

**Engineering Statement
In Support of an
Application for a Construction Permit
WUSD(FM), Channel 229C1, Hartford, AL**

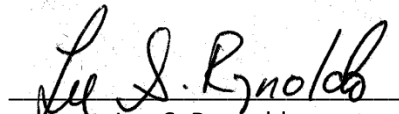
General

The instant application for a construction permit seeks to change the city of license of WUSD from Geneva, Alabama to Hartford, Alabama. Geneva will continue to be served by WGEA(AM), 1150 kHz. No technical changes to the facility are proposed. As such, no gain/loss study or remaining services study are shown in the engineering exhibits, since no site change, channel change, classification change, or power change is proposed.

Exhibit E, Figure 1 shows short spacing to WPBH, channel 228C2, Port St. Joe, Florida. However, WPBH is a §73.215 facility that protects WUSD as a maximum class C1 facility at its current site. Therefore, WUSD is able to use its current antenna location as allocation coordinates on channel 229C1.

Exhibit E, Figure 2 shows that the current WUSD facility easily covers 100% of the city of Hartford, Alabama with a F(50,50) 70 dBu contour. (Exhibit E, Figure 3 is a terrain/contour study that demonstrates the distances to the contours shown in Exhibit E, Figure 2.) Exhibit E, Figure 4 is a vertical sketch that shows all the pertinent elevations to the WUSD tower and antenna.

For the Applicant:



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(205) 618-2020

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WUSD Allocation/Channel Spacing Study

REFERENCE		DISPLAY DATES
31 02 42.0 N.	CLASS = C1	DATA 12-22-08
85 57 33.0 W.	Current Spacings to 3rd Adj.	SEARCH 12-22-08
----- Channel 229 - 93.7 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
WUSD	LIC 229C1	Geneva	AL	0.0	0.00	245.0 -245.00

Of no concern:
Licensed coordinates of WUSD.

WPBH	LIC-N 228C2	Port St. Joe	FL	153.6	151.60	158.0 -6.40
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Of no concern:
WPBH is a §73.215 facility that protects WUSD as a §73.207 facility at its current site. Therefore, the current site is usable as allocation coordinates.

WQSI	LIC	230C3	Union Springs	AL	10.8	143.74	144.0	-0.26
WMJY	LIC-Z	229C	Biloxi	MS	257.4	270.99	270.0	0.99
WIZB	LIC-Z	232C3	Abbeville	AL	55.3	77.29	76.0	1.29
WTYS-FM	LIC	231A	Marianna	FL	114.1	76.30	75.0	1.30
AL9613	VAC	228A	Morgan	GA	66.7	140.50	133.0	7.50
RADD	ADD	227C2	Shalimar	FL	215.4	88.66	79.0	9.66
WBBK-FM	LIC-N	226C2	Blakely	GA	71.6	90.66	79.0	11.66
WNCV	CP -N	227C2	Shalimar	FL	222.1	94.79	79.0	15.79
RDEL	DEL	227C1	Evergreen	AL	295.3	102.52	82.0	20.52
WNCV	LIC-N	227C1	Evergreen	AL	295.3	102.52	82.0	20.52
WDJC-FM	LIC	229C0	Birmingham	AL	342.2	279.76	259.0	20.76
RADD	ADD	230A	Camden	AL	309.6	159.82	133.0	26.82
WMTM-FM	LIC	230C1	Moultrie	GA	84.2	208.03	177.0	31.03
WQZX	LIC	232A	Greenville	AL	327.7	113.97	75.0	38.97

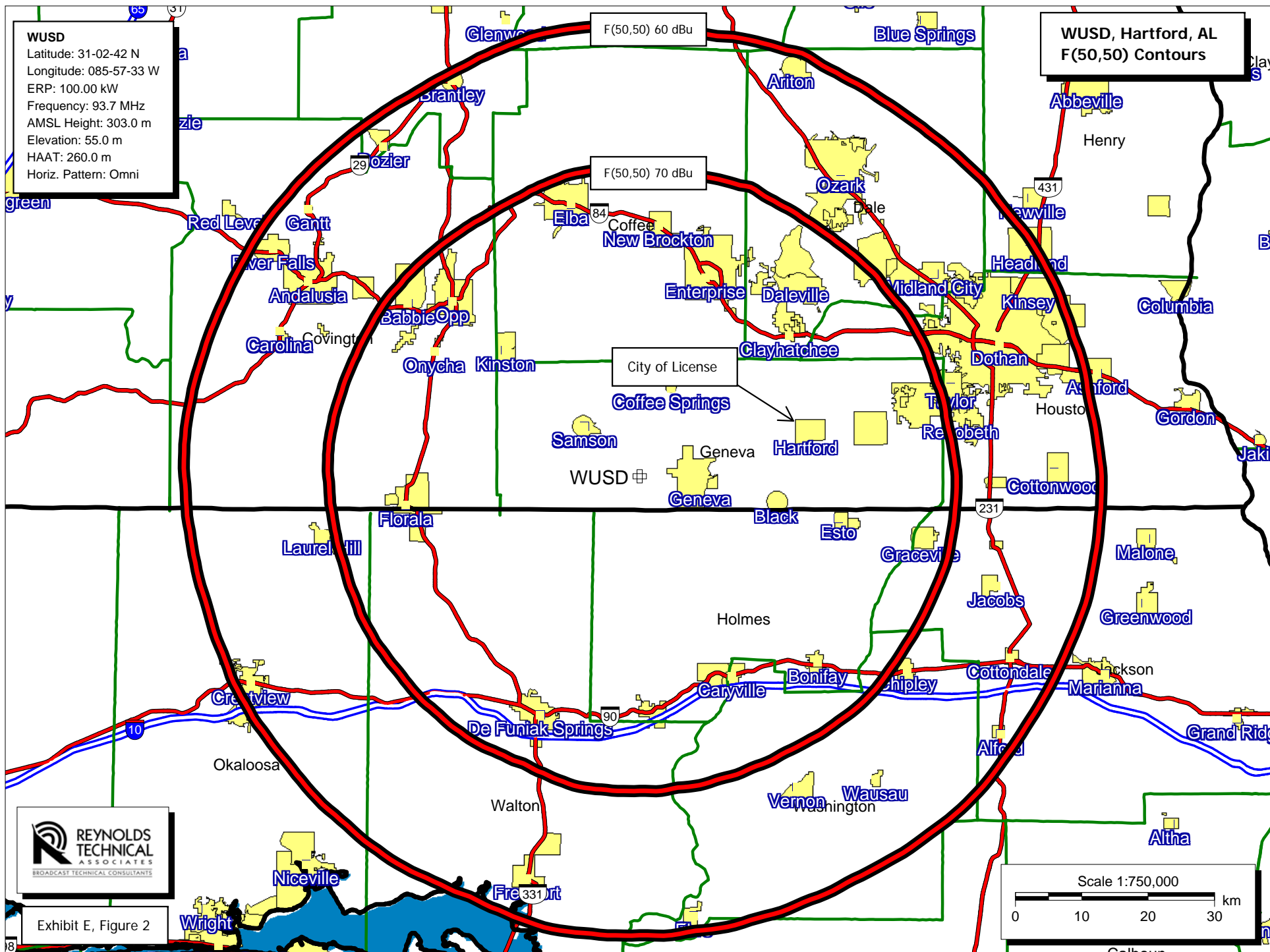


Exhibit E, Figure 2

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Terrain/Contour Study

Reference Coordinates:

ERP: 100 kW

North Latitude: 31-02-42

West Longitude: 85-57-33

Azimuth °T.	Ave. Elev. 3 to 16 km (Meters AMSL)	FM - 2-6 Tables Effective Antenna Height (Meters AAT)	ERP (dBk)	F(50-50) Distance to 70 dBu Contour (km)	F(50-50) Distance to 60 dBu Contour (km)
0	62.5	240.5	20.000	46.0	67.5
5	61.9	241.1	20.000	46.0	67.5
10	64.2	238.8	20.000	45.9	67.3
15	58.4	244.6	20.000	46.3	67.8
20	54.7	248.3	20.000	46.5	68.1
25	60.4	242.6	20.000	46.1	67.6
30	61.2	241.8	20.000	46.1	67.6
35	62.3	240.7	20.000	46.0	67.5
40	60.9	242.1	20.000	46.1	67.6
45	56.2	246.8	20.000	46.4	68.0
50	51.9	251.1	20.000	46.7	68.3
55	52.6	250.4	20.000	46.7	68.3
60	46.9	256.1	20.000	47.1	68.7
65	45.1	257.9	20.000	47.2	68.9
70	47.2	255.8	20.000	47.0	68.7
75	45.6	257.4	20.000	47.1	68.9
80	47.7	255.3	20.000	47.0	68.7
85	42.8	260.2	20.000	47.3	69.1
90	37.4	265.6	20.000	47.7	69.5
95	37.0	266.0	20.000	47.7	69.6
100	36.2	266.8	20.000	47.8	69.6
105	33.9	269.1	20.000	48.0	69.8
110	36.9	266.1	20.000	47.7	69.6
115	38.7	264.3	20.000	47.6	69.4
120	39.5	263.5	20.000	47.6	69.4
125	39.5	263.5	20.000	47.6	69.4
130	36.9	266.1	20.000	47.8	69.6
135	35.5	267.5	20.000	47.8	69.7
140	39.3	263.7	20.000	47.6	69.4
145	41.3	261.7	20.000	47.4	69.2
150	45.7	257.3	20.000	47.1	68.8
155	45.5	257.5	20.000	47.2	68.9

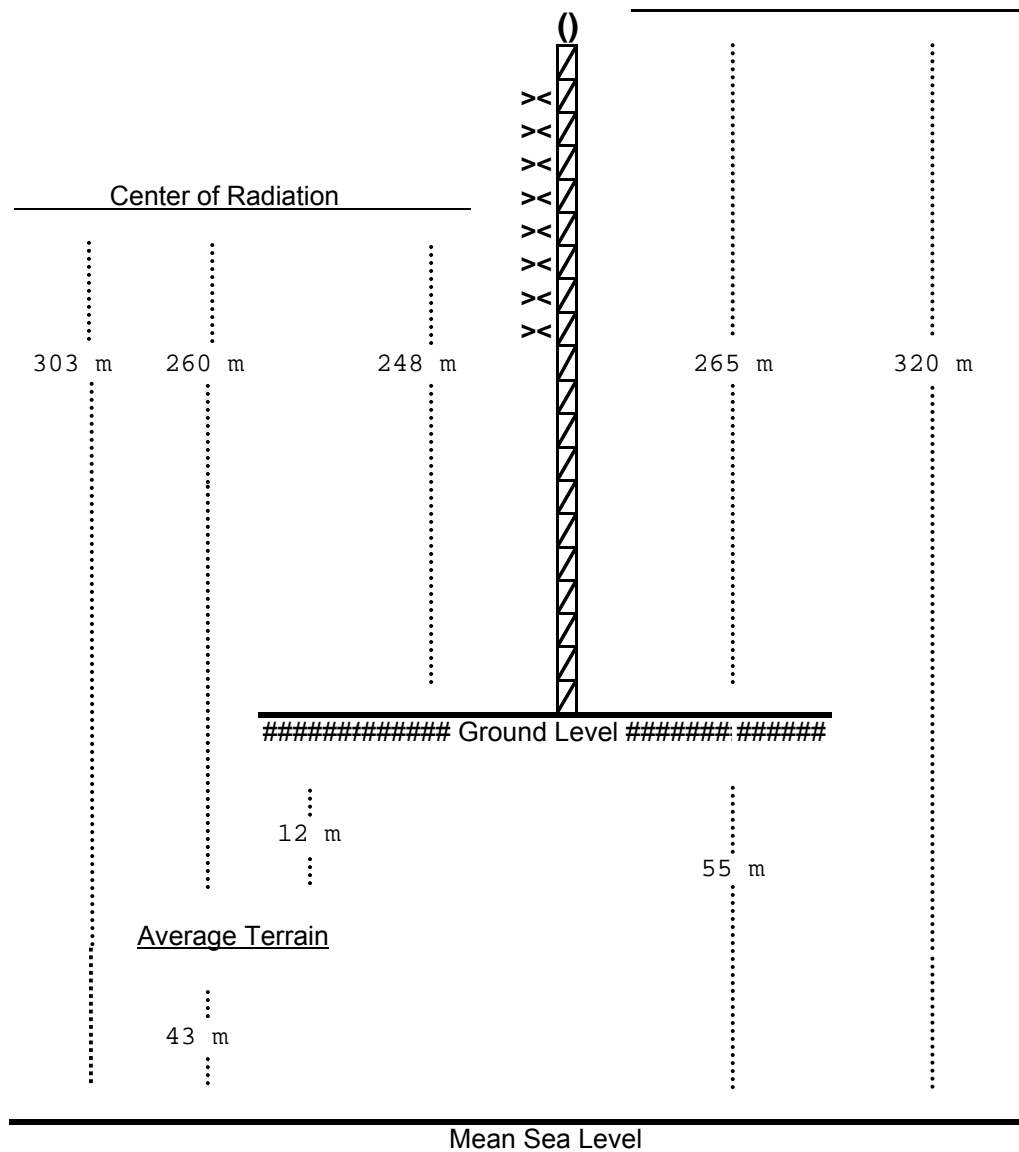
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ERP: 100 kW

Azimuth °T.	Ave. Elev. 3 to 16 km (Meters AMSL)	FM - 2-6 Tables Effective Antenna Height (Meters AAT)	ERP (dBk)	F(50-50) Distance to 70 dBu Contour (km)	F(50-50) Distance to 60 dBu Contour (km)
160	45.8	257.2	20.000	47.1	68.8
165	45.3	257.7	20.000	47.2	68.9
170	42.4	260.6	20.000	47.4	69.1
175	41.8	261.2	20.000	47.4	69.2
180	42.3	260.7	20.000	47.4	69.1
185	40.2	262.8	20.000	47.5	69.3
190	38.6	264.4	20.000	47.6	69.4
195	42.9	260.1	20.000	47.3	69.1
200	49.4	253.6	20.000	46.9	68.5
205	50.7	252.3	20.000	46.8	68.4
210	47.2	255.8	20.000	47.0	68.7
215	47.0	256.0	20.000	47.1	68.7
220	48.8	254.2	20.000	46.9	68.6
225	47.9	255.1	20.000	47.0	68.7
230	50.9	252.1	20.000	46.8	68.4
235	50.3	252.7	20.000	46.8	68.5
240	49.5	253.5	20.000	46.9	68.5
245	51.8	251.2	20.000	46.7	68.3
250	53.4	249.6	20.000	46.6	68.2
255	55.2	247.8	20.000	46.5	68.1
260	53.5	249.5	20.000	46.6	68.2
265	51.1	251.9	20.000	46.8	68.4
270	49.3	253.7	20.000	46.9	68.5
275	47.8	255.2	20.000	47.0	68.7
280	49.5	253.5	20.000	46.9	68.5
285	52.4	250.6	20.000	46.7	68.3
290	54.8	248.2	20.000	46.5	68.1
295	55.9	247.1	20.000	46.4	68.0
300	56.7	246.3	20.000	46.4	67.9
305	56.4	246.6	20.000	46.4	68.0
310	59.0	244.0	20.000	46.2	67.7
315	62.4	240.6	20.000	46.0	67.5
320	65.2	237.8	20.000	45.8	67.2
325	67.6	235.4	20.000	45.6	67.0
330	69.3	233.7	20.000	45.5	66.9
335	67.2	235.8	20.000	45.7	67.1
340	61.9	241.1	20.000	46.0	67.5
345	56.1	246.9	20.000	46.4	68.0
350	53.8	249.2	20.000	46.6	68.2
355	56.8	246.2	20.000	46.4	67.9

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Vertical Sketch



Proposed Location: 31° 02' 42" N. Lat. 85° 57' 33" W. Long. [NAD27]

NOT DRAWN TO SCALE

Proposed Antenna: 8 elements (1 λ between elements)

ASRN: 1036594