



**STATEMENT OF JOHN E. HIDLE, P.E.  
IN SUPPORT OF AN APPLICATION TO MODIFY  
CONSTRUCTION PERMIT BPCDT-19991101AKJ  
KOKH-DT- OKLAHOMA CITY, OKLAHOMA  
DTV - CH. 24 - 1000 kW - 475.6 M HAAT**

Prepared for: KOKH 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 registered Professional Engineer in the Commonwealth of Virginia, Registration No. 7418, and in the State of New York, Registration No. 63418.

**GENERAL**

This office has been authorized by KOKH Licensee, LLC, licensee of KOKH-TV, channel 25, Oklahoma City, Oklahoma, and permittee of the paired Digital Television Allotment for KOKH-DT, channel 24, to prepare this statement, FCC Form 301, Sections III and III-D, and the associated exhibits in support of this application to modify its current authorization, construction permit BPCDT-19991101AKJ. The instant application to modify KOKH-DT's construction permit is necessary as a component of the permittee's efforts to implement its digital facility on DTV channel 24 by sharing a common antenna with KOKH-TV on channel 25. In order to physically implement KOKH-DT and KOKH-TV sharing the same antenna on the existing support structure the modifications proposed herein are required.

It is proposed herein to install a new Dielectric directional antenna, type TFU-30GTH-R 6T170 DC, to be used by both KOKH-DT and KOKH-TV. The new antenna is to be mounted on the existing tower support structure located at 35E 32' 58" N latitude, 97E 29' 18" W longitude. The existing structure is registered in the FCC's tower registration database, #1011337, and is the site specified in KOKH-DT's allotment. An application for a construction permit to authorize the use of this common antenna by KOKH-TV at this site is being concurrently submitted. The modifications, as proposed herein, will serve to further the Commission's goals in the deployment of DTV service in the United States.

#### **PROPOSED DIRECTIONAL ANTENNA**

It is proposed to install a new directional antenna, Dielectric TFU-30GTH-R 6T170 DC for common use by both KOKH-DT and KOKH-TV. Since the azimuth pattern of the proposed antenna differs from that specified in KOKH-DT's construction permit, and the proposed HAAT is slightly different, the instant application for modification of construction permit is required. The proposed directional transmitting antenna shall employ an electrical beam tilt of 0.75 degrees below the horizontal plane. The antenna manufacturer's horizontal plane azimuth radiation pattern, illustrating the proposed antenna's directional pattern characteristics is shown in Exhibit 2, and tabulated in Exhibit 3, and the vertical plane radiation pattern, illustrating the proposed antenna's radiation characteristics above and below the horizontal plane, is shown in Exhibit 4, and tabulated in Exhibit 5. A Vertical Plan Antenna Sketch is provided in Exhibit 1.

## **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), 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. The predicted principal community (48 dBu) contour completely encompasses the principal community of license, shown in Exhibit 6, as required by Section 73.625(a) of the Commission's rules. The predicted 41 dBu contour is also shown in Exhibit 6.

## **ALLOCATION CONSIDERATIONS**

### **NTSC Allocation Considerations**

An interference study was performed, using the Commission's application analysis program, tv\_process, to ensure that the proposed DTV facility is in compliance with the Commission's *de minimis* interference requirement contained in Section 73.623(c)(2) of the Commission's rules. The study showed that the DTV facility proposed herein is predicted to cause no increase in the interference population in excess of the Commission's *de minimis* criteria to any authorized NTSC television facility.

**DTV Allocation Considerations**

The same study was evaluated to determine if the proposed modification of KOKH-DT is predicted to cause any level of new prohibited interference to other authorized DTV facilities, including other DTV stations, DTV expansion construction permits, DTV allotments or pending DTV applications. The study results indicate that the instant proposal is predicted to cause no unacceptable level of new interference to the populations served by any other relevant DTV facility, and thereby is in compliance with the *de minimis* interference criteria contained in Section 73.623(c)(2) of the Commission's Rules.

**Class A Television Allocation Considerations**

As required in Section 73.623(c)(5) of the FCC's Rules, as established in the Report and Order establishing Class A Television Service, released April 4, 2000, a study of interference contour overlap was performed, based on the KOKH-DT facility proposed herein, to establish compliance with the protection requirements contained therein. The study shows that there are two class A LPTV stations potentially affected by KOKH-DT.

Class A LPTV station KOMI-LP, channel 24, licensed to Woodward, Oklahoma, is co-channel to KOKH-DT and is located 194 kilometers from KOKH-DT's site. As shown in exhibit 7, the modifications to KOKH-DT's construction permit proposed herein serve to reduce existing contour overlap of KOMI-LP's service area by KOKH-DT's current authorization. Class A LPTV station KLHO-LP, channel 17, licensed to Oklahoma City, Oklahoma, is a minus seventh adjacent channel station to KOKH-DT and is located 20.1 kilometers in a direction approximately south of KOKH-DT's site. As shown in exhibit 8,

the modifications to KOKH-DT's construction permit proposed herein serve to reduce the existing area, in which the Desired to Undesired signal ratio exceeds minus 43 dB, within KHLO-LP's service area resulting from KOKH-DT's current authorization from the present interference area of 46.8 square kilometers to a smaller interference area of 43.3 square kilometers. Therefore, as a result of the changes proposed herein, no increase in prohibited contour overlap, or increase in interference area, is predicted to occur with any LPTV station which was granted a Certificate of Eligibility for Class A Status in Public Notice DA 00-1224, Released June 2, 2000.

### **BLANKETING AND INTERMODULATION INTERFERENCE**

A number of broadcast and non-broadcast facilities are located within 10 km of the proposed KOKH-DT transmitter/antenna site. The applicant recognizes its responsibility to remedy complaints of interference created by this proposal in accordance with applicable Rules.

### **ENVIRONMENTAL CONSIDERATIONS**

#### **GENERAL**

The proposal described herein meets the criteria specified in Section 1.1306 of the FCC Rules and Regulations as an action which is categorically excluded from environmental processing. The proposed TV facility involves neither a site location specified under Section 1.1307(a)(1)-(7) of the Rules nor high intensity lighting as specified in Section 1.1307(a)(8).

### **RADIO FREQUENCY IMPACT**

Effective October 15, 1997, the FCC adopted new guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions. The guidelines are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986), and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, LLC (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The guidelines provide a maximum permissible exposure (MPE) level for occupational or "controlled" situations that apply in cases that affect the general public. The FCC Office of Engineering and Technology's technical bulletin No. 65 entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (Edition 97-01, August 1997), provides assistance in the determination of whether FCC-regulated transmitting facilities, operations or devices comply with guideline limits for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. Bulletin No. 65 contains the technical information necessary to evaluate compliance with the FCC's policies and guidelines.

The FCC's Maximum Permitted Exposure (MPE) level for "uncontrolled" environments is 0.2 milliwatts per centimeter squared ( $\text{mW}/\text{cm}^2$ ) when applied to broadcast facilities operating between 30 MHz and 300 MHz, and for broadcast facilities operating between 300 MHz and 1500 MHz, primarily UHF TV stations, is derived from the formula, (frequency/1500). The MPE level for "controlled" environments is 1.0 milliwatts per

centimeter squared ( $\text{mW}/\text{cm}^2$ ) for operations between 30 MHz and 300 MHz, and for broadcast stations operating between 300 MHz and 1500 MHz is derived from the formula,  $(\text{frequency}/300)$ . The predicted emissions of KOKH-DT channel 24 must be considered, along with the predicted emissions from other proposed and existing stations at the current site. For KOKH-DT, which will operate on television Channel 24 (530-536 MHz), the MPE is 0.355 milliwatts per centimeter squared ( $\text{mW}/\text{cm}^2$ ) in an "uncontrolled" environment and 1.777  $\text{mW}/\text{cm}^2$  in a "controlled" environment. The proposed KOKH-DT facility will operate with a maximum ERP of 1000 kW from a horizontally polarized directional transmitting antenna with a centerline height of 483.4 meters above ground level (AGL). Considering a very conservative vertical plane relative field factor of 0.3, the KOKH-DT facility is predicted to produce a power density at two meters above ground level of 0.01299  $\text{mW}/\text{cm}^2$ , which is 3.66% of the FCC guideline value for "uncontrolled" environments, and 0.731% of the FCC guideline value for "controlled" environments (see Appendix A). The total percentage of the ANSI value at the proposed site, considering the cumulative radiation of all stations at the site, is only 49.84% of the limit for "uncontrolled" environments, and 9.97% of the limit for "controlled" environments.

### **OCCUPATIONAL SAFETY**

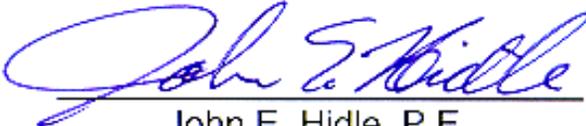
The licensee of KOKH-TV and permittee of KOKH-DT is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KOKH-DT and TV antenna. The applicant is committed to reducing power and/or ceasing operation during times of service or maintenance of the transmission systems, when necessary, to

ensure protection to personnel. As an additional safety measure, the base of the tower will be fenced to preclude casual access. In light of the above, the proposed KOKH-DT facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

**SUMMARY**

It is submitted that the instant proposal to modify KOKH-DT's construction permit, BPCDT-19991101AKJ, as described herein complies with the Rules and Regulations of the Federal Communications Commission. This statement, FCC Form 301, 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: August 6, 2002

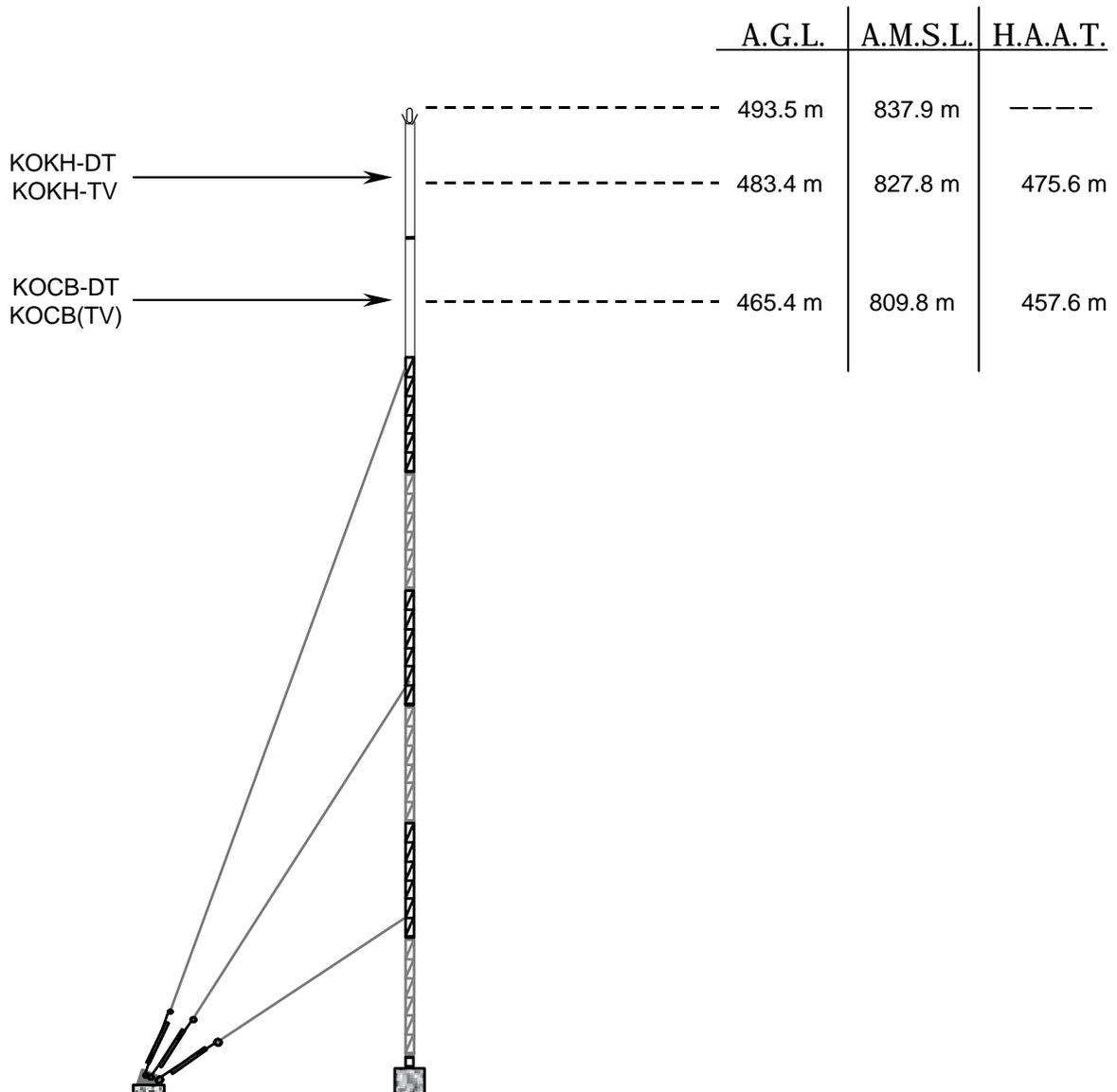
  
John E. Hidle, P.E.



**COORDINATES NAD-27**

NORTH LATITUDE: 35° 32' 58"  
WEST LONGITUDE: 97° 29' 18"

**EXHIBIT 1**



**VERTICAL PLAN ANTENNA SKETCH**

KOKH-DT - Ch. 24 - 1000 kW ERP - 475.6 m HAAT  
( DIRECTIONAL )  
OKLAHOMA CITY, OKLAHOMA  
JULY, 2002

**CARL T. JONES**  
CORPORATION

NOTE : NOT DRAWN TO SCALE



Proposal Number  
Date **20 Jun 2002**      Revision **Exhibit 2**  
Call Letters **KOKH-DT**      Channel **24**  
Location **Oklahoma City, OK**  
Customer  
Antenna Type **TFU-30GTH-R 6T170 DC**

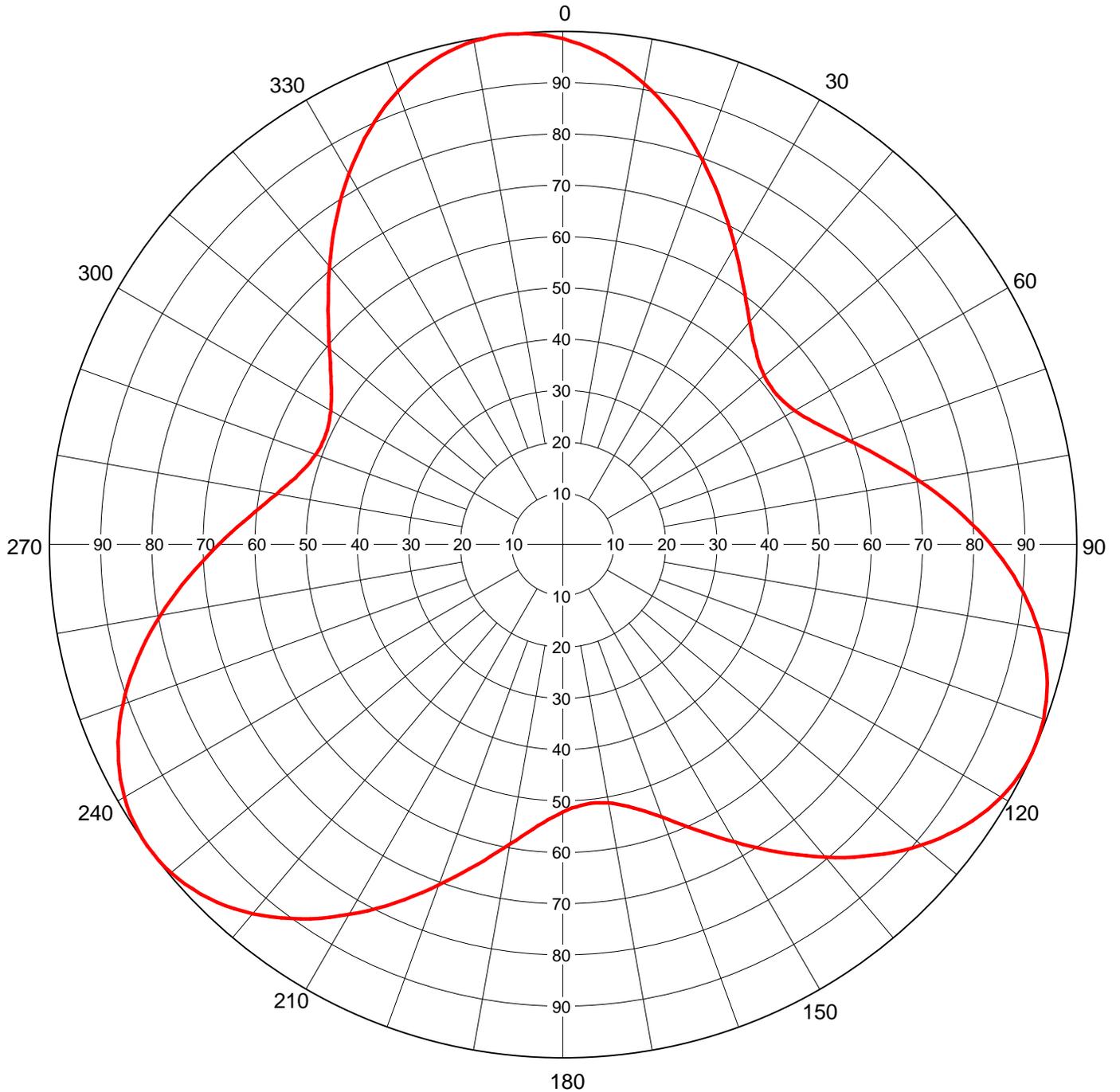
### AZIMUTH PATTERN

RMS Gain at Main Lobe  
Calculated / Measured

**1.70 (2.30 dB)**  
**Calculated**

Frequency  
Drawing #

**533 MHz**  
**TFU-6T170-25-24**



Remarks:



Proposal Number  
 Date **20 Jun 2002**      Revision **Exhibit 3**  
 Call Letters **KOKH-DT**      Channel **24**  
 Location **Oklahoma City, OK**  
 Customer  
 Antenna Type **TFU-30GTH-R 6T170 DC**

**TABULATION OF AZIMUTH PATTERN**

Azimuth Pattern Drawing # **TFU-6T170-25-24**

Angle	Field														
0	0.985	45	0.532	90	0.833	135	0.857	180	0.522	225	0.975	270	0.669	315	0.646
1	0.980	46	0.526	91	0.845	136	0.845	181	0.526	226	0.981	271	0.658	316	0.658
2	0.975	47	0.522	92	0.857	137	0.833	182	0.531	227	0.985	272	0.646	317	0.670
3	0.969	48	0.518	93	0.868	138	0.821	183	0.537	228	0.990	273	0.635	318	0.682
4	0.963	49	0.515	94	0.880	139	0.808	184	0.543	229	0.993	274	0.624	319	0.694
5	0.955	50	0.512	95	0.891	140	0.796	185	0.551	230	0.996	275	0.613	320	0.706
6	0.948	51	0.510	96	0.901	141	0.783	186	0.558	231	0.998	276	0.603	321	0.719
7	0.939	52	0.508	97	0.911	142	0.770	187	0.566	232	0.999	277	0.593	322	0.732
8	0.931	53	0.508	98	0.921	143	0.757	188	0.574	233	1.000	278	0.583	323	0.745
9	0.921	54	0.508	99	0.930	144	0.745	189	0.584	234	1.000	279	0.575	324	0.757
10	0.912	55	0.509	100	0.939	145	0.732	190	0.593	235	0.999	280	0.566	325	0.770
11	0.901	56	0.510	101	0.947	146	0.719	191	0.603	236	0.998	281	0.558	326	0.783
12	0.891	57	0.512	102	0.955	147	0.706	192	0.613	237	0.995	282	0.550	327	0.796
13	0.880	58	0.514	103	0.962	148	0.694	193	0.624	238	0.993	283	0.544	328	0.808
14	0.869	59	0.518	104	0.969	149	0.682	194	0.635	239	0.989	284	0.537	329	0.821
15	0.857	60	0.522	105	0.975	150	0.669	195	0.646	240	0.985	285	0.532	330	0.833
16	0.845	61	0.526	106	0.981	151	0.658	196	0.658	241	0.980	286	0.526	331	0.845
17	0.833	62	0.531	107	0.985	152	0.646	197	0.670	242	0.975	287	0.522	332	0.857
18	0.821	63	0.537	108	0.990	153	0.635	198	0.682	243	0.969	288	0.518	333	0.868
19	0.808	64	0.543	109	0.993	154	0.624	199	0.694	244	0.963	289	0.515	334	0.880
20	0.796	65	0.551	110	0.996	155	0.613	200	0.706	245	0.955	290	0.512	335	0.891
21	0.783	66	0.558	111	0.998	156	0.603	201	0.719	246	0.948	291	0.510	336	0.901
22	0.770	67	0.566	112	0.999	157	0.593	202	0.732	247	0.939	292	0.508	337	0.911
23	0.757	68	0.574	113	1.000	158	0.583	203	0.745	248	0.931	293	0.508	338	0.921
24	0.745	69	0.584	114	1.000	159	0.575	204	0.757	249	0.921	294	0.508	339	0.930
25	0.732	70	0.593	115	0.999	160	0.566	205	0.770	250	0.912	295	0.509	340	0.939
26	0.719	71	0.603	116	0.998	161	0.558	206	0.783	251	0.901	296	0.510	341	0.947
27	0.706	72	0.613	117	0.995	162	0.550	207	0.796	252	0.891	297	0.512	342	0.955
28	0.694	73	0.624	118	0.993	163	0.544	208	0.808	253	0.880	298	0.514	343	0.962
29	0.682	74	0.635	119	0.989	164	0.537	209	0.821	254	0.869	299	0.518	344	0.969
30	0.669	75	0.646	120	0.985	165	0.532	210	0.833	255	0.857	300	0.522	345	0.975
31	0.658	76	0.658	121	0.980	166	0.526	211	0.845	256	0.845	301	0.526	346	0.981
32	0.646	77	0.670	122	0.975	167	0.522	212	0.857	257	0.833	302	0.531	347	0.985
33	0.635	78	0.682	123	0.969	168	0.518	213	0.868	258	0.821	303	0.537	348	0.990
34	0.624	79	0.694	124	0.963	169	0.515	214	0.880	259	0.808	304	0.543	349	0.993
35	0.613	80	0.706	125	0.955	170	0.512	215	0.891	260	0.796	305	0.551	350	0.996
36	0.603	81	0.719	126	0.948	171	0.510	216	0.901	261	0.783	306	0.558	351	0.998
37	0.593	82	0.732	127	0.939	172	0.508	217	0.911	262	0.770	307	0.566	352	0.999
38	0.583	83	0.745	128	0.931	173	0.508	218	0.921	263	0.757	308	0.574	353	1.000
39	0.575	84	0.757	129	0.921	174	0.508	219	0.930	264	0.745	309	0.584	354	1.000
40	0.566	85	0.770	130	0.912	175	0.509	220	0.939	265	0.732	310	0.593	355	0.999
41	0.558	86	0.783	131	0.901	176	0.510	221	0.947	266	0.719	311	0.603	356	0.998
42	0.550	87	0.796	132	0.891	177	0.512	222	0.955	267	0.706	312	0.613	357	0.995
43	0.544	88	0.808	133	0.880	178	0.514	223	0.962	268	0.694	313	0.624	358	0.993
44	0.537	89	0.821	134	0.869	179	0.518	224	0.969	269	0.682	314	0.635	359	0.989

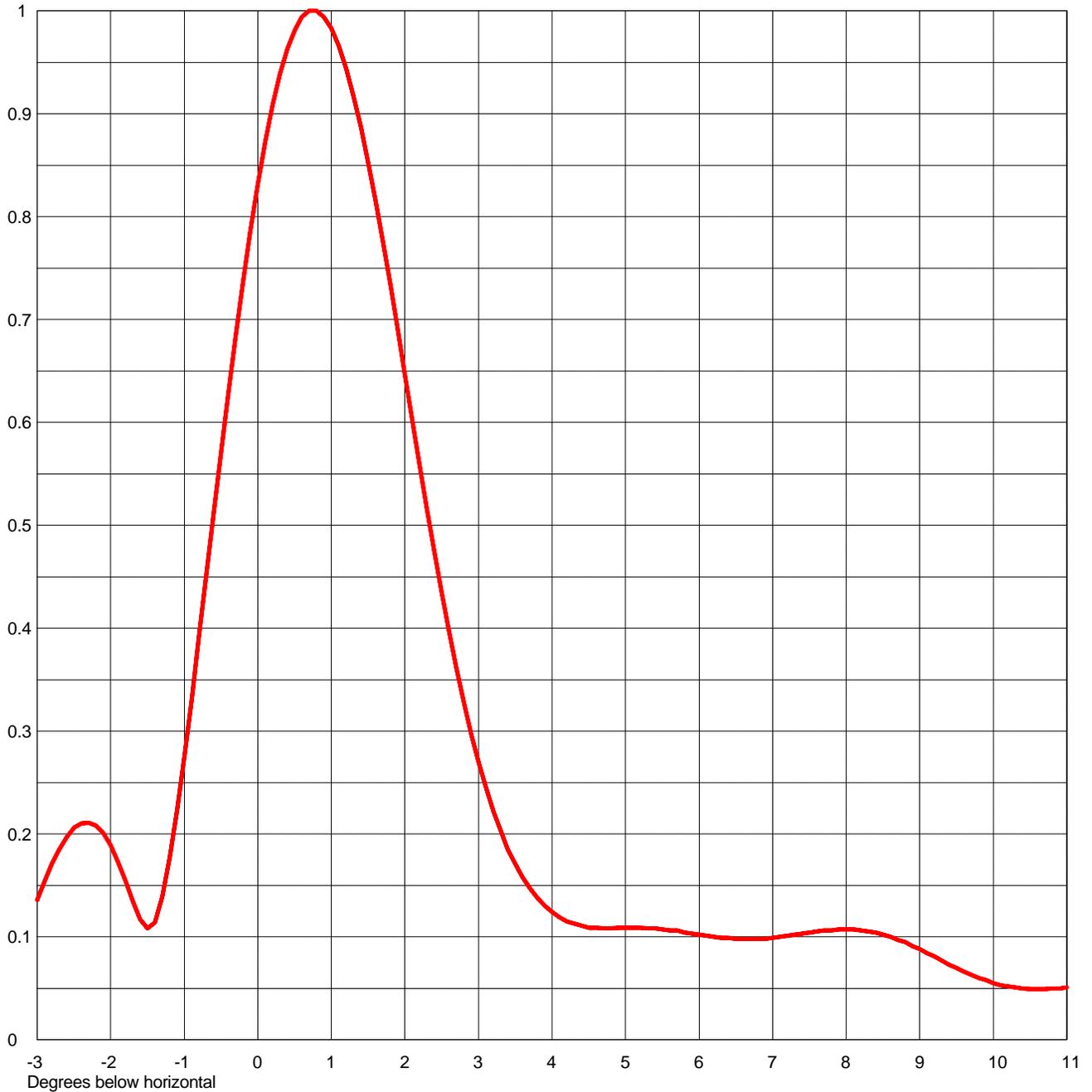
Remarks:



Proposal Number  
Date **20 Jun 2002** Revision **Exhibit 4A**  
Call Letters **KOKH-DT** Channel **24**  
Location **Oklahoma City, OK**  
Customer  
Antenna Type **TFU-30GTH-R 6T170 DC**

### ELEVATION PATTERN

RMS Gain at Main Lobe	<b>24.5 (13.89 dB)</b>	Beam Tilt	<b>0.75 Degrees</b>
RMS Gain at Horizontal	<b>17.0 (12.30 dB)</b>	Frequency	<b>533.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>30G245075</b>



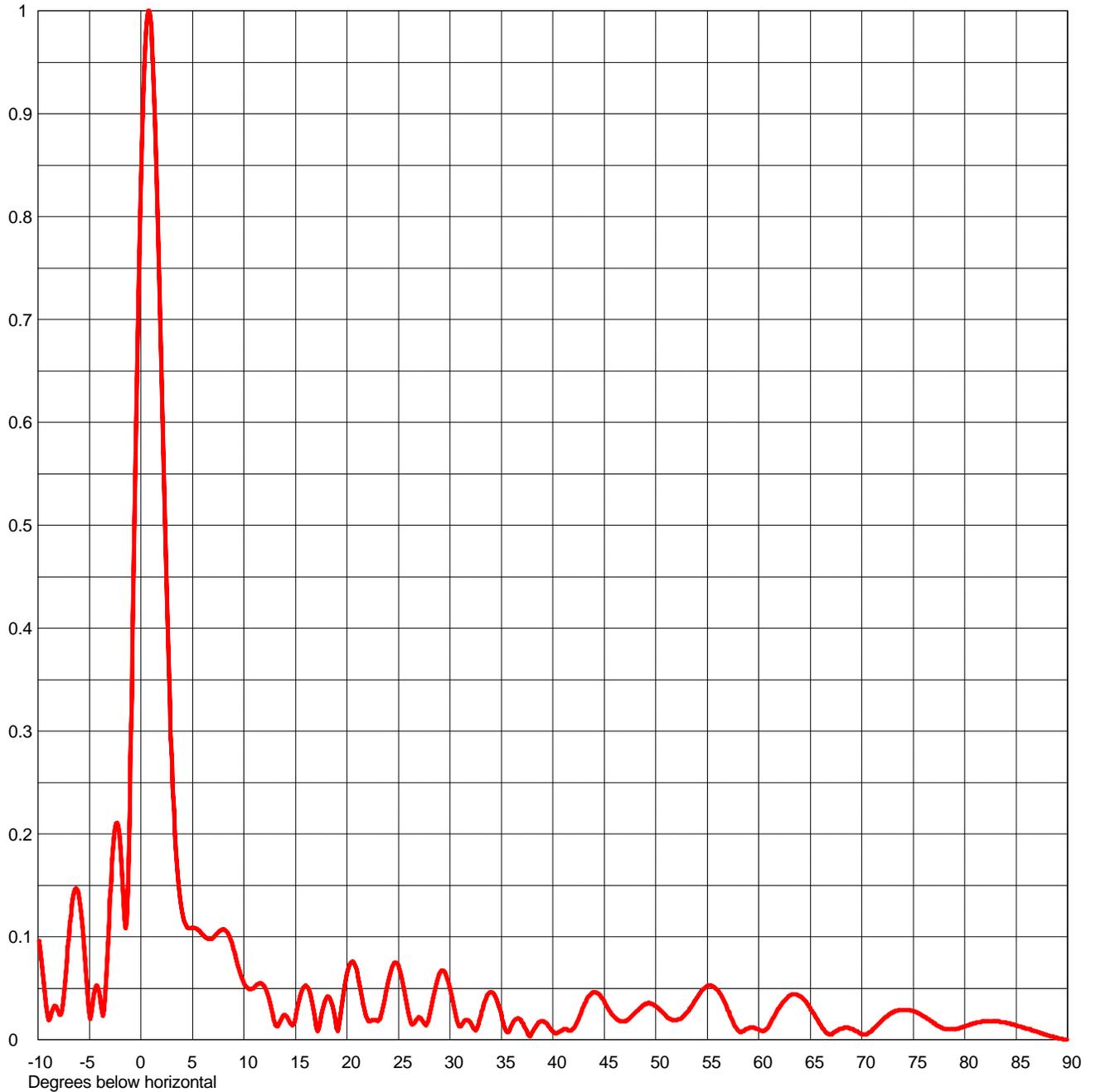
Remarks:



Proposal Number  
Date **20 Jun 2002** Revision **Exhibit 4B**  
Call Letters **KOKH-DT** Channel **24**  
Location **Oklahoma City, OK**  
Customer  
Antenna Type **TFU-30GTH-R 6T170 DC**

### ELEVATION PATTERN

RMS Gain at Main Lobe	<b>24.5 (13.89 dB)</b>	Beam Tilt	<b>0.75 Degrees</b>
RMS Gain at Horizontal	<b>17.0 (12.30 dB)</b>	Frequency	<b>533.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>30G245075</b>



Remarks:



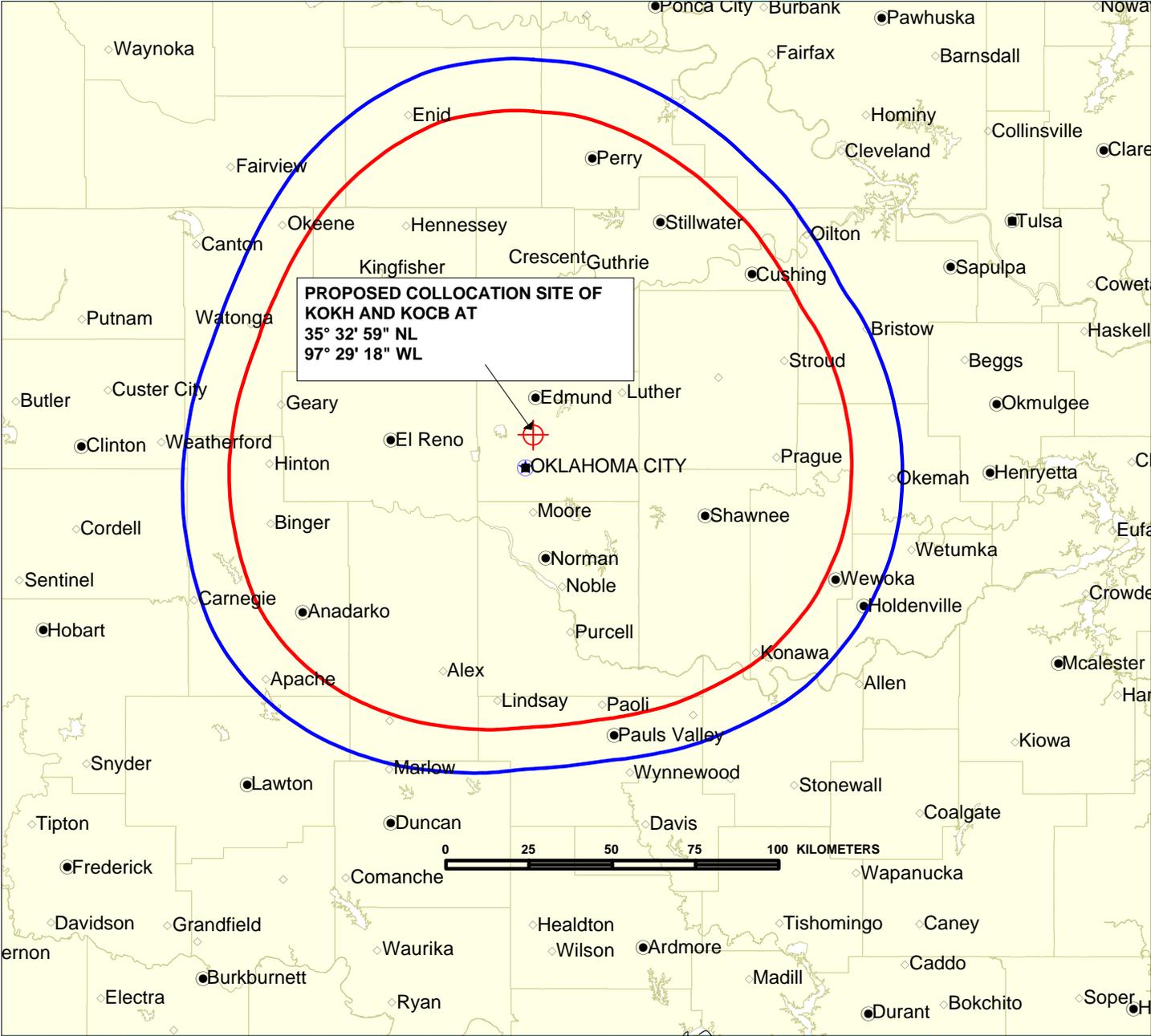
Proposal Number  
 Date **20 Jun 2002** Revision **Exhibit 5**  
 Call Letters **KOKH-DT** Channel **24**  
 Location **Oklahoma City, OK**  
 Customer  
 Antenna Type **TFU-30GTH-R 6T170 DC**

**TABULATION OF ELEVATION PATTERN**

Elevation Pattern Drawing # **30G245075**

Angle	Field										
-10.0	0.103	2.4	0.475	10.6	0.049	30.5	0.027	51.0	0.023	71.5	0.014
-9.5	0.060	2.6	0.397	10.8	0.050	31.0	0.013	51.5	0.020	72.0	0.019
-9.0	0.019	2.8	0.328	11.0	0.051	31.5	0.019	52.0	0.019	72.5	0.023
-8.5	0.031	3.0	0.270	11.5	0.055	32.0	0.017	52.5	0.021	73.0	0.026
-8.0	0.027	3.2	0.222	12.0	0.052	32.5	0.009	53.0	0.026	73.5	0.028
-7.5	0.043	3.4	0.185	12.5	0.037	33.0	0.023	53.5	0.033	74.0	0.029
-7.0	0.101	3.6	0.158	13.0	0.016	33.5	0.039	54.0	0.041	74.5	0.029
-6.5	0.143	3.8	0.138	13.5	0.017	34.0	0.046	54.5	0.048	75.0	0.028
-6.0	0.138	4.0	0.124	14.0	0.024	34.5	0.040	55.0	0.052	75.5	0.026
-5.5	0.086	4.2	0.115	14.5	0.016	35.0	0.024	55.5	0.052	76.0	0.023
-5.0	0.022	4.4	0.111	15.0	0.021	35.5	0.008	56.0	0.048	76.5	0.020
-4.5	0.047	4.6	0.109	15.5	0.043	36.0	0.014	56.5	0.040	77.0	0.016
-4.0	0.043	4.8	0.108	16.0	0.053	36.5	0.020	57.0	0.029	77.5	0.013
-3.5	0.041	5.0	0.109	16.5	0.042	37.0	0.017	57.5	0.018	78.0	0.011
-3.0	0.136	5.2	0.109	17.0	0.015	37.5	0.008	58.0	0.009	78.5	0.010
-2.8	0.171	5.4	0.108	17.5	0.022	38.0	0.007	58.5	0.008	79.0	0.010
-2.6	0.197	5.6	0.106	18.0	0.040	38.5	0.015	59.0	0.011	79.5	0.011
-2.4	0.210	5.8	0.104	18.5	0.036	39.0	0.018	59.5	0.012	80.0	0.013
-2.2	0.208	6.0	0.102	19.0	0.012	39.5	0.015	60.0	0.010	80.5	0.015
-2.0	0.189	6.2	0.100	19.5	0.032	40.0	0.008	60.5	0.009	81.0	0.016
-1.8	0.155	6.4	0.099	20.0	0.064	40.5	0.007	61.0	0.014	81.5	0.017
-1.6	0.117	6.6	0.098	20.5	0.076	41.0	0.010	61.5	0.022	82.0	0.018
-1.4	0.114	6.8	0.098	21.0	0.065	41.5	0.009	62.0	0.031	82.5	0.018
-1.2	0.177	7.0	0.099	21.5	0.040	42.0	0.011	62.5	0.038	83.0	0.018
-1.0	0.276	7.2	0.101	22.0	0.020	42.5	0.020	63.0	0.043	83.5	0.017
-0.8	0.391	7.4	0.103	22.5	0.019	43.0	0.033	63.5	0.044	84.0	0.017
-0.6	0.511	7.6	0.105	23.0	0.018	43.5	0.042	64.0	0.042	84.5	0.015
-0.4	0.628	7.8	0.106	23.5	0.031	44.0	0.046	64.5	0.038	85.0	0.014
-0.2	0.737	8.0	0.107	24.0	0.056	44.5	0.044	65.0	0.031	85.5	0.013
0.0	0.832	8.2	0.106	24.5	0.073	45.0	0.037	65.5	0.023	86.0	0.011
0.2	0.909	8.4	0.104	25.0	0.072	45.5	0.028	66.0	0.015	86.5	0.009
0.4	0.963	8.6	0.100	25.5	0.052	46.0	0.022	66.5	0.007	87.0	0.008
0.6	0.994	8.8	0.095	26.0	0.025	46.5	0.018	67.0	0.005	87.5	0.006
0.8	1.000	9.0	0.088	26.5	0.016	47.0	0.018	67.5	0.008	88.0	0.004
1.0	0.983	9.2	0.081	27.0	0.022	47.5	0.021	68.0	0.011	88.5	0.003
1.2	0.944	9.4	0.073	27.5	0.016	48.0	0.026	68.5	0.012	89.0	0.002
1.4	0.887	9.6	0.066	28.0	0.022	48.5	0.031	69.0	0.011	89.5	0.001
1.6	0.815	9.8	0.060	28.5	0.046	49.0	0.035	69.5	0.008	90.0	0.000
1.8	0.734	10.0	0.055	29.0	0.064	49.5	0.035	70.0	0.005		
2.0	0.647	10.2	0.052	29.5	0.066	50.0	0.033	70.5	0.005		
2.2	0.559	10.4	0.050	30.0	0.051	50.5	0.028	71.0	0.009		

Remarks:

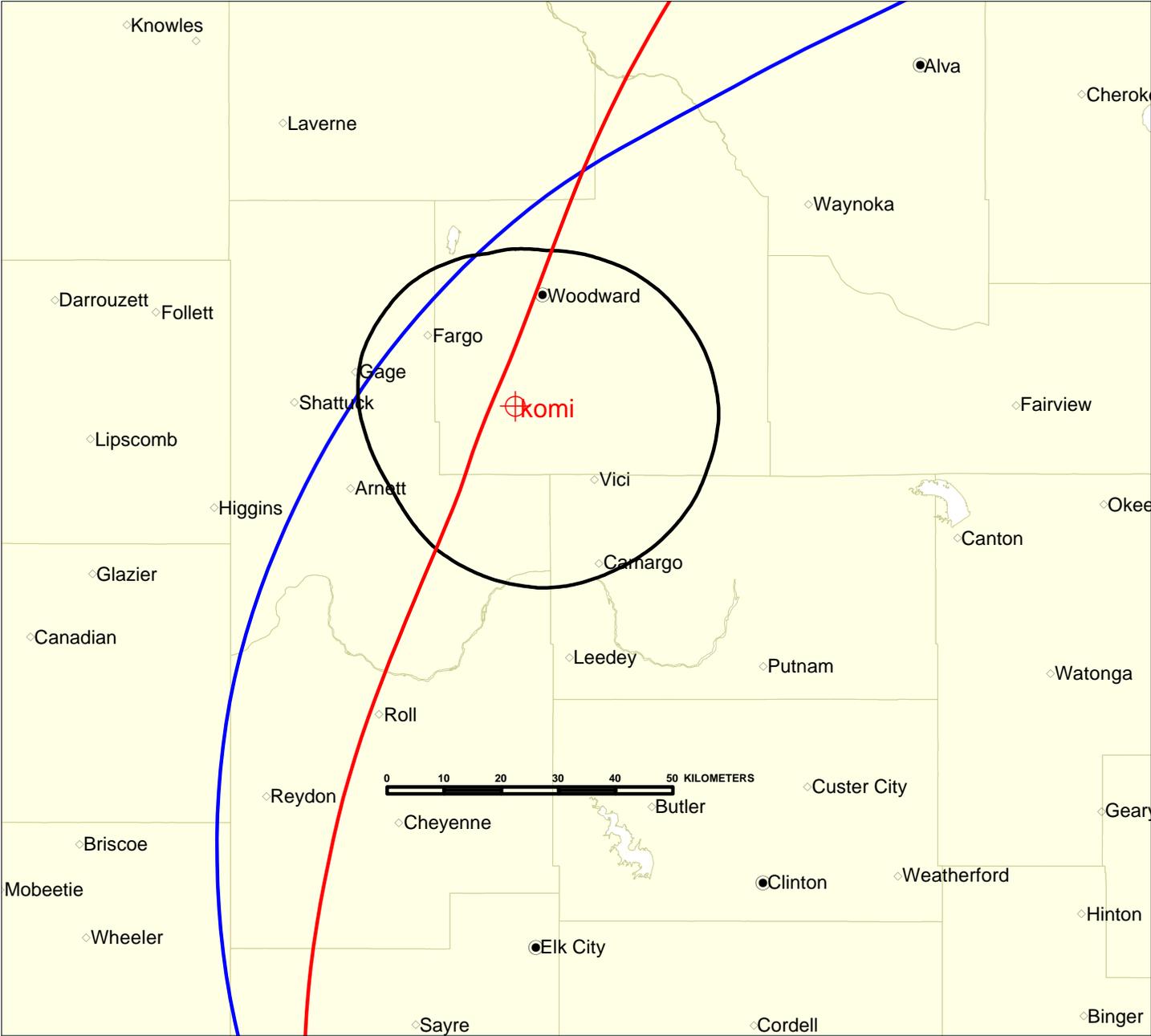


**41dBu F(50,90) Protected Coverage Contour**  
 1000 kW ERP; 476 m HAAT; Directional  
 Dielectric TFU-30GTH-R 6T170 DC

**48 dBu F(50,90) City Grade Coverage Contour**  
 1000 kW ERP; 476 m HAAT; Directional  
 Dielectric TFU-30GTH-R 6T170 DC

 Oklahoma City Corporate Limits

***KOKH-DT Channel 24, Oklahoma City, OK***  
***Predicted Coverage Contours***  
***1000 kW ERP, 476 m HAAT, Directional***  
***July, 2002***

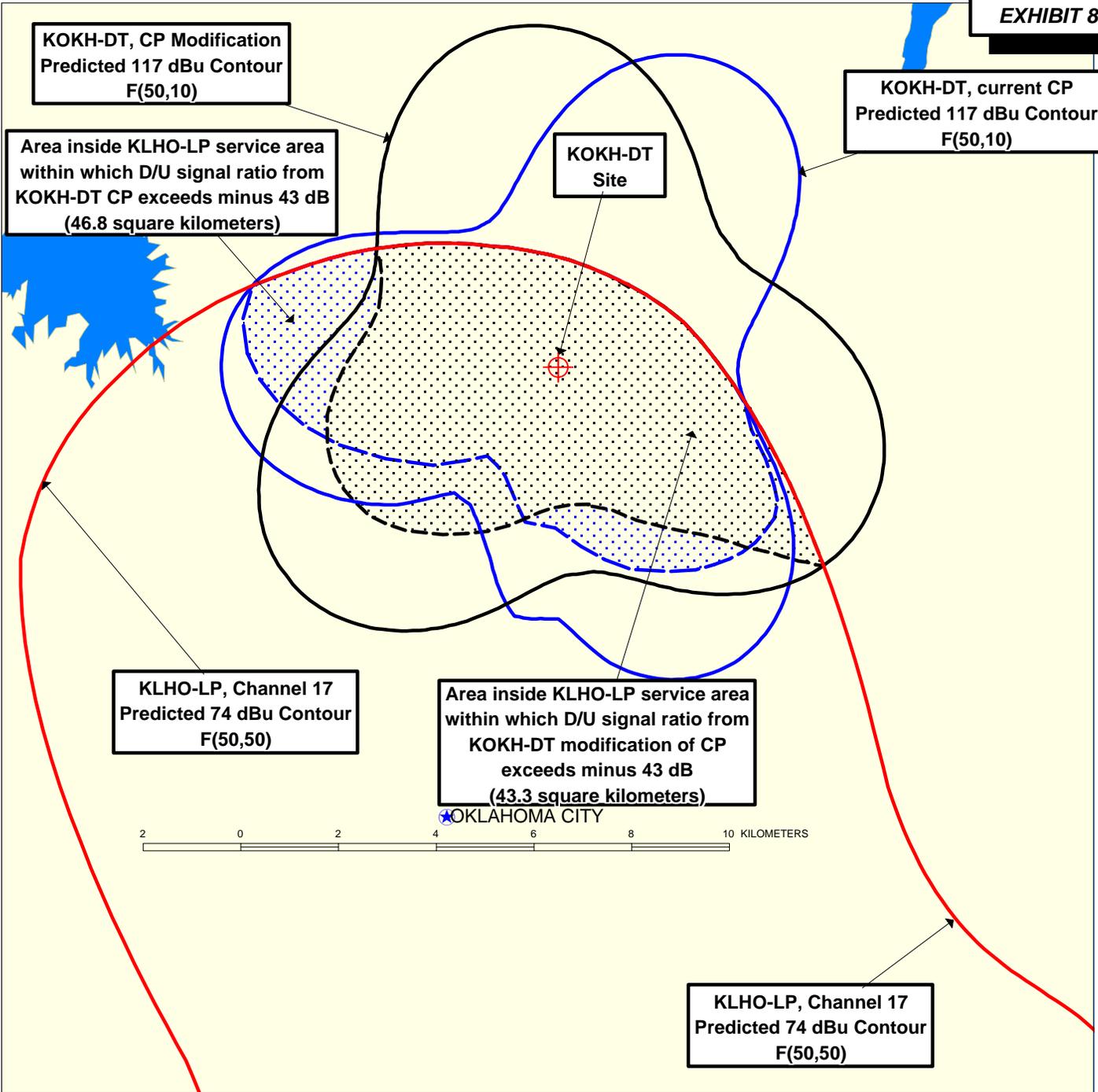


**KOKH-DT Proposed Facility**  
 40 dBu F(50,10) Interfering Coverage Contour  
 D-Antenna Re-oriented; 1000 kW ERP; 476 m HAAT  
 Overlap Area = 1918 km<sup>2</sup>

**KOKH-DT Construction Permit Facility**  
 40 dBu F(50,10) Interfering Coverage Contour  
 Trilobe D-Antenna, 1000 kW ERP, 472 m HAAT  
 Overlap Area = 2766 km<sup>2</sup>

**KOKMI-LP (CA), Ch. 24, Woodward, OK, Class A Facility**  
 74 dBu F(50,50) Protected Coverage Contour  
 D-Antenna, 33.70 kW ERP, 567 m HAAT

***KOKH-DT Channel 24, Oklahoma City, OK  
 Interfering Coverage Contours into KOKMI-LP (CA)  
 1000 kW ERP; 476 m HAAT  
 July, 2002***



**PREDICTED COVERAGE CONTOUR**  
 74 dBu, F(50,50)  
 KLHO-LP, OKLAHOMA CITY, OKLAHOMA  
 CH. 17, 37.1 kW (DA-MAX), 96 m HAAT

**INTERFERENCE AREA**  
**KOKH-DT CURRENT CP**  
 46.8 Square Kilometers

**INTERFERENCE AREA**  
**KOKH-DT CP MODIFICATION**  
 43.3 Square Kilometers

**PREDICTED INTERFERENCE CONTOURS**  
 Minus 43 dB, D/U ratio - 117 dBu F(50,10)  
 KOKH-DT, OKLAHOMA CITY, OKLAHOMA  
 CH. 24, 1000 kW (DA-MAX), 472 m HAAT  
 CONSTRUCTION PERMIT FACILITY

Minus 43 dB, D/U ratio - 117 dBu F(50,10)  
 KOKH-DT, OKLAHOMA CITY, OKLAHOMA  
 CH. 24, 1000 kW (DA-MAX), 475.6 m HAAT  
 MODIFIED CONSTRUCTION PERMIT FACILITY

**SUMMARY OF RADIOFREQUENCY  
RADIATION STUDY**  
KOKH-DT OKLAHOMA CITY, OKLAHOMA  
CHANNEL 24, 1000 kW ERP, 475.6 m HAAT  
AUGUST, 2002

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLARIZATION</u>	<u>ANTENNA HEIGHT **</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>PREDICTED POWER DENSITY (mW/cm<sup>2</sup>)</u>	<u>FCC UNCONTROLLED LIMIT (mW/cm<sup>2</sup>)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
KOKH-TV	TV	25	539	H	481	3470.000	0.300	0.02255	0.359	6.28%
KOKH-DT	DT	24	533	H	481	1000.000	0.300	0.01299	0.355	3.66%
KOCB(TV)	TV	34	593	H	463	1200.000	0.300	0.00842	0.395	2.13%
KOCB(DT)	DT	33	587	H	463	1000.000	0.300	0.01402	0.391	3.58%
KRXO-FM	FM	299	107.7	H & V	311	99.000	1.000	0.06839	0.200	34.20%

**TOTAL PERCENTAGE OF ANSI VALUE= 49.84%**

*\*\* The antenna heights indicated above are 2 meters less than the actual antenna heights so that the predicted power densities consider the 2 meter human height allowance.*