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ENGINEERING STATEMENT
REQUEST FOR STA
OHIO/OKLAHOMA HEARST-ARGYLE TELEVISION, INC.
STATION KOCO-DT, OKLAHOMA CITY, OKLAHOMA

Ohio/Oklahoma Hearst-Argyle Television, Inc. (hereafter, Hearst-Argyle) is the permittee in BPCDT-20080616ABL for maximized post-transition operation for Station KOCO-DT, Oklahoma City, Oklahoma on Channel 7, with a non-directional antenna. An application for license to cover Hearst-Argyle's initial post-transition construction permit is pending in BLCDDT-20080611ABT (covering BMPCDT-20080215ACU). The effective radiated power for Hearst-Argyle's maximized facility is 48 kW and the antenna radiation center height above average terrain is 453 meters.

Hearst-Argyle is operating KOCO-DT on Channel 7 pursuant to program test authority ("PTA") in connection with its pending license application in BLCDDT-20080611ABT. The PTA facilities are for a maximum effective radiated power of 47 kW using a side-mounted directional antenna on the same tower that will ultimately be employed to implement the maximized operation authorized in BPCDT-20080616ABL. The antenna radiation center for the PTA operation is 370 meters above average terrain.

Hearst-Argyle, now, seeks an STA to increase the effective radiated power to 57.5 kW pending implementation of the maximized facility in BPCDT-20080616ABL. No other change is proposed. This Engineering Statement provides support for the proposed change.

A review of allocation conditions for the proposed STA power increase reveals only two analog stations that merit attention. These stations are KSWO, Lawton, Oklahoma, and KOAM-TV, Pittsburg, Kansas, both on Channel 7. Station KSWO ceased analog operation on Channel 7, effective February 17, 2009, and is currently operating in digital mode on Channel 11 pursuant to BLCDDT-20060707ADG. Station KOAM-TV, effective February 17, 2009, ceased analog operation, and commenced digital operation

Request for STA

Ohio/Oklahoma Hearst-Argyle Television, Inc.

Station KOCO-DT, Oklahoma City, Oklahoma

on Channel 7 pursuant to BDSTA-20090206AFI. The STA's power/height facilities are 14.8 kW/335.8 meters-the same as authorized for post-transition operation for KOAM-DT in BPCDT-20080314ADI.

Thus, the only allocation concern for KOCO-DT's pre-transition STA operation is the pre-transition operation of Station KOAM-DT pursuant to the outstanding STA, which comports with the authorized post-transition facilities for the station.

Figure 1 is a map that shows the 36 dBu contour for the authorized maximized post-transition operation for KOCO-DT, together with the 36 dBu contours for the outstanding KOCO-DT STA 47 kW (max-DA) operation and the now requested STA power increase operation to 57.5 kW (max-DA). The map demonstrates that the proposed STA operation will not extend KOCO-DT coverage beyond the range of the coverage that has been authorized for the maximized post-transition operation for KOCO-DT, which comprehended the post transition operation for KOAM-DT.

In the interest of completeness, data for the proposed antenna are included herein. Figure 2 is the horizontal plane relative field radiation pattern, and Figure 3 is a tabulation of relative field data for the pattern of Figure 2. Figure 4 is the vertical plane relative field radiation pattern and Figure 5 is the tabulation of relative fields for the pattern of Figure 4.

The power increase from 47 kW to 57.5 kW will increase the radio frequency radiation exposure at uncontrolled locations from a present possible maximum of 0.4 % of the MPE (maximum permissible exposure) to 0.5 % of the MPE. No question arises of possible excessive exposure at uncontrolled locations. The procedures that are currently in place for the avoidance of worker overexposure to rfr will continue to be observed.

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Station KOCO-DT, Oklahoma City, Oklahoma

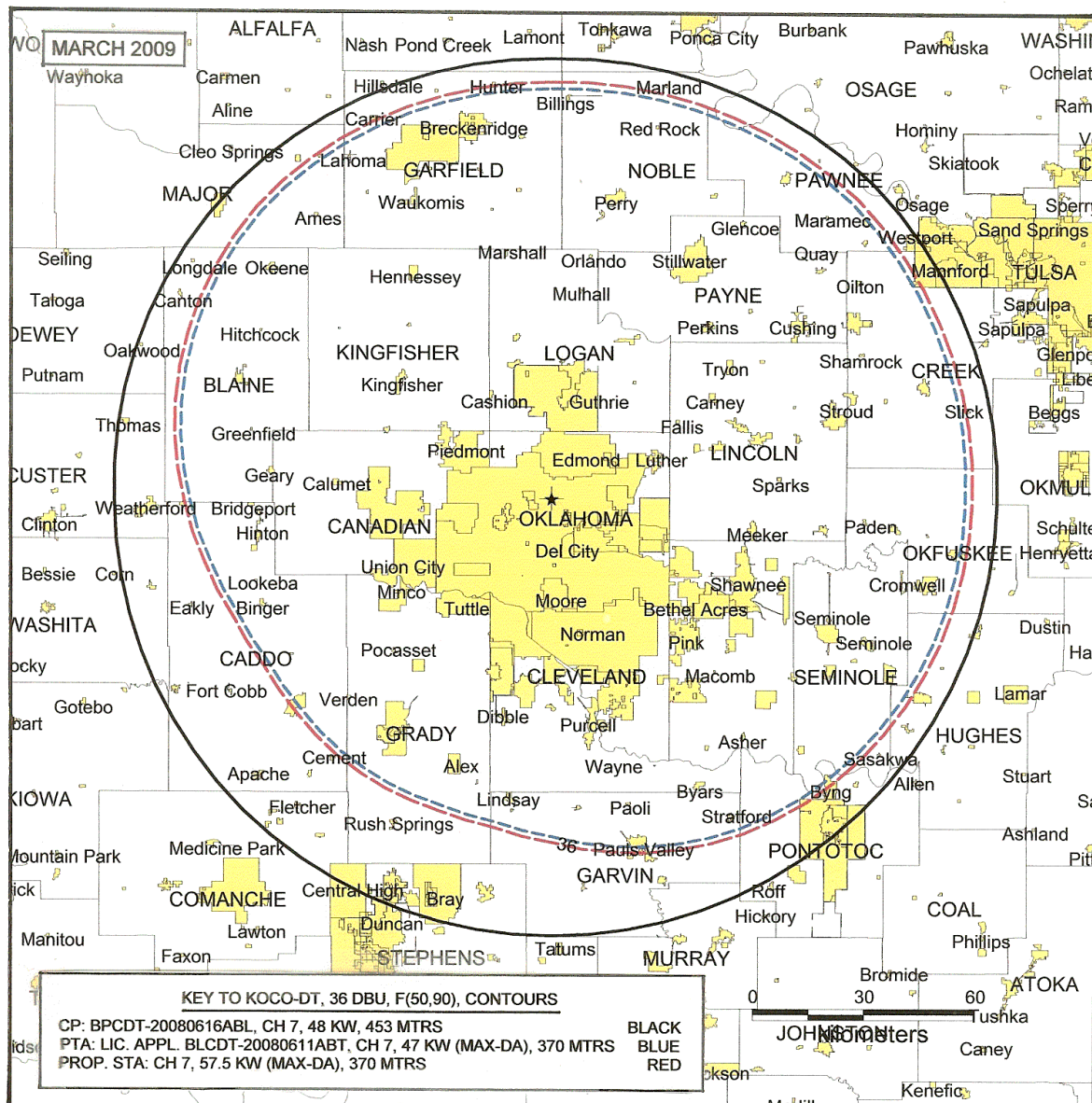
The increased power for the KOCO-DT operation that is now requested will improve the station's coverage, albeit, by only a small amount. However, the increase in power will improve signal strengths throughout the service range by approximately 0.9 dB. FCC measurements that were made on digital TV receiver performance have indicated that most receivers exhibit picture failure due to the so-called, "cliff effect" with a less than a 1 dB change in signal strength. Thus, the requested power increase, if granted, will serve to improve viewership in otherwise marginal situations.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 10, 2009.

Bernard R. Segal, P. E.

Bernard R. Segal, P. E.
Maryland Registration # 25811

FIGURE 1



CALCULATED 36 DBU, F(50,90), CONTOURS

OHIO/OKLAHOMA HEARST-ARGYLE TELEVISION, INC.
STATION KOCO-DT, OKLAHOMA CITY, OKLAHOMA

Bernard R. Segal, P. E. **Consulting Engineer**



Proposal Number

Date

Call Letters

Location

Customer

Antenna Type

08 Aug 2001

KOCO-DT Channel 7

Oklahoma City, OK

THV-6A7-R C170SP

FIGURE 2

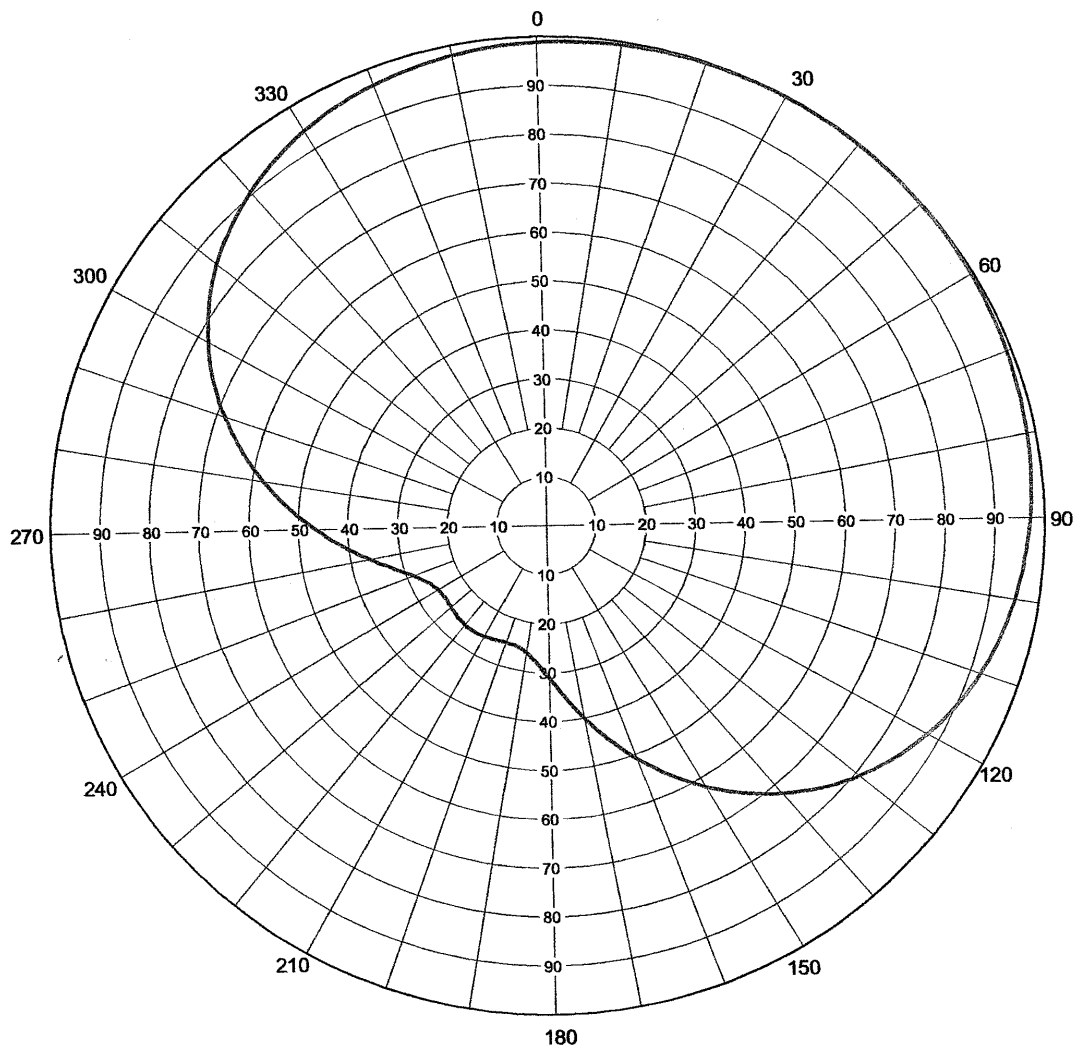
AZIMUTH PATTERN

RMS Gain at Main Lobe
Calculated / Measured

1.70 (2.30 dB)
Calculated

Frequency
Drawing #

177 MHz
THV-C170SP-7



Remarks:

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FIGURE 3

TABULATION OF AZIMUTH PATTERN DATA
KOCO-DT, OKLAHOMA CITY CITY, OKLAHOMA
STA MOD: CHANNEL 7 57.5 KW (MAX-DA) 370 METERS

Azimuth (Degrees T.)	Relative Field
0	0.988
10	0.993
20	0.997
30	1.000
37+	1.000
40	1.000
50	0.998
60	0.995
70	0.990
80	0.983
90	0.971
100	0.952
110	0.922
120	0.875
130	0.809
140	0.723
150	0.621
160	0.509
170	0.401
180	0.312
190	0.262
200-	0.252
210	0.259
217+	0.261
220	0.261
230	0.254
235-	0.252
240	0.254
250	0.287
260	0.362
270	0.465
280	0.577
290	0.684
300	0.777
310	0.851
320	0.905
330	0.942
340	0.965
350	0.979

+ denotes a local maximum; - denotes a local minimum



Proposal Number

Date

Call Letters

Location

Customer

Antenna Type

08 Aug 2001

KOCO-DT

Oklahoma City, OK

THV-6A7-R C170SP

FIGURE 4

Channel 7

ELEVATION PATTERN

RMS Gain at Main Lobe

6.0 (7.78 dB)

Beam Tilt

0.50 Degrees

RMS Gain at Horizontal

5.9 (7.71 dB)

Frequency

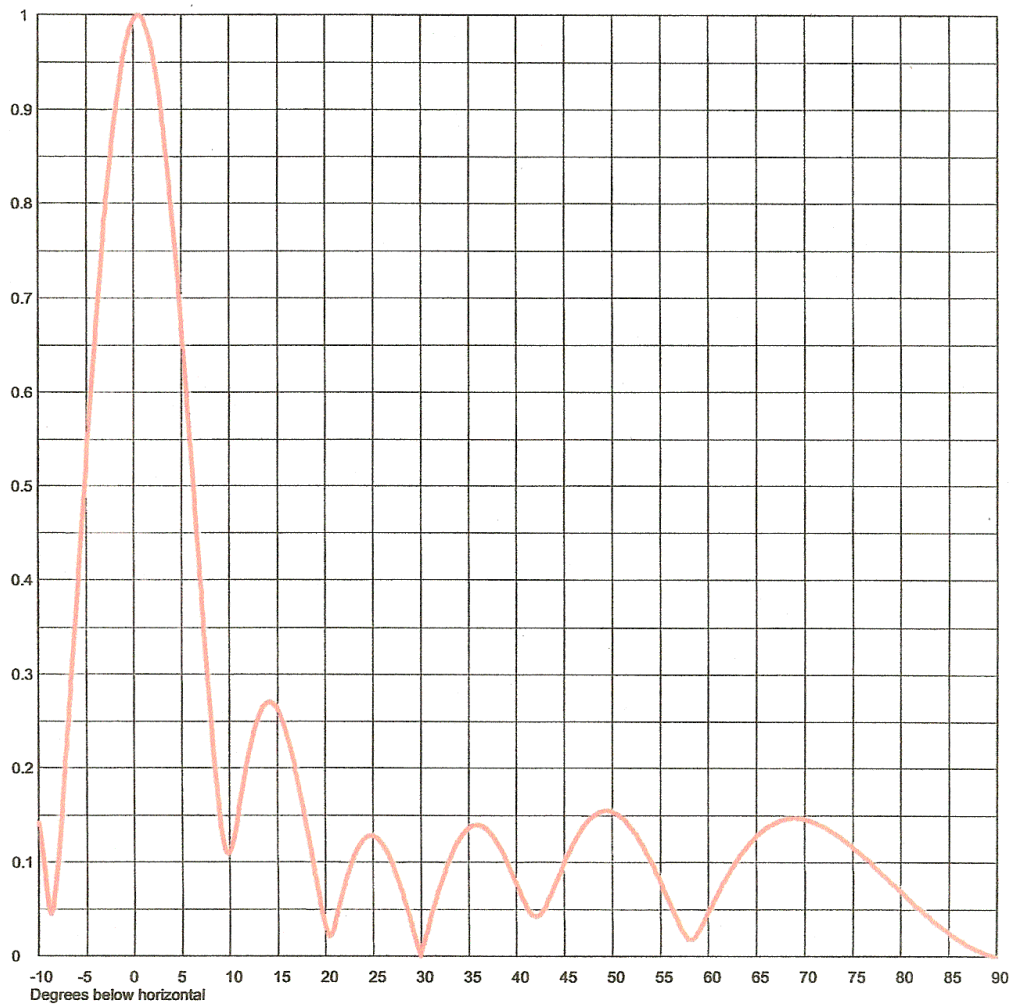
177.00 MHz

Calculated / Measured

Calculated

Drawing #

06V060050



Remarks:

Proposal Number

FIGURE 5

Date

08 Aug 2001

Call Letters

KOCO-DT

Channel

7

Location

Oklahoma City, OK

Customer

Antenna Type

THV-6A7-R C170SP

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #

06V060050

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.150	2.4	0.939	10.6	0.130	30.5	0.019	51.0	0.148	71.5	0.141
-9.5	0.106	2.6	0.926	10.8	0.142	31.0	0.037	51.5	0.144	72.0	0.138
-9.0	0.062	2.8	0.911	11.0	0.154	31.5	0.055	52.0	0.137	72.5	0.135
-8.5	0.048	3.0	0.895	11.5	0.184	32.0	0.072	52.5	0.130	73.0	0.132
-8.0	0.091	3.2	0.878	12.0	0.212	32.5	0.087	53.0	0.122	73.5	0.129
-7.5	0.153	3.4	0.859	12.5	0.235	33.0	0.101	53.5	0.113	74.0	0.125
-7.0	0.222	3.6	0.840	13.0	0.252	33.5	0.113	54.0	0.103	74.5	0.121
-6.5	0.294	3.8	0.820	13.5	0.264	34.0	0.122	54.5	0.093	75.0	0.117
-6.0	0.367	4.0	0.798	14.0	0.270	34.5	0.130	55.0	0.082	75.5	0.113
-5.5	0.441	4.2	0.776	14.5	0.270	35.0	0.136	55.5	0.070	76.0	0.108
-5.0	0.515	4.4	0.753	15.0	0.265	35.5	0.139	56.0	0.058	76.5	0.104
-4.5	0.587	4.6	0.729	15.5	0.254	36.0	0.140	56.5	0.047	77.0	0.099
-4.0	0.656	4.8	0.704	16.0	0.239	36.5	0.138	57.0	0.035	77.5	0.094
-3.5	0.721	5.0	0.678	16.5	0.220	37.0	0.135	57.5	0.025	78.0	0.089
-3.0	0.781	5.2	0.652	17.0	0.197	37.5	0.129	58.0	0.018	78.5	0.084
-2.8	0.804	5.4	0.626	17.5	0.172	38.0	0.122	58.5	0.019	79.0	0.079
-2.6	0.825	5.6	0.599	18.0	0.145	38.5	0.113	59.0	0.026	79.5	0.075
-2.4	0.846	5.8	0.571	18.5	0.117	39.0	0.102	59.5	0.035	80.0	0.070
-2.2	0.865	6.0	0.544	19.0	0.088	39.5	0.091	60.0	0.046	80.5	0.065
-2.0	0.883	6.2	0.516	19.5	0.060	40.0	0.079	60.5	0.056	81.0	0.060
-1.8	0.900	6.4	0.487	20.0	0.035	40.5	0.067	61.0	0.066	81.5	0.055
-1.6	0.916	6.6	0.459	20.5	0.021	41.0	0.056	61.5	0.076	82.0	0.051
-1.4	0.930	6.8	0.431	21.0	0.033	41.5	0.047	62.0	0.085	82.5	0.046
-1.2	0.944	7.0	0.403	21.5	0.053	42.0	0.043	62.5	0.094	83.0	0.042
-1.0	0.956	7.2	0.375	22.0	0.073	42.5	0.044	63.0	0.102	83.5	0.037
-0.8	0.966	7.4	0.347	22.5	0.090	43.0	0.051	63.5	0.109	84.0	0.033
-0.6	0.975	7.6	0.320	23.0	0.104	43.5	0.062	64.0	0.116	84.5	0.029
-0.4	0.983	7.8	0.293	23.5	0.115	44.0	0.074	64.5	0.122	85.0	0.025
-0.2	0.989	8.0	0.267	24.0	0.123	44.5	0.086	65.0	0.127	85.5	0.022
0.0	0.994	8.2	0.242	24.5	0.127	45.0	0.098	65.5	0.132	86.0	0.018
0.2	0.998	8.4	0.218	25.0	0.128	45.5	0.109	66.0	0.136	86.5	0.015
0.4	1.000	8.6	0.195	25.5	0.126	46.0	0.119	66.5	0.139	87.0	0.012
0.6	1.000	8.8	0.173	26.0	0.120	46.5	0.129	67.0	0.142	87.5	0.009
0.8	0.999	9.0	0.154	26.5	0.112	47.0	0.137	67.5	0.144	88.0	0.006
1.0	0.997	9.2	0.137	27.0	0.101	47.5	0.143	68.0	0.145	88.5	0.004
1.2	0.993	9.4	0.124	27.5	0.087	48.0	0.148	68.5	0.146	89.0	0.002
1.4	0.987	9.6	0.114	28.0	0.072	48.5	0.152	69.0	0.147	89.5	0.001
1.6	0.980	9.8	0.110	28.5	0.055	49.0	0.154	69.5	0.146	90.0	0.000
1.8	0.972	10.0	0.109	29.0	0.038	49.5	0.155	70.0	0.146		
2.0	0.963	10.2	0.113	29.5	0.019	50.0	0.154	70.5	0.144		
2.2	0.952	10.4	0.121	30.0	0.000	50.5	0.152	71.0	0.143		

Remarks: