



**STATEMENT OF JOHN E. HIDLE, P.E.  
IN SUPPORT OF A REQUEST FOR A  
SPECIAL TEMPORARY AUTHORIZATION FOR  
POST-TRANSITION DIGITAL OPERATION  
WDKY-DT - DANVILLE, KENTUCKY  
DTV - CH. 31 - 1000 kW - 351.9 m HAAT**

Prepared for: WDKY Licensee, LLC

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Professional Engineer in the Commonwealth of Virginia, License No. 7418, and in the State of New York, License No. 63418.

**GENERAL**

This office has been authorized by WDKY Licensee, LLC, licensee of WDKY-TV, channel 56, and permittee of WDKY-DT, channel 31, both allotted to Danville, Kentucky, to prepare this statement and the associated exhibits in support of a request for a Special Temporary Authorization (STA) to commence digital operation on channel 31 on June 13, 2009, as authorized in its construction permit, BPCDT-20090323AEA, with one exception. WDKY-DT seeks temporary authority to begin its digital operation on channel 31 utilizing its existing analog directional antenna while awaiting the delivery and installation of its authorized omni-directional antenna.

**PROPOSED TEMPORARY DIRECTIONAL ANTENNA**

WDKY-DT is authorized to install a new Dielectric model TFU-30GTH O4 custom elliptically polarized omni-directional transmitting antenna with its center of radiation

located at a height above ground of 343.2 meters, and a height above average terrain of 351.9 meters. However, in order to commence its post-transition digital operation on channel 31 on June 13, 2009, WDKY must utilize its existing Dielectric Model TUA-C4SP-14/42H-1-T directional panel type antenna. The antenna manufacturer's horizontal plane radiation azimuth pattern effective for channel 31 is shown in exhibit 1 and is tabulated in exhibit 2.

### **PREDICTED COVERAGE CONTOURS**

The predicted coverage contours were calculated in accordance with the method described in Section 73.684 of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), proposed Effective Radiated Power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, was determined using the National Geophysical Data Center Thirty Second Point Database (TPG-0050) as prescribed in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. Exhibit 3 shows the predicted Noise Limited (41 dBu) contour, and the principal community (48 dBu) contour. The 48 dBu contour completely encompasses the principal community of license, Danville, Kentucky. The proposed STA facility wholly encompasses the analog service area of WDKY-TV thereby serving 100% of the current analog viewers.

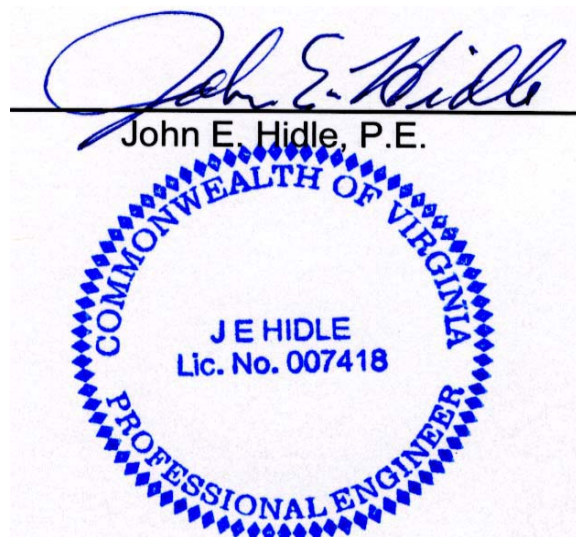
### **ALLOCATION CONSIDERATIONS**

The instant request for STA seeks to initially operate its authorized facility except for the temporary use of a directional antenna pending the receipt and installation of its authorized omni-directional antenna. The request for STA therefore does not propose to extend the authorized coverage area in any direction. A study, using the Commission's application processing software, confirms that the instant proposal will cause no prohibited interference to any post-transition facility.

### **SUMMARY**

It is submitted that WDKY-DT's instant request for STA in order to initiate digital broadcasting on its post-transition channel 31 utilizing a temporary directional antenna, as described herein, complies with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement and the attached exhibits were prepared by me, or under my direct supervision, and are believed to be true and correct to the best of my knowledge and belief.

DATED: May 20, 2009





Proposal Number

Date

Call Letters

Location

Customer

Antenna Type

11 Mar 2009

WDKY

Danville, KY

TUA-C4SP-14/42H-1-T

Revision

Exhibit 1

Channel

31

### AZIMUTH PATTERN

Gain

Calculated / Measured

2.38 (3.77 dB)

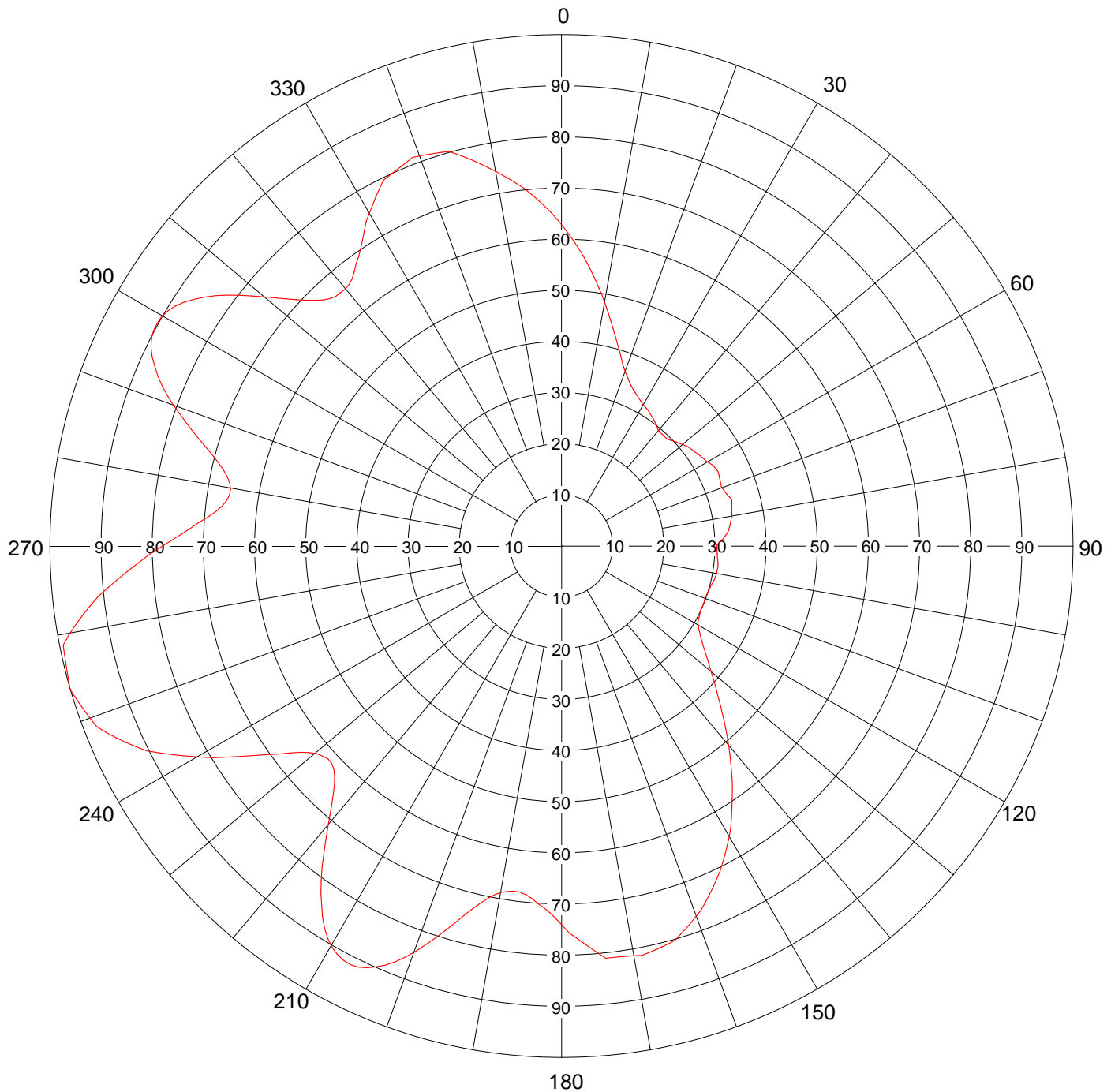
Calculated

Frequency

Drawing #

575 MHz

TUA-C4SP-5750



Remarks:



Proposal Number

Revision

Date

11 Mar 2009

Exhibit 2

Call Letters

WDKY

Channel

31

Location

Danville, KY

Customer

Antenna Type

TUA-C4SP-14/42H-1-T

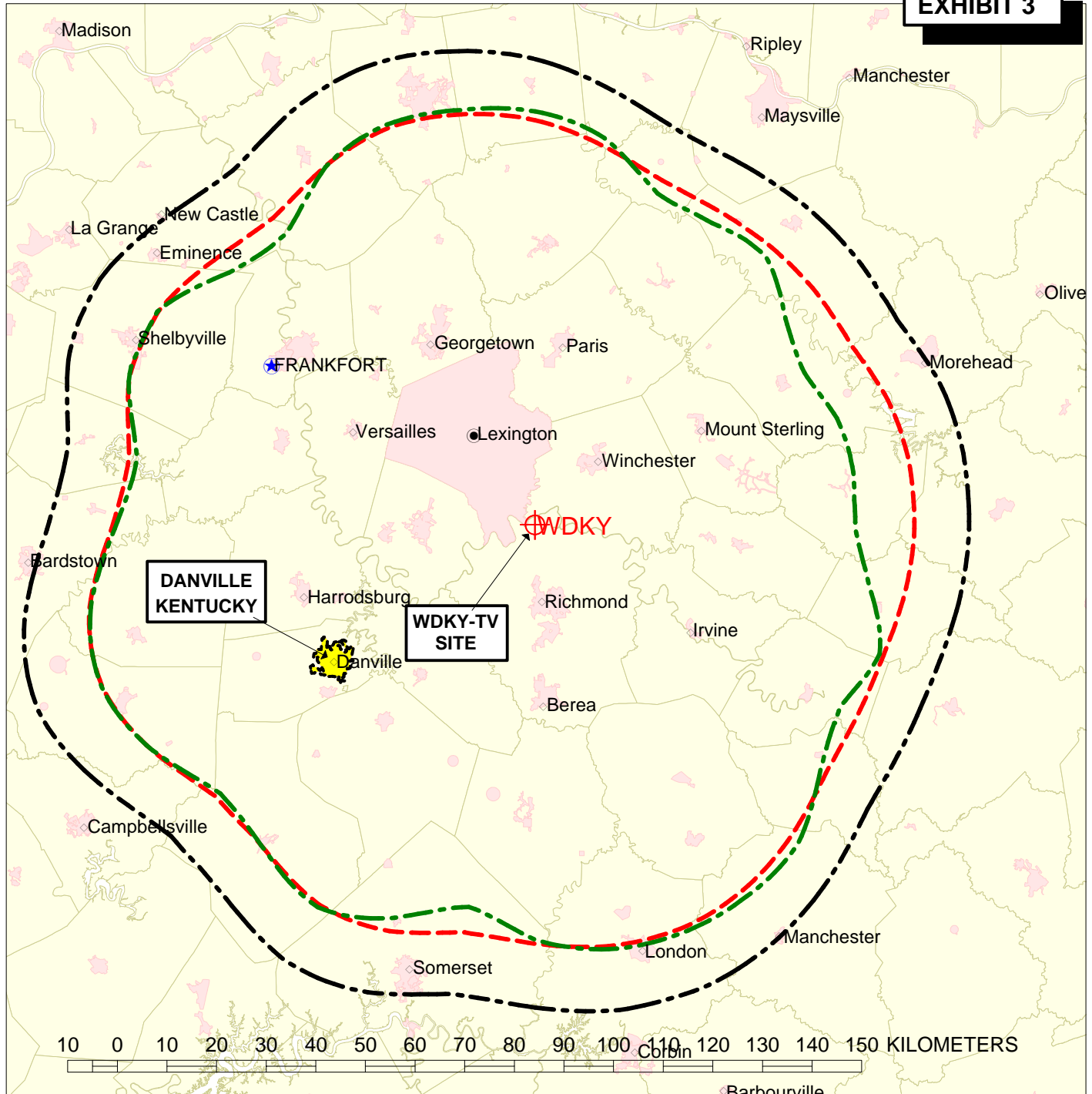
## TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #

TUA-C4SP-5750

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.628	45	0.298	90	0.301	135	0.435	180	0.737	225	0.629	270	0.787	315	0.683
1	0.614	46	0.300	91	0.301	136	0.449	181	0.724	226	0.621	271	0.766	316	0.673
2	0.600	47	0.303	92	0.302	137	0.462	182	0.712	227	0.616	272	0.746	317	0.665
3	0.586	48	0.306	93	0.303	138	0.476	183	0.703	228	0.616	273	0.728	318	0.661
4	0.572	49	0.308	94	0.303	139	0.491	184	0.696	229	0.620	274	0.712	319	0.660
5	0.557	50	0.311	95	0.304	140	0.504	185	0.687	230	0.625	275	0.695	320	0.660
6	0.542	51	0.314	96	0.305	141	0.519	186	0.681	231	0.634	276	0.680	321	0.662
7	0.527	52	0.316	97	0.305	142	0.533	187	0.677	232	0.648	277	0.670	322	0.667
8	0.512	53	0.317	98	0.305	143	0.548	188	0.677	233	0.664	278	0.662	323	0.675
9	0.497	54	0.319	99	0.304	144	0.563	189	0.679	234	0.684	279	0.658	324	0.685
10	0.482	55	0.321	100	0.304	145	0.577	190	0.682	235	0.703	280	0.658	325	0.694
11	0.467	56	0.323	101	0.303	146	0.592	191	0.689	236	0.724	281	0.661	326	0.704
12	0.453	57	0.324	102	0.302	147	0.607	192	0.699	237	0.746	282	0.669	327	0.716
13	0.439	58	0.326	103	0.301	148	0.622	193	0.711	238	0.770	283	0.680	328	0.730
14	0.425	59	0.328	104	0.299	149	0.637	194	0.725	239	0.795	284	0.693	329	0.744
15	0.413	60	0.331	105	0.298	150	0.650	195	0.742	240	0.816	285	0.709	330	0.754
16	0.401	61	0.334	106	0.297	151	0.663	196	0.761	241	0.838	286	0.727	331	0.765
17	0.390	62	0.336	107	0.296	152	0.676	197	0.780	242	0.860	287	0.747	332	0.776
18	0.379	63	0.337	108	0.295	153	0.689	198	0.799	243	0.881	288	0.766	333	0.787
19	0.369	64	0.338	109	0.294	154	0.701	199	0.818	244	0.903	289	0.786	334	0.798
20	0.362	65	0.337	110	0.295	155	0.712	200	0.837	245	0.918	290	0.806	335	0.801
21	0.355	66	0.335	111	0.296	156	0.723	201	0.855	246	0.933	291	0.825	336	0.805
22	0.349	67	0.334	112	0.296	157	0.734	202	0.871	247	0.947	292	0.842	337	0.808
23	0.343	68	0.333	113	0.296	158	0.745	203	0.884	248	0.961	293	0.858	338	0.812
24	0.338	69	0.332	114	0.295	159	0.756	204	0.895	249	0.974	294	0.871	339	0.816
25	0.335	70	0.333	115	0.296	160	0.764	205	0.904	250	0.979	295	0.884	340	0.814
26	0.331	71	0.335	116	0.298	161	0.772	206	0.910	251	0.985	296	0.894	341	0.812
27	0.328	72	0.338	117	0.299	162	0.780	207	0.912	252	0.990	297	0.900	342	0.810
28	0.325	73	0.340	118	0.300	163	0.788	208	0.911	253	0.995	298	0.904	343	0.807
29	0.321	74	0.343	119	0.301	164	0.796	209	0.907	254	1.000	299	0.904	344	0.805
30	0.320	75	0.342	120	0.306	165	0.799	210	0.900	255	0.998	300	0.903	345	0.796
31	0.318	76	0.340	121	0.311	166	0.802	211	0.890	256	0.996	301	0.899	346	0.786
32	0.316	77	0.339	122	0.316	167	0.805	212	0.876	257	0.995	302	0.891	347	0.776
33	0.313	78	0.338	123	0.322	168	0.808	213	0.860	258	0.994	303	0.881	348	0.766
34	0.310	79	0.337	124	0.328	169	0.810	214	0.841	259	0.993	304	0.868	349	0.756
35	0.308	80	0.334	125	0.336	170	0.808	215	0.822	260	0.978	305	0.854	350	0.746
36	0.306	81	0.332	126	0.344	171	0.807	216	0.802	261	0.963	306	0.838	351	0.736
37	0.303	82	0.330	127	0.352	172	0.806	217	0.780	262	0.946	307	0.820	352	0.725
38	0.299	83	0.328	128	0.360	173	0.805	218	0.757	263	0.929	308	0.801	353	0.715
39	0.296	84	0.326	129	0.369	174	0.805	219	0.734	264	0.912	309	0.782	354	0.705
40	0.295	85	0.322	130	0.379	175	0.794	220	0.713	265	0.891	310	0.763	355	0.693
41	0.295	86	0.317	131	0.390	176	0.783	221	0.693	266	0.870	311	0.744	356	0.680
42	0.295	87	0.312	132	0.401	177	0.772	222	0.673	267	0.849	312	0.727	357	0.668
43	0.295	88	0.307	133	0.412	178	0.761	223	0.656	268	0.828	313	0.710	358	0.655
44	0.295	89	0.301	134	0.423	179	0.752	224	0.641	269	0.809	314	0.696	359	0.642

Remarks:



## PREDICTED COVERAGE CONTOURS

WDKY-DT, DANVILLE, KENTUCKY

POST-TRANSITION STA - DIRECTIONAL ANTENNA

CH. 31, 1000 kW - 351.9 m HAAT

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**Predicted Principal Community Contour**  
 F(50,90) - 48 dBu

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**Predicted Noise Limited Contour**  
 F(50,90) - 41 dBu

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**Predicted Analog Grade "B" Contour**  
 F(50,50) - 64 dBu

MAY 2009

**CARL T. JONES**  
 CORPORATION