

**Engineering Statement  
In Support of an  
Application for a Construction Permit  
WECB(FM), Channel 287C3, Headland, AL**

**WECB(FM) Channel Spacing Study**

REFERENCE		CLASS = C3	DISPLAY DATES
31 11 33.0 N.			DATA 06-09-15
85 24 43.0 W.	Current	Spacings to 3rd Adj.	SEARCH 06-09-15
----- Channel 287 - 105.3 MHz -----			

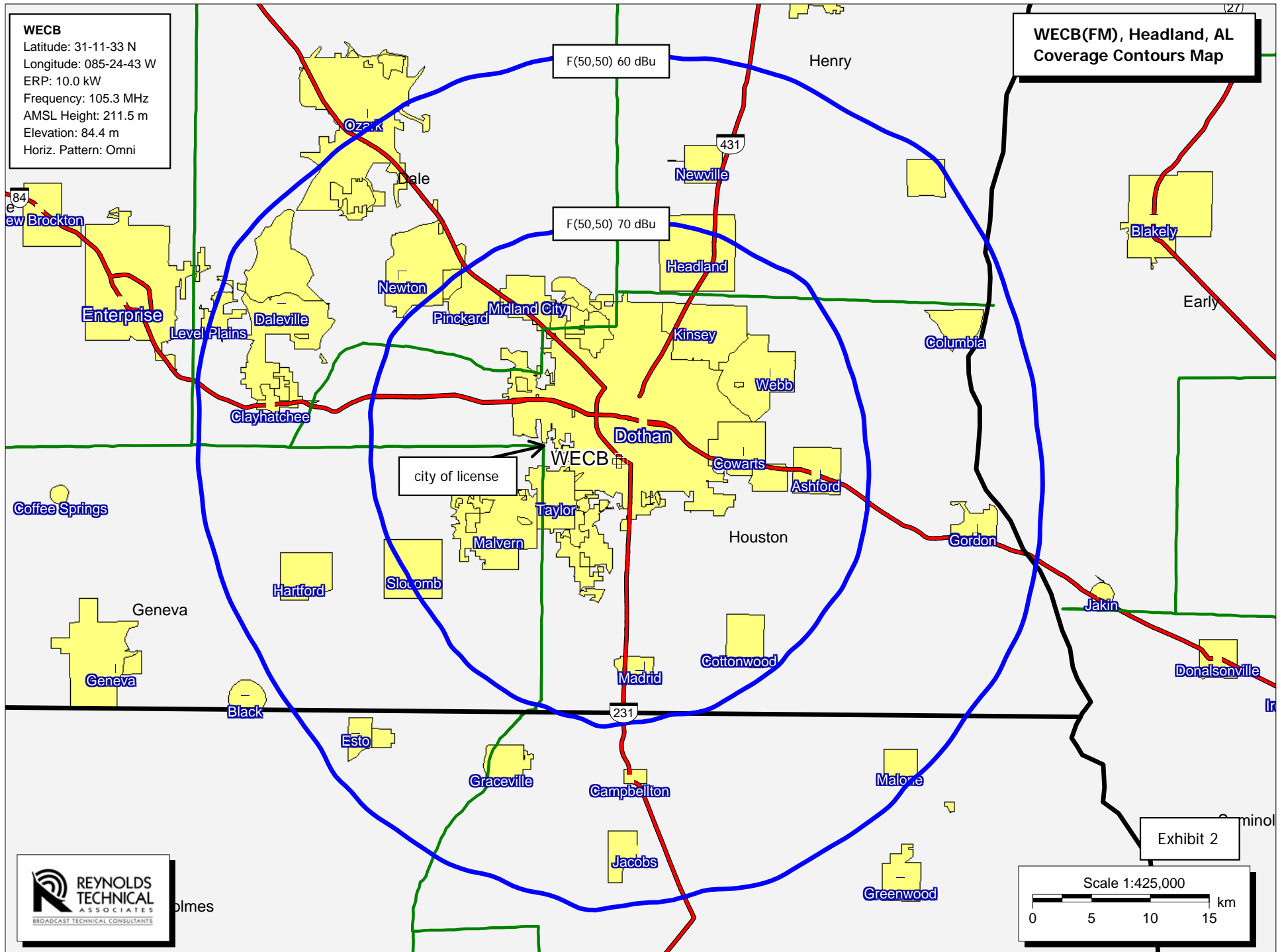
Call	Channel	Location		Azi	Dist	FCC	Margin
<b>WECB</b>	<b>LIC 287C3</b>	<b>Headland</b>	<b>AL</b>	<b>51.8</b>	<b>12.73</b>	<b>152.5</b>	<b>-139.8</b>
Of no concern: Licensed coordinates of WECB.							
<b>WOAB</b>	<b>LIC 285A</b>	<b>Ozark</b>	<b>AL</b>	<b>318.7</b>	<b>38.90</b>	<b>41.5</b>	<b>-2.6</b>
Of concern: Protection afforded via §73.215.							
WASJ	LIC-N 286C2	Panama City Beach	FL	197.5	117.82	116.5	1.3
WZHT	LIC-N 289C	Troy	AL	320.9	112.19	95.5	16.7
WZBN	LIC-N 288A	Camilla	GA	83.0	115.75	88.5	27.3
WBFZ	LIC-Z 287C2	Selma	AL	305.0	211.93	176.5	35.4
WBZY	LIC-N 287C1	Bowdon	GA	12.3	252.08	210.5	41.6
WSTI-FM	LIC 287C3	Quitman	GA	107.7	197.50	152.5	45.0
WYZB	LIC-Z 288C3	Mary Esther	FL	233.4	144.47	98.5	46.0
WAAZ-FM	LIC-N 284C1	Crestview	FL	247.4	121.60	75.5	46.1

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All separation margins include rounding

**WECB**

Latitude: 31-11-33 N  
Longitude: 085-24-43 W  
ERP: 10.0 kW  
Frequency: 105.3 MHz  
AMSL Height: 211.5 m  
Elevation: 84.4 m  
Horiz. Pattern: Omni

**WECB(FM), Headland, AL  
Coverage Contours Map**



**WECB(FM), Headland, AL  
Protected and Interfering  
Contours Map**

**WECB**

Latitude: 31-11-33 N  
Longitude: 085-24-43 W  
ERP: 10.0 kW  
Frequency: 105.3 MHz  
AMSL Height: 214.2 m  
Elevation: 84.4 m  
Horiz. Pattern: Omni

**WOAB**

BMLH19990525KA  
Latitude: 31-27-19 N  
Longitude: 085-40-58 W  
ERP: 6.00 kW  
Frequency: 104.9 MHz  
AMSL Height: 190.0 m  
Elevation: 80.493 m  
Horiz. Pattern: Omni

WOAB F(50,10) 100 dBu

WECB F(50,50) 60 dBu

WECB F(50,10) 100 dBu

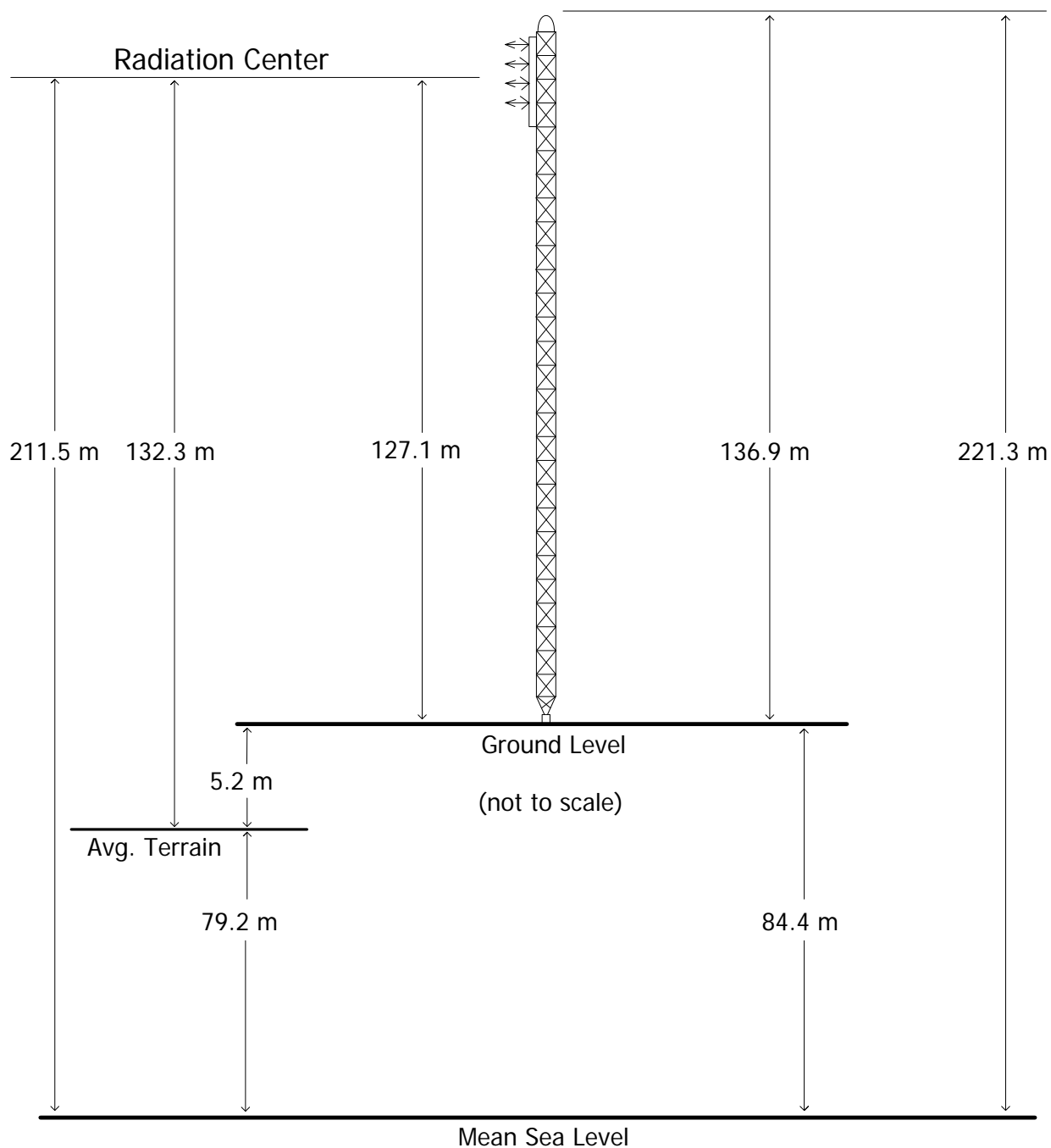
WOAB F(50,50) 60 dBu

WECB

Exhibit 3

Scale 1:175,000

0 2 4 6 km



NAD 27  
Site Coordinates:  
31° 11' 33"  
85° 24' 43"

ASRN: 1292971

**WECB**

Latitude: 31-11-33 N  
Longitude: 085-24-43 W  
ERP: 10.00 kW  
Frequency: 105.3 MHz  
AMSL Height: 211.5 m  
Elevation: 84.4 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: Longley/Rice  
Climate: Cont temperate  
Conductivity: 0.0050  
Dielec Const: 15.0  
Refractivity: 301.0  
Receiver Ht AG: 9.1 m  
Receiver Gain: 0 dB  
Time Variability: 50.0%  
Sit. Variability: 50.0%  
ITM Mode: Broadcast

**WECB(FM), Channel 287C3**  
**Headland, AL**  
**F(50,50) and Longley-Rice**  
**70 dBu Contours Over the**  
**City of License**

10°

Newville

Longley-Rice 70 dBu

34°

Headland

F(50,50) 70 dBu

Midland City

Napier Field

Grimes

Kinsey

Webb

Dothan

WECB

Cowarts

Avon

Ashford

Columbus

Exhibit 5

Scale 1:160,000

0 2 4 6 km

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**WECB(FM) Delta-h Study (along the 34° Radial)**

<u>Distance (km)</u>	<u>Elevation (m)</u>	<u>Distance (km)</u>	<u>Elevation (m)</u>	<u>Distance (km)</u>	<u>Elevation (m)</u>	<u>Distance (km)</u>	<u>Elevation (m)</u>
10.0	80.0	14.3	88.8	18.6	83.5	22.9	89.2
10.1	80.0	14.4	86.1	18.7	86.2	23.0	88.6
10.2	80.0	14.5	83.5	18.8	90.0	23.1	88.4
10.3	80.0	14.6	81.7	18.9	93.5	23.2	87.0
10.4	80.0	14.7	80.0	19.0	95.9	23.3	85.6
10.5	80.0	14.8	80.0	19.1	98.2	23.4	83.3
10.6	80.0	14.9	80.0	19.2	99.4	23.5	81.5
10.7	80.1	15.0	80.0	19.3	100.0	23.6	80.1
10.8	80.8	15.1	80.0	19.4	100.0	23.7	80.0
10.9	81.6	15.2	80.0	19.5	100.0	23.8	80.0
11.0	81.4	15.3	80.0	19.6	100.0	23.9	80.0
11.1	81.2	15.4	80.5	19.7	100.0	24.0	80.0
11.2	82.3	15.5	81.3	19.8	100.0	24.1	80.4
11.3	83.2	15.6	81.3	19.9	100.0	24.2	81.2
11.4	83.8	15.7	81.0	20.0	100.0	24.3	82.8
11.5	85.3	15.8	80.1	20.1	100.0	24.4	86.5
11.6	87.5	15.9	80.0	20.2	100.0	24.5	90.8
11.7	89.8	16.0	80.0	20.3	100.0	24.6	94.7
11.8	92.6	16.1	<b>*80.0</b>	20.4	100.0	24.7	98.5
11.9	94.2	16.2	80.0	20.5	100.0	24.8	98.6
12.0	95.5	16.3	80.0	20.6	100.0	24.9	99.2
12.1	95.7	16.4	80.0	20.7	100.0	25.0	99.9
12.2	95.5	16.5	80.0	20.8	100.0	25.1	100.0
12.3	95.9	16.6	80.0	20.9	100.0	25.2	100.0
12.4	96.1	16.7	80.0	21.0	100.0	25.3	<b>**100.0</b>
12.5	95.9	16.8	80.0	21.1	100.0	25.4	100.0
12.6	95.7	16.9	80.0	21.2	100.0	25.5	100.0
12.7	96.3	17.0	80.0	21.3	100.0	25.6	101.6
12.8	98.0	17.1	80.0	21.4	100.0	25.7	104.2
12.9	98.9	17.2	80.0	21.5	100.0	25.8	107.7
13.0	99.8	17.3	80.0	21.6	100.0	25.9	111.0
13.1	100.0	17.4	80.0	21.7	100.0	26.0	113.6
13.2	100.0	17.5	80.0	21.8	100.0	26.1	114.1
13.3	100.0	17.6	80.0	21.9	100.0	26.2	112.9
13.4	100.0	17.7	80.0	22.0	100.0	26.3	111.4
13.5	100.0	17.8	80.0	22.1	100.0	26.4	110.0
13.6	100.0	17.9	80.0	22.2	99.6	26.5	108.7
13.7	100.0	18.0	80.0	22.3	97.9	26.6	107.3
13.8	100.0	18.1	80.4	22.4	95.1	26.7	105.8
13.9	98.2	18.2	80.4	22.5	92.3	26.8	106.5
14.0	96.4	18.3	80.7	22.6	91.3	26.9	108.4
14.1	93.9	18.4	81.6	22.7	90.2	27.0	109.8
14.2	91.2	18.5	83.1	22.8	89.9		

\*h<sub>max</sub> = 100 meters

\*\*h<sub>min</sub> = 80 meters

delta-h (Δh) = h<sub>max</sub> – h<sub>min</sub> = 20 meters

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**WECB(FM) FCC/Longley-Rice 70 dBu Contour Comparison Over the Community of License  
(Showing that the percentage difference is greater than 10% for all radials)**

<u>Azimuth (°T)</u>	<u>Distance to F(50,50) 70 dBu (km)</u>	<u>Distance to Longley-Rice 70 dBu (km)</u>	<u>Percentage Difference</u>
10.0	25.4	20.4	24.5%
11.0	25.6	20.5	24.9%
12.0	25.8	20.6	25.2%
13.0	26.9	20.7	30.0%
14.0	27.1	20.7	30.9%
15.0	25.5	20.7	23.2%
16.0	24.3	20.7	17.4%
17.0	27.0	20.8	29.8%
18.0	28.3	20.8	36.1%
19.0	26.3	20.8	26.4%
20.0	25.9	20.8	24.5%
21.0	29.4	20.9	40.7%
22.0	26.1	20.9	24.9%
23.0	30.8	20.9	47.4%
24.0	27.1	21.0	29.0%
25.0	27.5	21.0	31.0%
26.0	27.4	21.0	30.5%
27.0	27.6	21.0	31.4%
28.0	25.9	20.9	23.9%
29.0	30.9	20.9	47.8%
30.0	26.6	20.9	27.3%
31.0	26.5	20.9	26.8%
32.0	26.6	20.9	27.3%
33.0	26.7	20.9	27.8%
34.0	27.0	20.9	29.2%