99	0.979	135	0.905	171	0.935	207	0.998	243	0.965	279	0.725	315	0.502
28	0.872	64	0.995	100	0.978	136	0.904	172	0.937	208	0.999	244	0.962	280	0.716	316	0.501
29	0.879	65	0.996	101	0.976	137	0.903	173	0.939	209	0.999	245	0.959	281	0.706	317	0.500
30	0.886	66	0.996	102	0.974	138	0.902	174	0.942	210	0.999	246	0.955	282	0.696	318	0.500
31	0.892	67	0.997	103	0.972	139	0.901	175	0.944	211	1.000	247	0.952	283	0.686	319	0.499
32	0.899	68	0.998	104	0.970	140	0.900	176	0.947	212	1.000	248	0.948	284	0.677	320	0.498
33	0.905	69	0.998	105	0.967	141	0.900	177	0.949	213	1.000	249	0.944	285	0.667	321	0.498
34	0.910	70	0.999	106	0.965	142	0.899	178	0.951	214	1.000	250	0.940	286	0.658	322	0.498
35	0.916	71	0.999	107	0.963	143	0.899	179	0.954	215	1.000	251	0.936	287	0.648	323	0.497



**Figure 1**  
**Antenna Azimuthal Pattern**  
**WXII-TV Winston-Salem, NC**  
**Facility ID 53921**  
**Ch. 16 1000 kW 572 m**

prepared for  
**Hearst Properties Inc.**

March, 2018

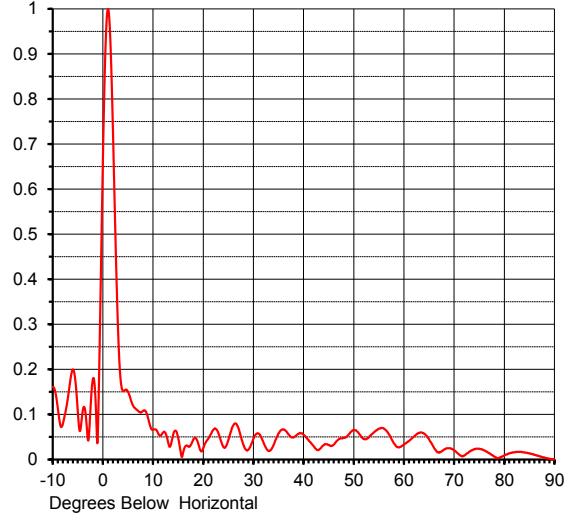
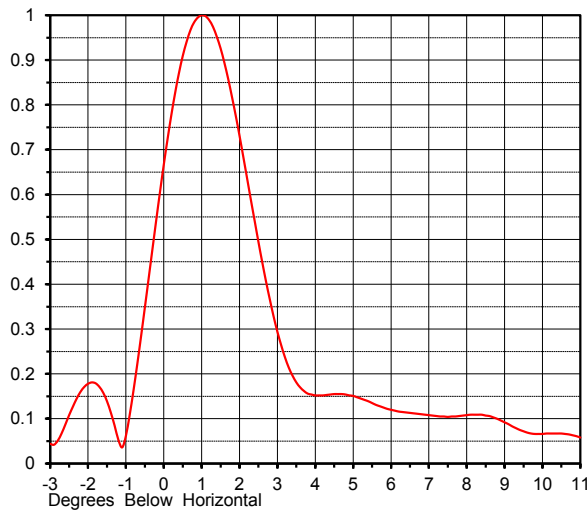
## ELEVATION PATTERN

Proposal No. **C-70124-4**  
 Date **9-Mar-18**  
 Call Letters **WXII 16**  
 Frequency **485 MHz**  
 Antenna Type **TFU-30DSC-R C135**

RMS Directivity at Main Lobe  
 RMS Directivity at Horizontal

**25.50 ( 14.07 dB )**  
**11.30 ( 10.53 dB )**  
 Calculated

Beam Tilt **1.00 deg**  
 Drawing Number **30Q255100**



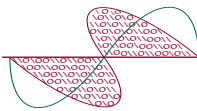
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.161	10.0	0.066	30.0	0.046	50.0	0.065	70.0	0.020
-9.0	0.115	11.0	0.058	31.0	0.058	51.0	0.058	71.0	0.011
-8.0	0.078	12.0	0.060	32.0	0.038	52.0	0.046	72.0	0.009
-7.0	0.135	13.0	0.038	33.0	0.019	53.0	0.049	73.0	0.017
-6.0	0.200	14.0	0.055	34.0	0.032	54.0	0.060	74.0	0.023
-5.0	0.106	15.0	0.048	35.0	0.058	55.0	0.068	75.0	0.024
-4.0	0.109	16.0	0.016	36.0	0.067	56.0	0.069	76.0	0.020
-3.0	0.044	17.0	0.029	37.0	0.056	57.0	0.056	77.0	0.014
-2.0	0.178	18.0	0.044	38.0	0.049	58.0	0.036	78.0	0.007
-1.0	0.062	19.0	0.035	39.0	0.057	59.0	0.027	79.0	0.004
0.0	0.667	20.0	0.025	40.0	0.055	60.0	0.033	80.0	0.009
1.0	1.000	21.0	0.046	41.0	0.043	61.0	0.041	81.0	0.014
2.0	0.731	22.0	0.066	42.0	0.030	62.0	0.051	82.0	0.016
3.0	0.294	23.0	0.059	43.0	0.021	63.0	0.059	83.0	0.017
4.0	0.152	24.0	0.028	44.0	0.032	64.0	0.058	84.0	0.016
5.0	0.151	25.0	0.043	45.0	0.032	65.0	0.045	85.0	0.014
6.0	0.120	26.0	0.076	46.0	0.033	66.0	0.026	86.0	0.011
7.0	0.108	27.0	0.070	47.0	0.045	67.0	0.015	87.0	0.007
8.0	0.108	28.0	0.033	48.0	0.048	68.0	0.022	88.0	0.004
9.0	0.092	29.0	0.022	49.0	0.056	69.0	0.025	89.0	0.002
								90.0	0.000



**Figure 2**  
**Antenna Elevation Pattern**  
**WXII-TV Winston-Salem, NC**  
**Facility ID 53921**  
**Ch. 16 1000 kW 572 m**

prepared for  
**Hearst Properties Inc.**

March, 2018



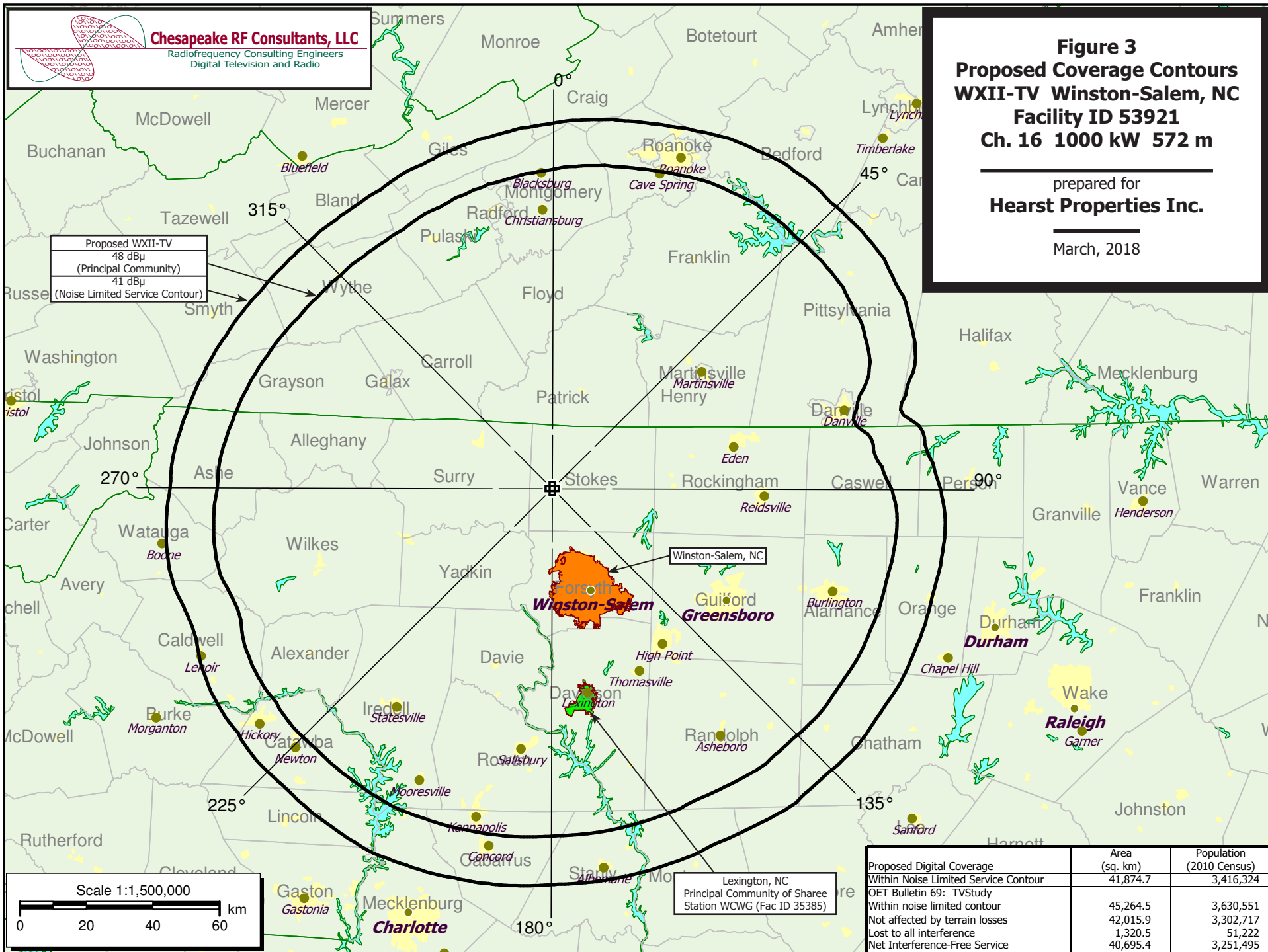
**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

**Figure 3**  
**Proposed Coverage Contours**  
**WXII-TV Winston-Salem, NC**  
**Facility ID 53921**  
**Ch. 16 1000 kW 572 m**

prepared for  
**Hearst Properties Inc.**

March, 2018

Proposed WXII-TV  
48 dBμ  
(Principal Community)  
41 dBμ  
(Noise Limited Service Contour)







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

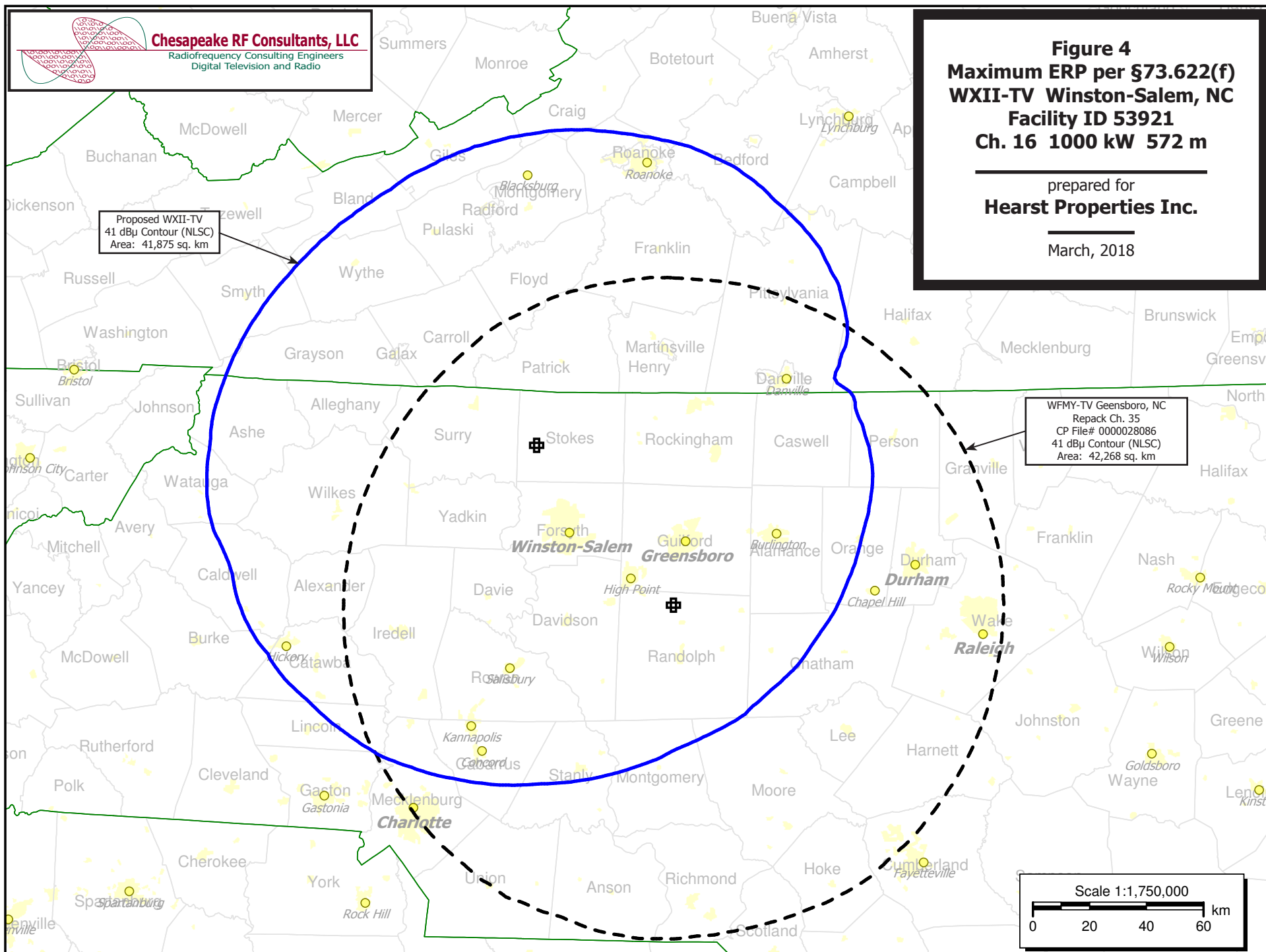
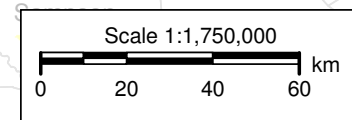
**Figure 4**  
**Maximum ERP per §73.622(f)**  
**WXII-TV Winston-Salem, NC**  
**Facility ID 53921**  
**Ch. 16 1000 kW 572 m**

prepared for  
**Hearst Properties Inc.**

March, 2018

Proposed WXII-TV  
41 dBu Contour (NLSC)  
Area: 41,875 sq. km

WFMY-TV Greensboro, NC  
Repack Ch. 35  
CP File# 0000028086  
41 dBu Contour (NLSC)  
Area: 42,268 sq. km



**Table 1    WXII-TV OET Bulletin 69 Interference Study**  
(page 1 of 9)



tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: WXII-TV 1000kW C135, Model: Longley-Rice  
Start: 2018.03.26 07:56:03

Study created: 2018.03.26 07:56:03

Study build station data: LMS TV 2018-03-25

Proposal: WXII-TV D16 DT APP WINSTON-SALEM, NC  
File number: WXII-TV 1000kW C135  
Facility ID: 53921  
Station data: User record  
Record ID: 1912  
Country: U.S.  
Zone: II

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	W21CK-D	D15	DC	CP	CHARLOTTE, NC	BLANK0000027832	138.4 km
Yes	W21CK-D	D15	DC	APP	CHARLOTTE, NC	BLANK0000034509	138.4
Yes	WRAX	D15	DT	CP	RALEIGH, NC	BLANK0000034036	183.3
No	WLTN	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	255.7
No	WAGT-CD	D16	DC	LIC	AUGUSTA, GA	BLANK0000001455	356.2
No	WAGT-CD	D16	DC	CP	AUGUSTA, GA	BLANK0000035762	355.7
No	WPXA-TV	D16	DT	CP	ROME, GA	BLANK0000034338	450.2
No	WCPB	D16	DT	CP	SALISBURY, MD	BLANK0000029877	477.7
No	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	335.7
No	WOSU-TV	D16	DT	CP	COLUMBUS, OH	BLANK0000033620	475.7
No	WINP-TV	D16	DT	CP	PITTSBURGH, PA	BLANK0000034405	453.9
Yes	WJPM-TV	D16	DT	CP	FLORENCE, SC	BLANK0000025028	239.8
Yes	WAPK-CD	D16	DC	CP	BRISTOL VA/KINGSPORT, TN	BLANK0000034342	157.9
Yes	WTKR	D16	DT	CP	NORFOLK, VA	BLANK0000034472	348.7
Yes	WRAL-TV	D17	DT	CP	RALEIGH, NC	BLANK0000034032	183.3
No	WHNS	D17	DT	CP	GREENVILLE, SC	BLANK0000024830	246.8
Yes	WVVA	D17	DT	CP	BLUEFIELD, WV	BLANK0000027470	121.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D16  
Latitude: 36 22 31.00 N (NAD83)  
Longitude: 80 22 25.00 W  
Height AMSL: 891.5 m  
HAAT: 571.9 m  
Peak ERP: 1000 kW  
Antenna: DIE TFU-30DSC C135 20180309 0.0 deg  
Elev Pattn: Generic  
Elec Tilt: 1.00

38.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	387 kW	561.5 m	114.0 km
45.0	915	603.5	124.7
90.0	986	533.7	121.1
135.0	821	602.0	123.5
180.0	914	582.2	123.4
225.0	990	596.4	125.1
270.0	654	564.3	119.0
315.0	255	531.9	108.3

ERP exceeds maximum  
ERP: 1000 kW    ERP maximum: 363 kW

Distance to Canadian border: 614.6 km

Distance to Mexican border: 1948.0 km



**Table 1    WXII-TV OET Bulletin 69 Interference Study**  
(page 2 of 9)



Conditions at FCC monitoring station: Laurel MD  
Bearing: 44.1 degrees    Distance: 439.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 288.5 degrees    Distance: 2201.3 km

No land mobile station failures found

Study cell size: 2.00 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%

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Interference to BLANK0000034509 APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W21CK-D	D15	DC	APP	CHARLOTTE, NC	BLANK0000034509	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	138.4 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	138.4
	WHKY-TV	D14	DD	CP	HICKORY, NC	BLANK0000024614	72.2
	WRAZ	D15	DT	CP	RALEIGH, NC	BLANK0000034036	219.2
	WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	122.9
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
5258.3    1,730,839		5222.3    1,728,486		4884.3    1,681,539		4884.3    1,681,539	0.00    0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WXII-TV D16 DT BL		0.0    0		0.0    0			
WXII-TV D16 DT APP		4.0    22				0.0    0	
WHKY-TV D14 DD CP		28.3    5,201		20.2    4,543		20.2    4,543	
WRAZ D15 DT CP		111.6    7,855		71.7    4,137		71.7    4,137	
WLTX D15 DT CP		238.0    37,609		206.2    34,549		202.1    34,527	

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Interference to BLANK0000034509 APP scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W21CK-D	D15	DC	APP	CHARLOTTE, NC	BLANK0000034509	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	138.4 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	138.4
	WHKY-TV	D14	DD	APP	HICKORY, NC	BLANK0000034548	41.6
	WRAZ	D15	DT	CP	RALEIGH, NC	BLANK0000034036	219.2
	WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	122.9
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
5258.3    1,730,839		5222.3    1,728,486		4633.9    1,635,969		4633.9    1,635,969	0.00    0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WXII-TV D16 DT BL		0.0    0		0.0    0			
WXII-TV D16 DT APP		4.0    22				0.0    0	
WHKY-TV D14 DD APP		298.7    52,568		270.6    50,113		270.6    50,113	
WRAZ D15 DT CP		111.6    7,855		51.7    2,340		51.7    2,340	
WLTX D15 DT CP		238.0    37,609		206.2    34,549		202.1    34,527	

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Interference to BLANK0000034036 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WRAZ	D15	DT	CP	RALEIGH, NC	BLANK0000034036	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	183.3 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	183.3
	WRDC	D14	DT	CP	DURHAM, NC	BLANK0000027404	0.7
	W21CK-D	D15	DC	CP	CHARLOTTE, NC	BLANK0000027832	219.2

**Table 1    WXII-TV OET Bulletin 69 Interference Study**  
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WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	268.9
WFDC-DT	D15	DT	LIC	ARLINGTON, VA	BLANK0000041206	384.8
WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	161.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
49981.2	3,904,573	49721.7	3,896,733	49089.9	3,812,183	48993.8	3,796,262	0.20    0.42

Undesired		Total IX		Unique IX, before		Unique IX, after	
WXII-TV D16 DT BL	340.5	78,910		328.5	78,423		
WXII-TV D16 DT APP	436.7	94,831				424.6	94,344
WRDC D14 DT CP	52.1	1,735		52.1	1,735	52.1	1,735
W21CK-D D15 DC CP	4.0	43		0.0	0	0.0	0
WLTX D15 DT CP	116.2	2,350		100.2	1,820	100.2	1,820
WFDC-DT D15 DT LIC	47.7	682		47.7	682	47.7	682
WPXU-TV D16 DT CP	87.4	1,360		87.4	1,360	87.4	1,360

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Interference to BLANK0000034036 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WRAZ	D15	DT	CP	RALEIGH, NC	BLANK0000034036	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	183.3 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	183.3
	WRDC	D14	DT	APP	DURHAM, NC	BLANK0000034511	0.7
	W21CK-D	D15	DC	CP	CHARLOTTE, NC	BLANK0000027832	219.2
	WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	268.9
	WFDC-DT	D15	DT	LIC	ARLINGTON, VA	BLANK0000041206	384.8
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	161.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
49981.2	3,904,573	49721.7	3,896,733	48989.6	3,809,033	48893.5	3,793,112	0.20    0.42

Undesired		Total IX		Unique IX, before		Unique IX, after	
WXII-TV D16 DT BL	340.5	78,910		328.5	78,423		
WXII-TV D16 DT APP	436.7	94,831				424.6	94,344
WRDC D14 DT APP	152.3	4,885		152.3	4,885	152.3	4,885
W21CK-D D15 DC CP	4.0	43		0.0	0	0.0	0
WLTX D15 DT CP	116.2	2,350		100.2	1,820	100.2	1,820
WFDC-DT D15 DT LIC	47.7	682		47.7	682	47.7	682
WPXU-TV D16 DT CP	87.4	1,360		87.4	1,360	87.4	1,360

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Interference to BLANK0000034036 CP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WRAZ	D15	DT	CP	RALEIGH, NC	BLANK0000034036	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	183.3 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	183.3
	WRDC	D14	DT	CP	DURHAM, NC	BLANK0000027404	0.7
	W21CK-D	D15	DC	APP	CHARLOTTE, NC	BLANK0000034509	219.2
	WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	268.9
	WFDC-DT	D15	DT	LIC	ARLINGTON, VA	BLANK0000041206	384.8
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	161.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
49981.2	3,904,573	49721.7	3,896,733	49085.9	3,812,158	48989.7	3,796,237	0.20    0.42

Undesired		Total IX		Unique IX, before		Unique IX, after	
WXII-TV D16 DT BL	340.5	78,910		312.4	76,684		
WXII-TV D16 DT APP	436.7	94,831				408.5	92,605
WRDC D14 DT CP	52.1	1,735		52.1	1,735	52.1	1,735
W21CK-D D15 DC APP	60.3	2,716		4.0	25	4.0	25
WLTX D15 DT CP	116.2	2,350		72.1	1,215	72.1	1,215
WFDC-DT D15 DT LIC	47.7	682		47.7	682	47.7	682
WPXU-TV D16 DT CP	87.4	1,360		87.4	1,360	87.4	1,360

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Interference to BLANK0000034036 CP scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WRAZ	D15	DT	CP	RALEIGH, NC	BLANK0000034036	

**Table 1 WXII-TV OET Bulletin 69 Interference Study**  
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Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	183.3 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	183.3
	WRDC	D14	DT	APP	DURHAM, NC	BLANK0000034511	0.7
	W21CK-D	D15	DC	APP	CHARLOTTE, NC	BLANK0000034509	219.2
	WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	268.9
	WFDC-DT	D15	DT	LIC	ARLINGTON, VA	BLANK0000041206	384.8
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	161.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
49981.2 3,904,573	49721.7 3,896,733	48985.6 3,809,008	48889.5 3,793,087	0.20 0.42

Undesired	Total IX	Unique IX, before	Unique IX, after
WXII-TV D16 DT BL	340.5 78,910	312.4 76,684	
WXII-TV D16 DT APP	436.7 94,831		408.5 92,605
WRDC D14 DT APP	152.3 4,885	152.3 4,885	152.3 4,885
W21CK-D D15 DC APP	60.3 2,716	4.0 25	4.0 25
WLTX D15 DT CP	116.2 2,350	72.1 1,215	72.1 1,215
WFDC-DT D15 DT LIC	47.7 682	47.7 682	47.7 682
WPXU-TV D16 DT CP	87.4 1,360	87.4 1,360	87.4 1,360

Interference to BLANK0000025028 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJPM-TV	D16	DT	CP	FLORENCE, SC	BLANK0000025028	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	239.8 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	239.8
	W21CK-D	D15	DC	CP	CHARLOTTE, NC	BLANK0000027832	145.4
	WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	96.0
	WAGT-CD	D16	DC	LIC	AUGUSTA, GA	BLANK0000001455	229.7
	WSAV-TV	D16	DT	CP	SAVANNAH, GA	BLANK0000034780	286.2
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	212.2
	WTAT-TV	D17	DT	CP	CHARLESTON, SC	BLANK0000027762	149.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
17209.3 623,965	17197.3 623,813	16926.3 613,047	16854.7 610,471	0.42 0.42

Undesired	Total IX	Unique IX, before	Unique IX, after
WXII-TV D16 DT BL	151.1 8,553	103.2 5,146	
WXII-TV D16 DT APP	238.6 11,304		174.8 7,722
WLTX D15 DT CP	139.8 3,076	87.9 1,753	75.9 1,665
WAGT-CD D16 DC LIC	4.0 73	0.0 0	0.0 0
WSAV-TV D16 DT CP	40.0 1,191	0.0 0	0.0 0
WPXU-TV D16 DT CP	43.9 3,457	4.0 90	4.0 90
WTAT-TV D17 DT CP	16.1 86	16.1 86	16.1 86

Interference to BLANK0000025028 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJPM-TV	D16	DT	CP	FLORENCE, SC	BLANK0000025028	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	239.8 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	239.8
	W21CK-D	D15	DC	CP	CHARLOTTE, NC	BLANK0000027832	145.4
	WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	96.0
	WAGT-CD	D16	DC	LIC	AUGUSTA, GA	BLANK0000001455	229.7
	WSAV-TV	D16	DT	CP	SAVANNAH, GA	BLANK0000034780	286.2
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	212.2
	WTAT-TV	D17	DT	APP	CHARLESTON, SC	BLANK0000034503	149.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
17209.3 623,965	17197.3 623,813	16910.2 612,794	16838.6 610,218	0.42 0.42

Undesired	Total IX	Unique IX, before	Unique IX, after
WXII-TV D16 DT BL	151.1 8,553	103.2 5,146	
WXII-TV D16 DT APP	238.6 11,304		174.8 7,722
WLTX D15 DT CP	139.8 3,076	87.9 1,753	75.9 1,665
WAGT-CD D16 DC LIC	4.0 73	0.0 0	0.0 0
WSAV-TV D16 DT CP	40.0 1,191	0.0 0	0.0 0
WPXU-TV D16 DT CP	43.9 3,457	4.0 90	4.0 90

**Table 1    WXII-TV OET Bulletin 69 Interference Study**  
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WTAT-TV D17 DT APP                      32.2                      339                      32.2                      339                      32.2                      339

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Interference to BLANK0000025028 CP scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJPM-TV	D16	DT	CP	FLORENCE, SC	BLANK0000025028	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	239.8 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	239.8
	W21CK-D	D15	DC	CP	CHARLOTTE, NC	BLANK0000027832	145.4
	WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	96.0
	WAGT-CD	D16	DC	CP	AUGUSTA, GA	BLANK0000035762	216.7
	WSAV-TV	D16	DT	CP	SAVANNAH, GA	BLANK0000034780	286.2
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	212.2
	WTAT-TV	D17	DT	CP	CHARLESTON, SC	BLANK0000027762	149.0
-----							
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	17209.3    623,965	17197.3	623,813	16926.3	613,047	16854.7    610,471	0.42    0.42
-----							
Undesired			Total IX	Unique IX, before		Unique IX, after	
WXII-TV D16 DT BL	151.1		8,553	103.2		5,146	
WXII-TV D16 DT APP	238.6		11,304			174.8	7,722
WLTX D15 DT CP	139.8		3,076	87.9		1,753	75.9    1,665
WAGT-CD D16 DC CP	8.0		118	0.0		0	0.0    0
WSAV-TV D16 DT CP	40.0		1,191	0.0		0	0.0    0
WPXU-TV D16 DT CP	43.9		3,457	4.0		90	4.0    90
WTAT-TV D17 DT CP	16.1		86	16.1		86	16.1    86

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Interference to BLANK0000025028 CP scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJPM-TV	D16	DT	CP	FLORENCE, SC	BLANK0000025028	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	239.8 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	239.8
	W21CK-D	D15	DC	CP	CHARLOTTE, NC	BLANK0000027832	145.4
	WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	96.0
	WAGT-CD	D16	DC	CP	AUGUSTA, GA	BLANK0000035762	216.7
	WSAV-TV	D16	DT	CP	SAVANNAH, GA	BLANK0000034780	286.2
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	212.2
	WTAT-TV	D17	DT	APP	CHARLESTON, SC	BLANK0000034503	149.0
-----							
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	17209.3    623,965	17197.3	623,813	16910.2	612,794	16838.6    610,218	0.42    0.42
-----							
Undesired			Total IX	Unique IX, before		Unique IX, after	
WXII-TV D16 DT BL	151.1		8,553	103.2		5,146	
WXII-TV D16 DT APP	238.6		11,304			174.8	7,722
WLTX D15 DT CP	139.8		3,076	87.9		1,753	75.9    1,665
WAGT-CD D16 DC CP	8.0		118	0.0		0	0.0    0
WSAV-TV D16 DT CP	40.0		1,191	0.0		0	0.0    0
WPXU-TV D16 DT CP	43.9		3,457	4.0		90	4.0    90
WTAT-TV D17 DT APP	32.2		339	32.2		339	32.2    339

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Interference to BLANK0000034342 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WAPK-CD	D16	DC	CP	BRISTOL VA/KINGSPORT, TN	BLANK0000034342	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	157.9 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	157.9
	WAGT-CD	D16	DC	LIC	AUGUSTA, GA	BLANK0000001455	328.9
	WVVA	D17	DT	CP	BLUEFIELD, WV	BLANK0000027470	125.0
-----							
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	16699.8    784,208	12458.4	659,500	12338.5	653,608	12330.5    652,336	0.06    0.19
-----							
Undesired			Total IX	Unique IX, before		Unique IX, after	
WXII-TV D16 DT BL	115.9		5,892	111.9		5,892	
WXII-TV D16 DT APP	123.9		7,164			119.9	7,164

**Table 1    WXII-TV OET Bulletin 69 Interference Study**  
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WVVA D17 DT CP                      8.0                      0                      4.0                      0                      4.0                      0

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Interference to BLANK0000034472 CP scenario 1

Desired:	Call WTKR	Chan D16	Svc DT	Status CP	City, State NORFOLK, VA	File Number BLANK0000034472	Distance
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	348.7 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	348.7
	WCPB	D16	DT	CP	SALISBURY, MD	BLANK0000029877	192.8
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	268.3
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
33801.0	2,149,376	33797.0	2,149,375	33248.2	2,142,316	33244.2 2,142,316	0.01 0.00
Undesired				Total IX	Unique IX, before	Unique IX, after	
WXII-TV	D16	DT	BL	4.0	0	0.0	0
WXII-TV	D16	DT	APP	12.0	0	4.0	0
WCPB	D16	DT	CP	536.8	7,059	532.8	7,059
WPXU-TV	D16	DT	CP	12.0	0	8.0	0

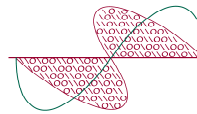
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Interference to BLANK0000034032 CP scenario 1

Desired:	Call WRAL-TV	Chan D17	Svc DT	Status CP	City, State RALEIGH, NC	File Number BLANK0000034032	Distance				
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	183.3 km				
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	183.3				
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	161.6				
	WTAT-TV	D17	DT	CP	CHARLESTON, SC	BLANK0000027762	322.3				
	WHNS	D17	DT	CP	GREENVILLE, SC	BLANK0000024830	380.2				
	WKTD-CD	D17	DC	LIC	PORTSMOUTH, VA	BLTTA20050316ACC	221.1				
	WVVA	D17	DT	CP	BLUEFIELD, WV	BLANK0000027470	295.2				
	WCCB	D18	DT	CP	CHARLOTTE, NC	BLANK0000034433	204.8				
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX				
50508.1	3,939,263	50236.6	3,933,878		49383.0	3,854,324	49299.0	3,845,734	0.17	0.22	
Undesired				Total IX		Unique IX, before		Unique IX, after			
WXII-TV	D16	DT	BL	240.3		62,558		148.2	47,099		
WXII-TV	D16	DT	APP	336.4		71,260		232.3		55,689	
WPXU-TV	D16	DT	CP	35.7		336		35.7	336		
WTAT-TV	D17	DT	CP	214.4		7,251		166.5	6,648		
WHNS	D17	DT	CP	116.3		3,807		16.1	266		
WKTD-CD	D17	DC	LIC	59.7		1,312		59.7	1,312		
WVVA	D17	DT	CP	363.3		22,928		239.0	6,379		
WCCB	D18	DT	CP	48.2		1,611		12.0	234		

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Interference to BLANK0000034032 CP scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance				
Desired:	WRAL-TV	D17	DT	CP	RALEIGH, NC	BLANK0000034032					
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	183.3 km				
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	183.3				
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	161.6				
	WTAT-TV	D17	DT	APP	CHARLESTON, SC	BLANK0000034503	322.3				
	WHNS	D17	DT	CP	GREENVILLE, SC	BLANK0000024830	380.2				
	WKTD-CD	D17	DC	LIC	PORTSMOUTH, VA	BLTTA20050316ACC	221.1				
	WVVA	D17	DT	CP	BLUEFIELD, WV	BLANK0000027470	295.2				
	WCCB	D18	DT	CP	CHARLOTTE, NC	BLANK0000034433	204.8				
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX			
50508.1	3,939,263	50236.6	3,933,878	49271.9	3,852,000	49187.8	3,843,410	0.17	0.22		
Undesired				Total IX	Unique IX, before		Unique IX, after				
WXII-TV	D16	DT	BL	240.3	62,558	148.2	47,099				
WXII-TV	D16	DT	APP	336.4	71,260			232.3	55,689		
WPXU-TV	D16	DT	CP	35.7	336	35.7	336				
WTAT-TV	D17	DT	APP	329.6	9,603	277.6	8,972	277.6	8,972		

**Table 1 WXII-TV OET Bulletin 69 Interference Study**  
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**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

WHNS D17 DT CP	116.3	3,807	16.1	266	16.1	266
WKTD-CD D17 DC LIC	59.7	1,312	59.7	1,312	59.7	1,312
WVVA D17 DT CP	363.3	22,928	239.0	6,379	227.0	6,267
WCCB D18 DT CP	48.2	1,611	12.0	234	12.0	234

Interference to BLANK0000027470 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVVA	D17	DT	CP	BLUEFIELD, WV	BLANK0000027470	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	121.4 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	121.4
	WAPK-CD	D16	DC	CP	BRISTOL VA/KINGSPORT, TN	BLANK0000034342	125.0
	WKSO-TV	D17	DT	CP	SOMERSET, KY	BLANK0000025331	322.7
	WRAL-TV	D17	DT	CP	RALEIGH, NC	BLANK0000034032	295.2
	WCET	D17	DT	CP	CINCINNATI, OH	BLANK0000026835	358.1
	WHNS	D17	DT	CP	GREENVILLE, SC	BLANK0000024830	266.9
	WLPX-TV	D18	DT	CP	CHARLESTON, WV	BLANK0000026970	144.7
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	32623.9 1,037,632	26607.9 722,666		25851.5 707,497		25855.5 707,508	-0.02 -0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WXII-TV D16 DT BL	115.5 1,531	51.8 516	
WXII-TV D16 DT APP	103.5 1,347		47.8 505
WAPK-CD D16 DC CP	83.7 3,028	67.6 2,801	67.6 2,801
WKSO-TV D17 DT CP	4.0 101	4.0 101	4.0 101
WRAL-TV D17 DT CP	379.1 8,821	283.5 7,321	291.5 7,494
WCET D17 DT CP	27.7 596	19.8 596	19.8 596
WHNS D17 DT CP	127.6 2,430	67.8 1,399	67.8 1,399
WLPX-TV D18 DT CP	146.3 585	138.4 585	138.4 585

Interference to BLANK0000027470 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVVA	D17	DT	CP	BLUEFIELD, WV	BLANK0000027470	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	121.4 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	121.4
	WAPK-CD	D16	DC	CP	BRISTOL VA/KINGSPORT, TN	BLANK0000034342	125.0
	WKSO-TV	D17	DT	APP	SOMERSET, KY	BLANK0000034631	322.7
	WRAL-TV	D17	DT	CP	RALEIGH, NC	BLANK0000034032	295.2
	WCET	D17	DT	CP	CINCINNATI, OH	BLANK0000026835	358.1
	WHNS	D17	DT	CP	GREENVILLE, SC	BLANK0000024830	266.9
	WLPX-TV	D18	DT	CP	CHARLESTON, WV	BLANK0000026970	144.7
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	32623.9 1,037,632	26607.9 722,666		25847.5 707,497		25851.5 707,508	-0.02 -0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WXII-TV D16 DT BL	115.5 1,531	51.8 516	
WXII-TV D16 DT APP	103.5 1,347		47.8 505
WAPK-CD D16 DC CP	83.7 3,028	67.6 2,801	67.6 2,801
WKSO-TV D17 DT APP	8.0 101	8.0 101	8.0 101
WRAL-TV D17 DT CP	379.1 8,821	283.5 7,321	291.5 7,494
WCET D17 DT CP	27.7 596	19.8 596	19.8 596
WHNS D17 DT CP	127.6 2,430	67.8 1,399	67.8 1,399
WLPX-TV D18 DT CP	146.3 585	138.4 585	138.4 585

Interference to BLANK0000027470 CP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVVA	D17	DT	CP	BLUEFIELD, WV	BLANK0000027470	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	121.4 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	121.4
	WAPK-CD	D16	DC	CP	BRISTOL VA/KINGSPORT, TN	BLANK0000034342	125.0
	WKSO-TV	D17	DT	CP	SOMERSET, KY	BLANK0000025331	322.7
	WRAL-TV	D17	DT	CP	RALEIGH, NC	BLANK0000034032	295.2
	WCET	D17	DT	CP	CINCINNATI, OH	BLANK0000026835	358.1



**Table 1 WXII-TV OET Bulletin 69 Interference Study**  
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WHNS		D17	DT	CP	GREENVILLE, SC		BLANK0000024830		266.9	
WLPX-TV		D18	DT	APP	CHARLESTON, WV		BLANK0000034886		144.7	
Service area		Terrain-limited			IX-free, before		IX-free, after		Percent New IX	
32623.9	1,037,632	26607.9		722,666	25831.7	707,432	25835.7	707,443	-0.02	-0.00
Undesired				Total IX		Unique IX, before		Unique IX, after		
WXII-TV	D16	DT	BL	115.5	1,531	51.8	516			
WXII-TV	D16	DT	APP	103.5	1,347			47.8	505	
WAPK-CD	D16	DC	CP	83.7	3,028	67.6	2,801	67.6	2,801	
WKSO-TV	D17	DT	CP	4.0	101	4.0	101	4.0	101	
WRAL-TV	D17	DT	CP	379.1	8,821	283.5	7,321	291.5	7,494	
WCET	D17	DT	CP	27.7	596	19.8	596	19.8	596	
WHNS	D17	DT	CP	127.6	2,430	67.8	1,399	67.8	1,399	
WLPX-TV	D18	DT	APP	166.1	650	158.2	650	158.2	650	

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Interference to BLANK0000027470 CP scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVVA	D17	DT	CP	BLUEFIELD, WV	BLANK0000027470	
Undesireds:	WXII-TV	D16	DT	BL	WINSTON-SALEM, NC	DTVBL53921	121.4 km
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	121.4
	WAPK-CD	D16	DC	CP	BRISTOL VA/KINGSPORT, TN	BLANK0000034342	125.0
	WKSO-TV	D17	DT	APP	SOMERSET, KY	BLANK0000034631	322.7
	WRAL-TV	D17	DT	CP	RALEIGH, NC	BLANK0000034032	295.2
	WCET	D17	DT	CP	CINCINNATI, OH	BLANK0000026835	358.1
	WHNS	D17	DT	CP	GREENVILLE, SC	BLANK0000024830	266.9
	WLPX-TV	D18	DT	APP	CHARLESTON, WV	BLANK0000034886	144.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
32623.9	1,037,632	26607.9	722,666	25827.7	707,432	25831.7	707,443	-0.02	-0.00
Undesired		Total IX		Unique IX, before		Unique IX, after			
WXII-TV D16 DT BL	115.5	1,531	51.8	516					
WXII-TV D16 DT APP	103.5	1,347				47.8	505		
WAPK-CD D16 DC CP	83.7	3,028	67.6	2,801		67.6	2,801		
WKSO-TV D17 DT APP	8.0	101	8.0	101		8.0	101		
WRAL-TV D17 DT CP	379.1	8,821	283.5	7,321		291.5	7,494		
WCET D17 DT CP	27.7	596	19.8	596		19.8	596		
WHNS D17 DT CP	127.6	2,430	67.8	1,399		67.8	1,399		
WLPX-TV D18 DT APP	166.1	650	158.2	650		158.2	650		

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Interference to proposal scenario 1  
1.55% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	
Undesireds:	W21CK-D	D15	DC	CP	CHARLOTTE, NC	BLANK0000027832	138.4 km
	WRAZ	D15	DT	CP	RALEIGH, NC	BLANK0000034036	183.3
	WAGT-CD	D16	DC	LIC	AUGUSTA, GA	BLANK0000001455	356.2
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	335.7
	WJPM-TV	D16	DT	CP	FLORENCE, SC	BLANK0000025028	239.8
	WAPK-CD	D16	DC	CP	BRISTOL VA/KINGSPORT, TN	BLANK0000034342	157.9
	WTKR	D16	DT	CP	NORFOLK, VA	BLANK0000034472	348.7
	WRAL-TV	D17	DT	CP	RALEIGH, NC	BLANK0000034032	183.3
	WVVA	D17	DT	CP	BLUEFIELD, WV	BLANK0000027470	121.4

Service area		Terrain-limited		IX-free		Percent IX	
45264.5	3,630,551	42015.9	3,302,717	40695.4	3,251,495	3.14	1.55
Undesired		Total IX		Unique IX		Prcnt Unique IX	
WRAZ D15 DT CP	405.7	14,498	0.0	0		0.00	0.00
WPXU-TV D16 DT CP	92.7	2,834	4.0	7		0.01	0.00
WJPM-TV D16 DT CP	294.7	18,957	238.2	16,101		0.57	0.49
WAPK-CD D16 DC CP	347.8	10,818	299.7	9,508		0.71	0.29
WTKR D16 DT CP	116.1	2,899	88.0	2,048		0.21	0.06
WRAL-TV D17 DT CP	506.1	20,020	100.4	5,522		0.24	0.17
WVVA D17 DT CP	128.1	569	92.1	553		0.22	0.02

**Table 1    WXII-TV OET Bulletin 69 Interference Study**  
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Interference to proposal scenario 2  
\*\*MX: 1.73% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WXII-TV	D16	DT	APP	WINSTON-SALEM, NC	WXII-TV 1000kW C135	
Undesireds:	W21CK-D	D15	DC	APP	CHARLOTTE, NC	BLANK0000034509	138.4 km
	WRAZ	D15	DT	CP	RALEIGH, NC	BLANK0000034036	183.3
	WAGT-CD	D16	DC	LIC	AUGUSTA, GA	BLANK0000001455	356.2
	WPXU-TV	D16	DT	CP	JACKSONVILLE, NC	BLANK0000026976	335.7
	WJPM-TV	D16	DT	CP	FLORENCE, SC	BLANK0000025028	239.8
	WAPK-CD	D16	DC	CP	BRISTOL VA/KINGSPORT, TN	BLANK0000034342	157.9
	WTKR	D16	DT	CP	NORFOLK, VA	BLANK0000034472	348.7
	WRAL-TV	D17	DT	CP	RALEIGH, NC	BLANK0000034032	183.3
	WVVA	D17	DT	CP	BLUEFIELD, WV	BLANK0000027470	121.4

Service area	Terrain-limited	IX-free	Percent IX
45264.5    3,630,551	42015.9    3,302,717	40691.3    3,245,561	3.15    1.73

Undesired	Total IX	Unique IX	Prcnt Unique IX
W21CK-D D15 DC APP	4.0    5,934	4.0    5,934	0.01    0.18
WRAZ D15 DT CP	405.7    14,498	0.0    0	0.00    0.00
WPXU-TV D16 DT CP	92.7    2,834	4.0    7	0.01    0.00
WJPM-TV D16 DT CP	294.7    18,957	238.2    16,101	0.57    0.49
WAPK-CD D16 DC CP	347.8    10,818	299.7    9,508	0.71    0.29
WTKR D16 DT CP	116.1    2,899	88.0    2,048	0.21    0.06
WRAL-TV D17 DT CP	506.1    20,020	100.4    5,522	0.24    0.17
WVVA D17 DT CP	128.1    569	92.1    553	0.22    0.02

**Channel and  
Facility  
Information**

Section	Question	Response
Proposed Community of License	Facility ID	53921
	State	North Carolina
	City	WINSTON-SALEM
	DTV Channel	16
Facility Type	Facility Type	Commercial
	Station Type	Main
Zone	Zone	2

**Antenna Location  
Data**

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1008241
Coordinates (NAD83)	Latitude	36° 22' 31.0" N+
	Longitude	080° 22' 25.0" W-
	Structure Type	TOWER-A free standing or guyed struct
	Overall Structure Height	208.1 meters
	Support Structure Height	176.6 meters
	Ground Elevation (AMSL)	731.5 meters
Antenna Data	Height of Radiation Center Above Ground Level	160 meters
	Height of Radiation Center Above Average Terrain	571.9 meters
	Height of Radiation Center Above Mean Sea Level	891.5 meters
	Effective Radiated Power	1000 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	TFU-30DSC-R C135
	Rotation	0 degrees
	Electrical Beam Tilt	1
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Horizontal
DTV and DTS: Elevation 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	

### Directional Antenna Relative Field Values (Pre-rotated Pattern)

Degree	V <sub>A</sub> (Authorized Value)	Degree	V <sub>A</sub> (Authorized Value)	Degree	V <sub>A</sub> (Authorized Value)	Degree	V <sub>A</sub> (Authorized Value)
0	0.622	90	0.993	180	0.956	270	0.809
10	0.716	100	0.978	190	0.978	280	0.716
20	0.809	110	0.956	200	0.993	290	0.622
30	0.886	120	0.932	210	0.999	300	0.549
40	0.940	130	0.912	220	0.999	310	0.511
50	0.973	140	0.900	230	0.991	320	0.498
60	0.991	150	0.900	240	0.973	330	0.498
70	0.999	160	0.912	250	0.940	340	0.511
80	0.999	170	0.932	260	0.886	350	0.549

### Additional Azimuths

Degree	V <sub>A</sub>
76	1.000
214	1.000