

Engineering Statement
In Support of an Application for
Amendment of Application
W256CK ó Birmingham, AL
FID No. 141481
BNPFT-20130826AEI
BMPFT-20160129AFA

The Corporate Engineering Department of the Crawford Broadcasting Company, on behalf of its subsidiary, Kimtron, Inc. (óKimtronö), has prepared this Engineering Statement and associated exhibits to accompany an Amendment to an Application for Modification of Construction Permit to change the location, frequency and power of translator station W256CK (BMPFT-20160129AFA, FID No. 141481).

On January 29, 2016 Kimtron filed an Application for Modification of Construction Permit to change the location, frequency and power of W256CK, which is presently licensed to Albany, Georgia on channel 256D with an ERP of 0.01 kW (BNPFT-20130826AEI). This application was filed in the first Modification Window (January 29 ó July 28, 2016) announced in the Public Notice, óMedia Bureau Announces Filing Dates and Procedures for AM Station Filing Window for FM Translator Modifications and Availability of FM Translator Technical Tools,ö DA-1491, Released December 23, 2015. Kimtron is licensee of Class D AM station WYDE, Birmingham, AL (FID No. 34822). This station meets the eligibility requirements for the first Modification Window, and the site specified in the W256CK construction permit is within the 250-mile relocation radius specified in the Notice.

Subsequent to the tendering of this application it was discovered that another entity, La Promesa Foundation, had on the same day tendered an application to relocate W262AR to the same geographic area and channel (250D) as specified in the Kimtron W256CK application, making the two applications mutually exclusive (óMXö). The instant application is submitted herewith in an effort to cure this MX status by changing frequency to channel 237D.

No change in site is requested herewith; the proposed site remains that of WDJC-FM (FID No. 34819) and is located at N33-26-36 / W86-52-50. The Antenna Structure Registration No. for the tower is 1036590.

The antenna height, ERP and directional pattern specified in the prior application are unchanged in this amendment. The maximum Effective Radiated Power is 250 watts H&V and a Scala HDCA-5CP-RM Yagi-type directional antenna with a main lobe oriented 85 degrees True is specified. The antenna will be mounted at an elevation of 323 meters above mean sea level (AMSL) and 36.5 meters above ground level (AGL), which corresponds to a height above average terrain (HAAT) of 142 meters.

Table 1 below shows a channel spacing study from the proposed site for W256CK on channel 237D. This study shows that WBHJ (239C2) in Midfield, AL is second-adjacent channel to the proposed facility. WBHJ produces a field strength of 105.6 dBu at the proposed site. The +40 dB interfering contour is 145.6 dBu. The study also shows that the licensed facility for W235BS (235D) in Birmingham, AL is second-adjacent channel to the proposed facility. The W235BS licensed facility produces a field strength of 113.9 dBu at the proposed site. The +40 dB interfering contour is 153.9 dBu. The maximum free-space distance for the 145.6 dBu contour is 6 meters from the antenna and does not reach the ground. As such, the 145.6 dBu contour and inclusively the 153.9 dBu contour have zero population, and in both the WBHJ and the W235BS cases §74.1204(d) applies.

The study shows that WFFN (237C2), Coaling, AL, is co-channel to the proposed facility. Figure 1 shows that the proposed facility will not produce any prohibited overlap to the WFFN protected 60 dBu contour.

The spacing study shows that the proposed facility is fully-spaced to first-adjacent channel station WSYP-LP (236L1) in Birmingham, AL. Figure 1 shows that the proposed facility will not produce any prohibited overlap to the WSYP-LP protected 60 dBu contour.

Figure 2 and Table 2 show the proposed directional antenna pattern for use by W256CK on channel 237D at the proposed site.

Table 3 is a tabulation of the distances to pertinent contours used in the study for the proposed operation of W256CK on channel 237D at the proposed site.

Figure 3 shows the proposed 60 dBu contour of W256CK will be completely contained within the licensed 2 mV/m daytime contour and 25-mile radius of station WYDE(AM).

It was concluded that the new proposed operation of W256CK on channel 237D at the proposed new site will not cause any harmful interference to any existing stations and will be in full compliance with the Commission's rules.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W.C. Alexander', is written over a horizontal line.

W.C. Alexander, CPBE, AMD, DRB
Director of Engineering
Crawford Broadcasting Company

FM Study for: W256CK FCC Database Date: 2/1/2016

33-26-36

Location: BIRMINGHAM, AL Channel Class: D

86-52-50

[*] by HAAT indicates calculated as missing in database.

Call Status	City, State Proponent	Chan File Number	Cl. Freq	kW HAAT	Latitude Longitude	Dist. Azim.	Required Clear (km)	Site

>>>>>>> Study For Channel 237 95.3 MHz <<<<<<<<								
WBHJ LIC	MIDFIELD, AL Fac. No. 730	239 C2 BLH-20050527BFJ	95.7	12.0+ 306	33-27-37 86-51-07	3.3 54.8	53 -49.7	SHORT
WFFN LIC	COALING, AL Fac. No. 54797	237 C2 BLH-20050603ABJ	95.3	17.5 256	33-03-15 87-32-57	75.8 235.5	96 -20.2	SHORT
W235BS LIC	BIRMINGHAM, AL Fac. No. 158047	235 D BLFT-20140813ACL	94.9	.070+ 298	33-26-38 86-52-47	0.1 51.5	14 -13.9	SHORT
W235BS CP	BIRMINGHAM, AL Fac. No. 158047	235 D BMPFT-20141021ABI	94.9	.250+ 172	33-32-24 86-39-50	22.8 61.9	14 8.8	CLOSE
W290CN CP	BIRMINGHAM, AL Fac. No. 150939	290 D BNPFT-20130816AAJ	105.9	.038 28	33-30-49 86-47-47	11.0 45.1	0 11.0	CLOSE
WSYPLP CP	BIRMINGHAM, AL Fac. No. 193924	236 L1 BNPL-20131113AJM	95.1	.055 41	33-38-44 86-41-01	28.9 39.1	14 14.9	CLOSE
ALLOC RSV	ALEXANDRIA, AL Fac. No. 52320	237 A -	95.3		33-48-20 85-57-59	93.9 64.4	73 20.9	CLEAR
WHMAFM APP	ALEXANDRIA, AL Fac. No. 52320	237 A BPH-20071214AAR	95.3	.400+ 332	33-37-38 85-53-25	94.2 77.2	73 21.2	CLEAR
W237DH LIC	ONEONTA, AL Fac. No. 150993	237 D BLFT-20100803ABR	95.3	.085 154	33-56-48 86-29-06	66.8 33.2	44 22.8	CLEAR
NEW CP	CHELSEA, AL Fac. No. 197321	291 L1 BMPL-20151112XFY	106.1	.022 64	33-21-23 86-38-05	24.8 112.8	0 24.8	CLEAR
W238BS LIC	CLANTON, AL Fac. No. 150964	238 D BLFT-20110722ADI	95.5	.175 93	32-52-31 86-37-30	67.4 159.2	32 35.4	CLEAR
ALLOC RSV	GOODWATER, AL Counterproposal	248 A RM-2010324*	97.5		33-02-22 86-00-21	93.0 118.5	29 64.0	CLEAR
WKGA LIC	GOODWATER, AL Fac. No. 64557	248 A BLH-20050202ADU	97.5	5.10+ 108	33-01-42 85-59-23	94.9 118.8	29 65.9	CLEAR
WFXO LIC	ASHLAND, AL Fac. No. 704	252 A BLH-20050527BCZ	98.3	1.70+ 188	33-18-30 85-50-58	97.1 98.6	29 68.1	CLEAR
WZZN LIC	UNION GROVE, AL Fac. No. 5885	249 A BLH-20091222ARG	97.7	.950 251	34-26-39 86-32-05	115.5 16.0	47 68.5	CLEAR
WSMXLP LIC	CLANTON, AL Fac. No. 196717	252 L1 BLL-20140407AAN	98.3	.045 44	32-49-53 86-40-24	70.6 164.0	0 70.6	CLEAR
W251BV CP	GADSDEN, AL Fac. No. 147806	251 D BMPFT-20151214ACT	98.1	.010 127	34-01-54 86-00-36	103.8 50.8	32 71.8	CLEAR

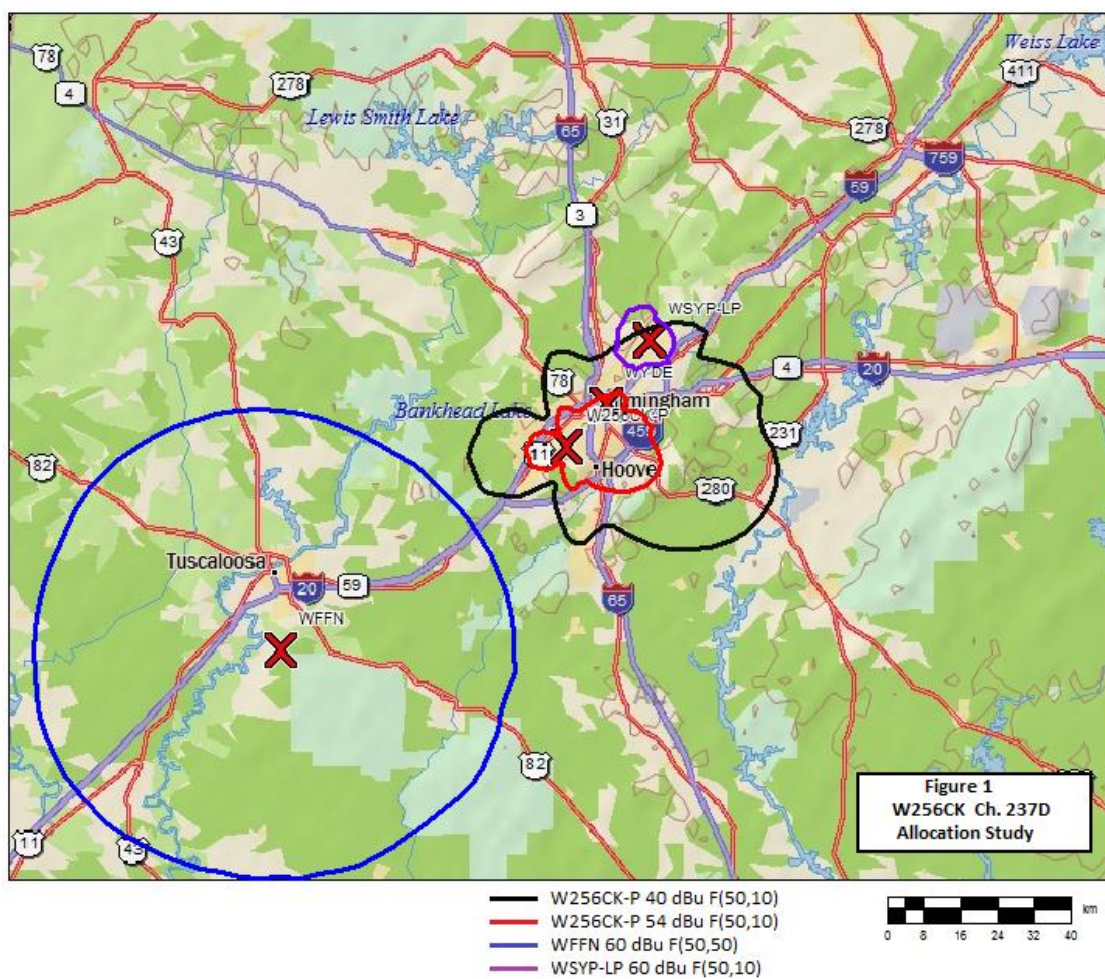


Figure 1 – W256CK-P Contour Protection Study

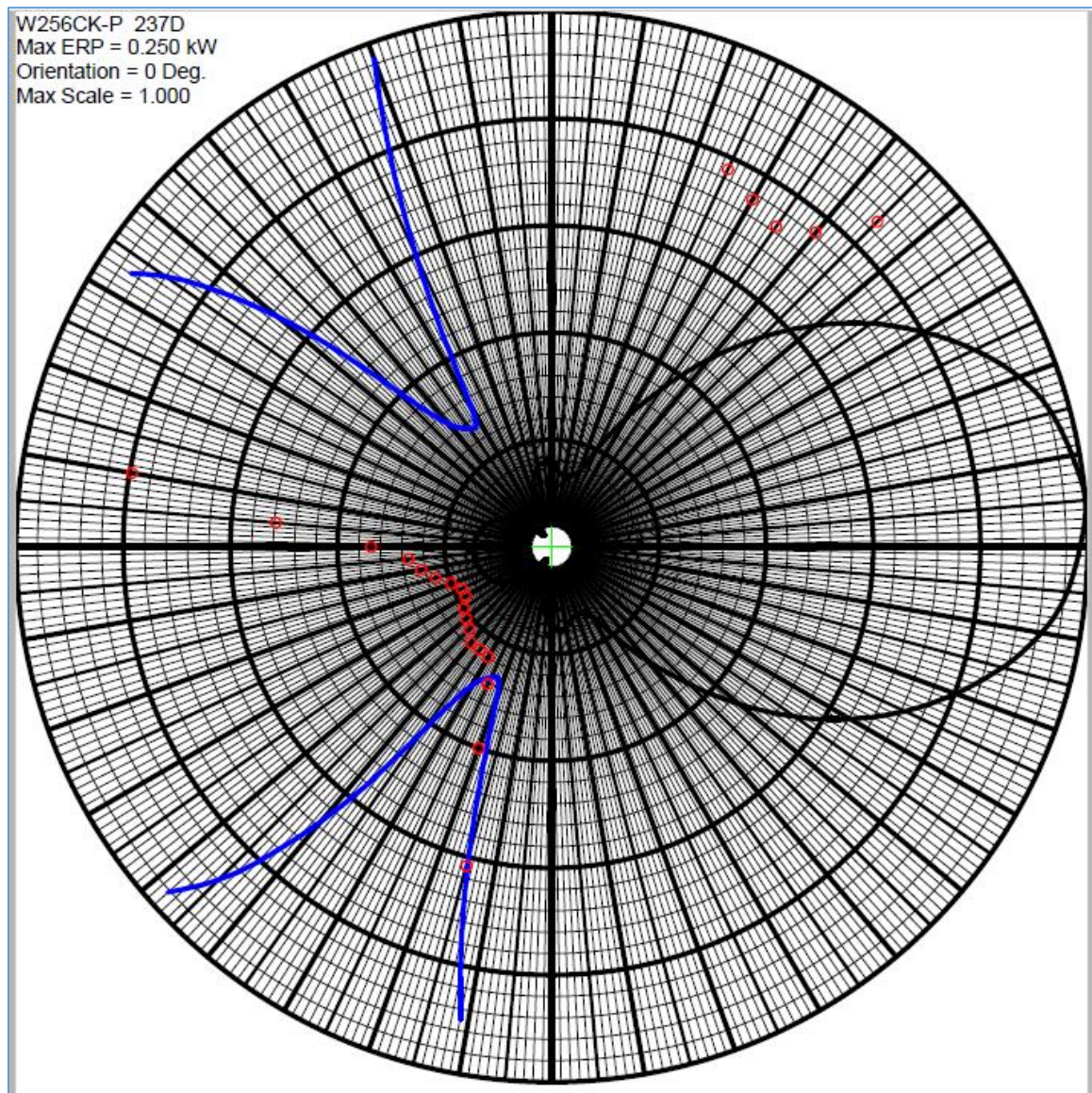


Figure 2 – Composite Directional Pattern

Table 2
W256CK_250D_HDCA-5CP-RM_FM_C-pol_85DEG_250W Pattern
Composite Horizontal Plane Pattern
Pattern RMS: .4678 Field

Azimuth	Field	dBk	ERP(kW)	Azimuth	Field	dBk	ERP(kW)
0	0.153	-22.33	0.01	180	0.152	-22.38	0.01
5	0.141	-23.04	0.00	185	0.130	-23.74	0.00
10	0.134	-23.48	0.00	190	0.097	-26.29	0.00
15	0.138	-23.22	0.00	195	0.060	-30.46	0.00
20	0.150	-22.50	0.01	200	0.030	-36.48	0.00
25	0.203	-19.87	0.01	205	0.027	-37.39	0.00
30	0.278	-17.14	0.02	210	0.030	-36.48	0.00
35	0.363	-14.82	0.03	215	0.042	-33.56	0.00
40	0.458	-12.80	0.05	220	0.067	-29.50	0.00
45	0.553	-11.17	0.08	225	0.088	-27.13	0.00
50	0.643	-9.86	0.10	230	0.102	-25.85	0.00
55	0.727	-8.79	0.13	235	0.117	-24.66	0.00
60	0.802	-7.94	0.16	240	0.127	-23.94	0.00
65	0.871	-7.22	0.19	245	0.134	-23.48	0.00
70	0.928	-6.67	0.22	250	0.138	-23.22	0.00
75	0.966	-6.32	0.23	255	0.143	-22.91	0.01
80	0.986	-6.14	0.24	260	0.146	-22.73	0.01
85	1.000	-6.02	0.25	265	0.145	-22.79	0.01
90	0.986	-6.14	0.24	270	0.146	-22.73	0.01
95	0.966	-6.32	0.23	275	0.143	-22.91	0.01
100	0.928	-6.67	0.22	280	0.138	-23.22	0.00
105	0.871	-7.22	0.19	285	0.134	-23.48	0.00
110	0.802	-7.94	0.16	290	0.127	-23.94	0.00
115	0.727	-8.79	0.13	295	0.117	-24.66	0.00
120	0.643	-9.86	0.10	300	0.102	-25.85	0.00
125	0.553	-11.17	0.08	305	0.088	-27.13	0.00
130	0.458	-12.80	0.05	310	0.067	-29.50	0.00
135	0.363	-14.82	0.03	315	0.042	-33.56	0.00
140	0.278	-17.14	0.02	320	0.030	-36.48	0.00
145	0.203	-19.87	0.01	325	0.027	-37.39	0.00
150	0.150	-22.50	0.01	330	0.030	-36.48	0.00
155	0.138	-23.22	0.00	335	0.060	-30.46	0.00
160	0.134	-23.48	0.00	340	0.097	-26.29	0.00
165	0.141	-23.04	0.00	345	0.130	-23.74	0.00
170	0.153	-22.33	0.01	350	0.152	-22.38	0.01
175	0.157	-22.10	0.01	355	0.157	-22.10	0.01

Table 3
FM Contour Distances
W256CK-P 237D

Azi. Deg.	ERP kW	HAAT m	70 dBu (50,50) km	60 dBu (50,50) km	54 dBu (50,10) km	40 dBu (50,10) km
0	0.006	155	3.2	6.3	9.0	21.12
5	0.005	160	3.1	6.1	8.7	20.61
10	0.004	159	3.0	6.0	8.5	19.95
15	0.005	158	3.1	6.0	8.6	20.22
20	0.006	160	3.2	6.3	9.0	21.27
25	0.010	161	3.9	7.4	10.5	24.84
30	0.019	159	4.7	8.7	12.2	28.88
35	0.033	155	5.4	9.8	13.8	32.53
40	0.052	152	6.1	10.8	15.4	36.15
45	0.076	145	6.5	11.6	16.8	38.83
50	0.103	129	6.7	11.8	17.1	39.71
55	0.132	88	5.8	10.4	14.7	34.98
60	0.161	94	6.3	11.2	16.1	38.26
65	0.190	104	7.0	12.3	18.0	41.94
70	0.215	98	7.0	12.3	18.1	42.11
75	0.233	103	7.3	12.9	19.0	43.93
80	0.243	95	7.1	12.5	18.4	42.75
85	0.250	94	7.1	12.5	18.4	42.84
90	0.243	106	7.5	13.2	19.6	44.91
95	0.233	116	7.7	13.7	20.4	46.18
100	0.215	123	7.8	13.8	20.6	46.41
105	0.190	130	7.8	13.7	20.5	46.03
110	0.161	135	7.6	13.4	20.0	44.95
115	0.132	139	7.3	13.0	19.3	43.44
120	0.103	139	6.9	12.2	17.9	40.98
125	0.076	140	6.4	11.4	16.4	38.22
130	0.052	139	5.8	10.4	14.7	34.64
135	0.033	142	5.2	9.3	13.2	31.15
140	0.019	144	4.5	8.2	11.6	27.45
145	0.010	141	3.7	6.9	9.8	23.18
150	0.006	142	3.1	6.0	8.5	19.89
155	0.005	142	2.9	5.7	8.1	18.99
160	0.004	148	2.9	5.8	8.2	19.14
165	0.005	150	3.0	6.0	8.4	19.90
170	0.006	155	3.2	6.3	9.0	21.12
175	0.006	147	3.2	6.2	8.8	20.78

Table 3
FM Contour Distances
W256CK-P 237D

Azi. Deg.	ERP kW	HAAT m	70 dBu (50,50) km	60 dBu (50,50) km	54 dBu (50,10) km	40 dBu (50,10) km
180	0.006	138	3.1	5.9	8.4	19.69
185	0.004	124	2.7	5.2	7.4	16.83
190	0.002	123	2.2	4.4	6.4	14.19
195	0.001	126	1.6	3.4	5.0	11.28
200	0.000	133	1.0	2.3	3.5	8.20
205	0.000	154	1.0	2.2	3.5	8.37
210	0.000	165	1.0	2.4	3.8	9.18
215	0.000	157	1.4	3.0	4.6	10.58
220	0.001	140	1.8	3.8	5.6	12.59
225	0.002	148	2.2	4.6	6.6	14.85
230	0.003	150	2.5	5.0	7.2	16.35
235	0.003	155	2.7	5.5	7.8	18.15
240	0.004	167	3.0	5.9	8.5	19.93
245	0.004	174	3.1	6.2	8.9	21.00
250	0.005	170	3.2	6.2	8.9	21.05
255	0.005	167	3.2	6.3	9.0	21.25
260	0.005	169	3.3	6.4	9.2	21.61
265	0.005	173	3.3	6.5	9.3	21.80
270	0.005	166	3.2	6.4	9.1	21.40
275	0.005	160	3.2	6.2	8.8	20.77
280	0.005	155	3.0	6.0	8.5	20.00
285	0.004	162	3.0	6.0	8.6	20.16
290	0.004	158	2.9	5.8	8.2	19.27
295	0.003	148	2.7	5.3	7.6	17.62
300	0.003	146	2.4	4.9	7.1	16.09
305	0.002	143	2.2	4.5	6.5	14.59
310	0.001	139	1.8	3.8	5.6	12.54
315	0.000	135	1.3	2.8	4.2	9.78
320	0.000	144	1.0	2.3	3.6	8.54
325	0.000	151	1.0	2.2	3.4	8.28
330	0.000	150	1.1	2.4	3.6	8.72
335	0.001	153	1.7	3.7	5.5	12.48
340	0.002	153	2.4	4.9	7.0	16.06
345	0.004	152	2.9	5.7	8.1	19.09
350	0.006	156	3.2	6.3	9.0	21.12
355	0.006	155	3.3	6.4	9.1	21.40

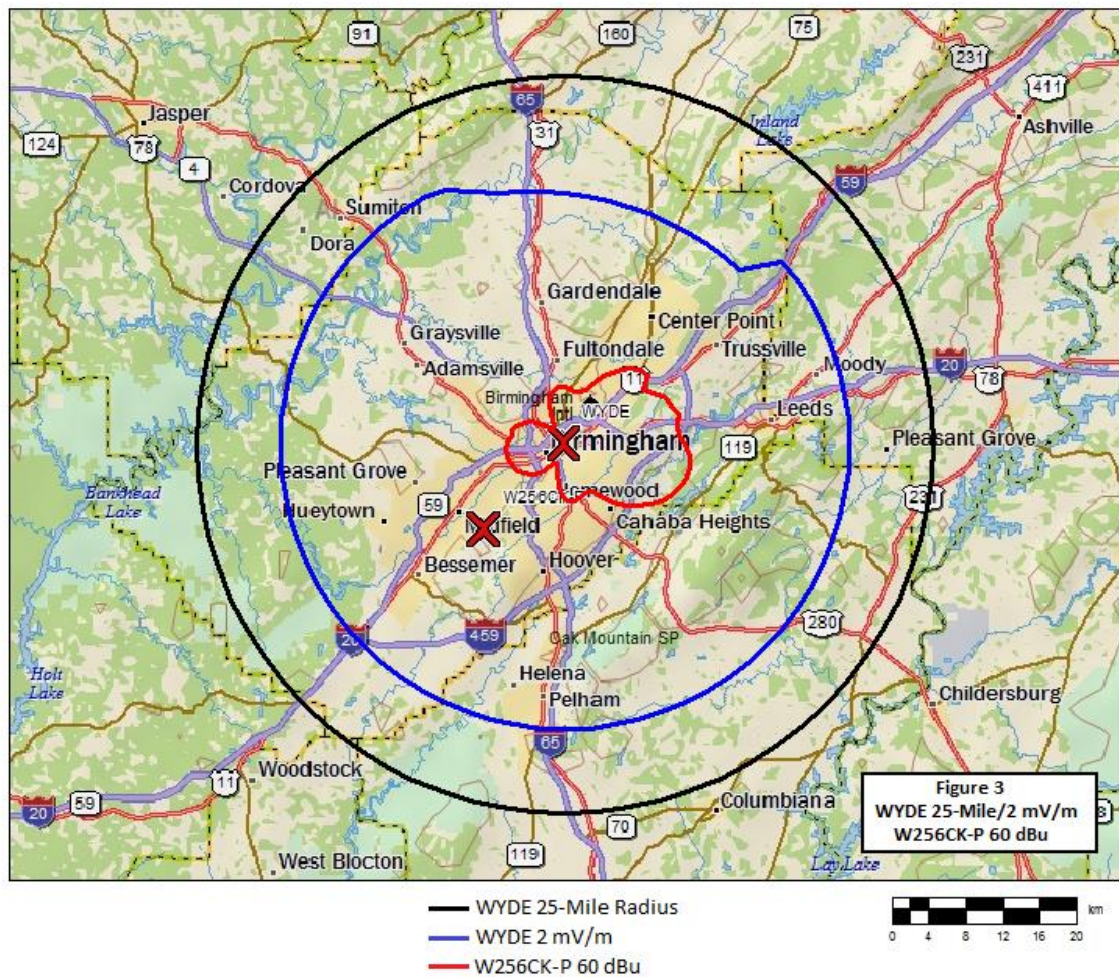


Figure 3 - W256CK-P 60 dBu, WYDE 2 mV/m daytime contour and 25-mile radius.