

FM Translator W237FB
Channel 237D – 95.3 MHz – 0.099 kW
Tallahassee, FL
April 1, 2022

TECHNICAL NARRATIVE

This Technical Narrative and attached exhibits were prepared on behalf of Live Communications, Inc. (“Live”), licensee W237FB, Facility ID No. 202900, Tallahassee, FL. Live herein is filing a minor modification application to relocate to a different transmit location.

The proposed W237FB facility would be used as a fill-in translator for co-owned primary Station WTAL(AM), licensed to Tallahassee, FL. The proposed facility would operate on Channel 237D (95.3 MHz) with 99 watts non-directional with the transmit antenna located at 102 meters height above ground level and 135 meters HAAT. The transmit site is an existing tower 105.3 meters in overall height and registered with FCC Antenna Structure Registration (“ASR”) number 1028859. An exhibit demonstrates that the proposed W237FB FCC F(50,50) 60 dBu contour is contained within a 25 mile radius from the WTAL transmit location. WTAL will be relocating to a new transmit location in the near future. The Section 74.1201(g) Fill-In Translator exhibit shows a 25 mile radius from both the WTAL licensed site (shown in blue) and the proposed WTAL site (shown in green). Therefore it is believed that this application is in compliance with Section 74.1201(g) of the Commission’s rules. The channel study is included that assumes a Class A 6 kW facility operating on channel 237 and is provided to help identify potential contour overlap issues. The channel study also shows the distance from the licensed and proposed W237FB site is only 0.3 km. Therefore, there is no exhibit demonstrating compliance with FCC Section 74.1233(a)

“Common Overlap”.

Exhibits show Section 74.1204 contour protection to second adjacent channel full power FM station WTNT-FM, Channel 235C1, Tallahassee, FL, co-channel full power FM station WVKV, Channel 237C2, Nashville, GA, second adjacent FM translator W239CG, Channel 239D, Tallahassee, FL and first adjacent full power FM station WTVY-FM, Channel 238C0, Dothan, AL.

Studies have been undertaken to show the proposed facility is in compliance with the Commission’s radio frequency emission limits and are attached as exhibits.

W237FB

Tallahassee, FL
Latitude: 30-25-41.10 N
Longitude: 084-14-54.60 W
ERP: 0.099 kW
HAAT: 135 m
Channel: 237
Frequency: 95.3 MHz
AMSL Height: 164.2 m
Elevation: 62.2 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%
HAAT Mthd: FCC

WTAL

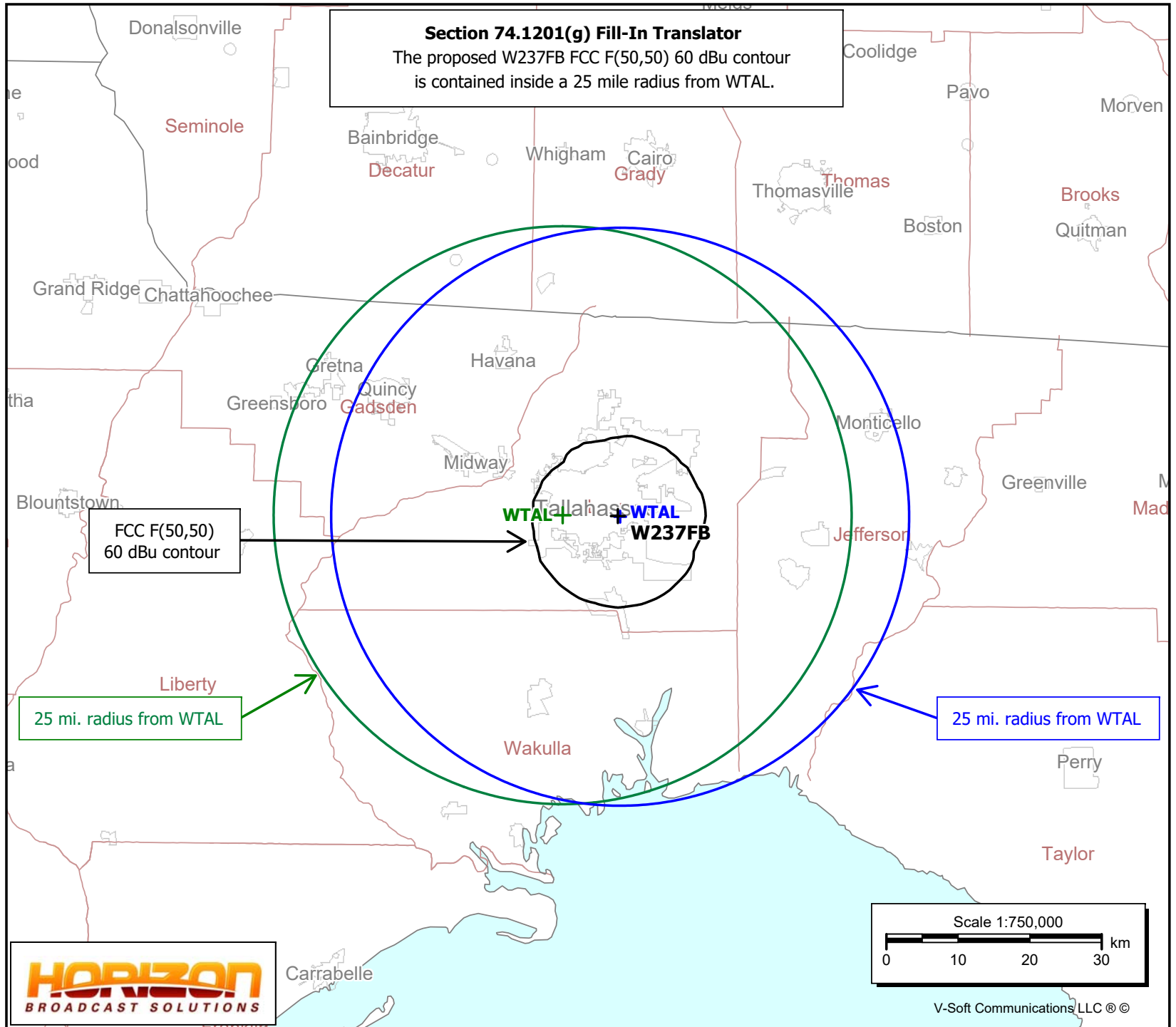
Tallahassee, FL
Type: AM
Channel: 1450
Latitude: 30-25-38 N
Longitude: 084-14-43 W
Power: 1.0 kW Daytime

WTAL Proposed

Tallahassee, FL
Type: AM
Channel: 1450
Latitude: 30-25-45 N
Longitude: 084-19-43 W
Power: TBD

Section 74.1201(g) Fill-In Translator

The proposed W237FB FCC F(50,50) 60 dBu contour is contained inside a 25 mile radius from WTAL.



W237FB Channel Study

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REFERENCE                                     DISPLAY DATES
30 25 41.1 N.                               CLASS = A   Int = A   DATA 03-17-22
84 14 54.6 W.                               Current Spacings to 3rd Adj. SEARCH 03-17-22
----- Channel 237 - 95.3 MHz -----
Call      Channel  Location      Azi      Dist      FCC      Margin
      Lat.      Lng.      Ant      Power      HAAT
-----
W237FB    LIC    237D    Tallahassee    FL    101.9    0.3    84.5    -84.2
30 25 39.0  84 14 43.0  CN      0.099 kW    0 M
Live Communications, Inc.    0000091112

WTNT-FM   LIC    235C1   Tallahassee    FL    355.2    16.7    74.5    -57.8
30 34 42.7  84 15 47.6  CN      100.000 kW   256 M
Ihm Licenses, LLC          BMLH20110408ABN
Note: See Section 74.1204 Contour Protection - WTNT-FM

WVKV      LIC-N 237C2   Nashville      GA    45.3    118.1    165.5    -47.4
31 10 18.7  83 21 56.6  NCN      29.000 kW   159 M
Educational Media Foundati BMLED20070202ADB
Note: See Section 74.1204 Contour Protection -WVKV

W239CG    LIC    239D    Tallahassee    FL    321.3    6.0    25.5    -19.5
30 28 12.7  84 17 15.6  CN      0.010 kW    0 M
Way Media , Inc.          BLFT20170424AAE
Note: See Section 74.1204 Contour Protection - W239CG

WTVY-FM   LIC    238C0   Dothan        AL    313.8    133.3    151.5    -18.2
31 15 16.6  85 15 38.7  CN      100.000 kW   323 M
Gulf South Communications, BLH19880323KD
Note: See Section 74.1204 Contour Protection - WTVY-FM

W237CN    LIC    237D    Perry         FL    118.4    74.6    84.5    -9.9
30 06 27.8  83 33 59.5  CN      0.250 kW    0 M
Dockins Communications, In BLFT20150427AFP

WQTL      CP -Z 291A    Tallahassee    FL    335.8    7.3    9.5    -2.2
30 29 17.1  84 16 47.1  ZCN      1.900 kW   180 M
Adams Radio Of Tallahassee 0000153419

WQTL      APP-Z 291A    Tallahassee    FL    335.8    7.3    9.5    -2.2
30 29 17.1  84 16 47.1  ZCN      1.900 kW   180 M
Adams Radio Of Tallahassee 0000185746

WQTL      LIC-Z 291A    Tallahassee    FL    11.2    7.5    9.5    -2.0
30 29 39.7  84 13 59.6  ZCN      2.250 kW   154 M
Adams Radio Of Tallahassee BLH20180202AAP

W240DR    LIC    240D    Cairo         GA    1.5    52.6    25.5    27.1
30 54 09.0  84 14 03.0  CN      0.250 kW    0 M
Lovett Broadcasting Enterp 0000120210

WQPW      LIC-N 239C2   Valdosta      GA    74.0    112.9    54.5    58.4
30 42 07.8  83 06 53.5  NCN      32.000 kW   185 M
Southern Communications, L  BLH20070817AAJ
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Section 74.1204

Contour Protection to WTNT-FM

This comprehensive exhibit has been prepared to demonstrate that proposed W237FB modification will not cause prohibited interference to second adjacent full power FM station WTNT-FM, Channel 235C1, Tallahassee, Florida. This statement demonstrates that a lack of population and/or other factors allow this proposal to be compliant with Section 74.1204. The process commonly called “Living Way,” allows for the use of U/D Analysis, also known as “signal strength ratio methodology.” In this instant case the facilities to be protected are second adjacent and are to be afforded protection from signals 40 dB stronger than they present in the location of the proposed antenna location.

The WTNT-FM F(50,50) protected contour at the proposed W237FB application site is 89.8 dBu. Therefore, the proposed W237FB F(50,10) interfering contour with respect to WTNT-FM is the 129.8 dBu contour. Using the FCC's FM propagation curves program (see attached), the 129.8 dBu contour was calculated to extend 23 meters from the antenna.

The proposed transmit antenna would be mounted 102 meters above ground level. The interfering contour will not reach the ground. Therefore it is believed that this application is in compliance with 47 C.F.R. § 74.1204 with respect to WTNT-FM.

FM and TV Propagation Curves

Databases & Searches

AM Query

Antenna Height Above Average
Terrain (HAAT) Calculator

Antenna Structure Registration
(ASRN) Records Within A Radius

Broadcast Station Mailing
Address Search

Call Sign Reservation and
Authorization System (CSRS)

CDBS Database Public Files

Children's Educational
Television Reporting - Form
2100, Schedule H

Children's Programming Query

COLORIT HTML Color Generator

Degrees Minutes Seconds
to/from Decimal Degrees

Distance and Azimuths
Between Two Sets of
Coordinates

Electioneering Communications
Database

EEO Filing Search

Filing Systems and Databases

This Javascript calculator uses the FM or TV propagation curves to find the distance to a service or interfering contour, or the corresponding field strength at a given contour distance. [More after the form.](#)

Select Contour Type:	F(50,50) Service Contour -- FM and NTSC (analog) TV F(50,10) Interfering Contour F(50,90) Digital TV Service Contour	
Select Channel Range: (not TV Virtual Channel)	FM Radio or TV Transmit Channels 2-6 TV Transmit Channels 7-13 TV Transmit Channels 14-69	
Find This:	Field Strength, given a Distance (in km) Distance, Given a Field Strength (in dBu) FM ERP, given Distance and Field Strength [F(50,50) Service Contour]	
ERP (kW)	Distance (km)	
HAAT (meters)	Field (dBu)	
Find Result	Clear Form	

Results:

Calculated Distance = 0.023 km

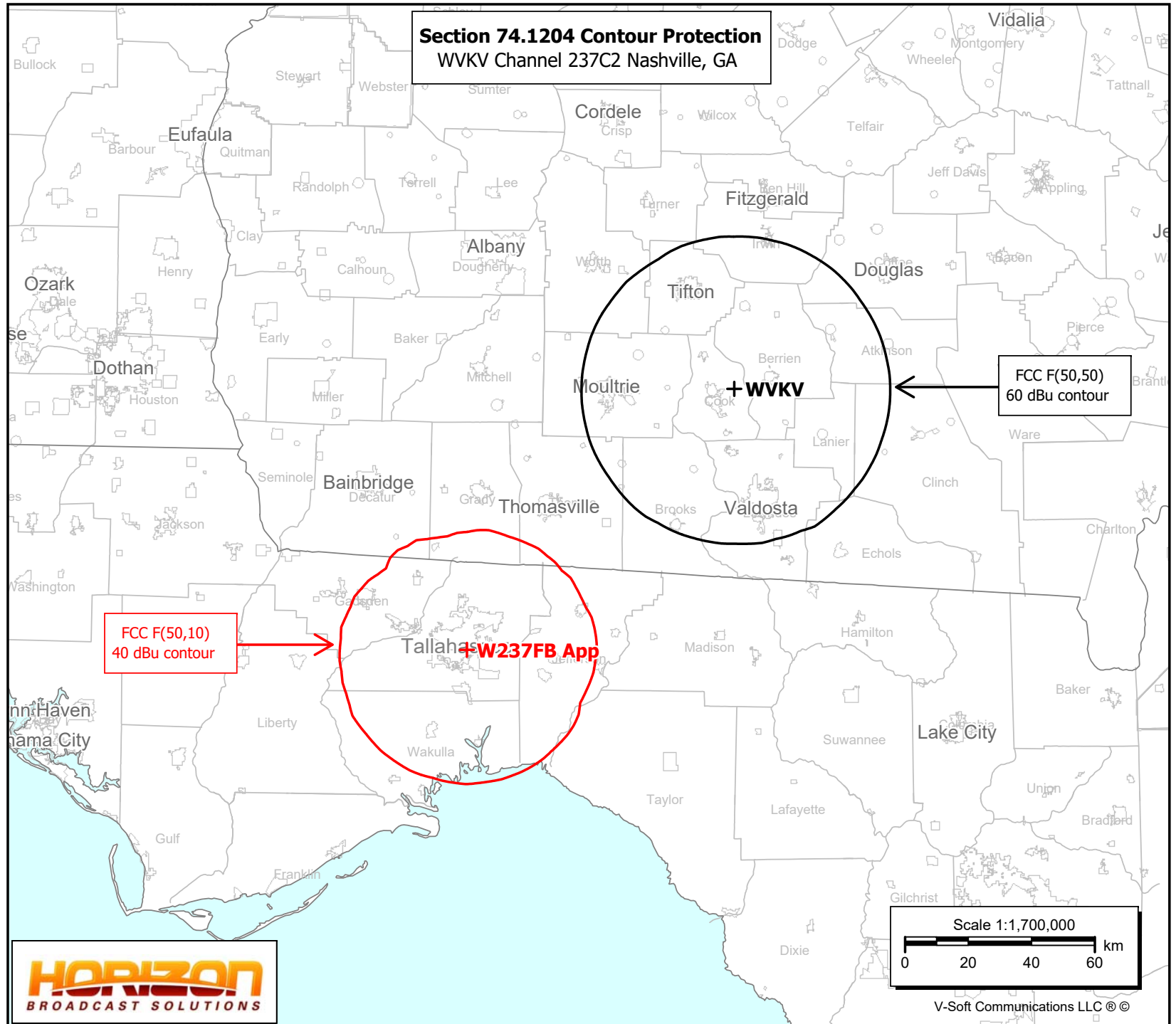
Free Space equation used to compute distance.

WVKV

Nashville, GA
BMLED20070202ADB
Latitude: 31-10-18 N
Longitude: 083-21-57.03 W
ERP: 29.00 kW
HAAT: 159 m
Channel: 237
Frequency: 95.3 MHz
AMSL Height: 231.0 m
Elevation: 69.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%
HAAT Mthd: FCC

W237FB App

Tallahassee, FL
Latitude: 30-25-41.10 N
Longitude: 084-14-54.60 W
ERP: 0.099 kW
HAAT: 134.72 m
Channel: 237
Frequency: 95.3 MHz
AMSL Height: 164.2 m
Elevation: 62.2 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%
HAAT Mthd: FCC

Section 74.1204 Contour Protection
WVKV Channel 237C2 Nashville, GA

Section 74.1204 Contour Protection W239CG Channel 239D Tallahassee, FL

This comprehensive exhibit has been prepared to demonstrate that the proposed W237FB modification will not cause prohibited interference to second adjacent FM translator W239CG, Channel 239D, Tallahassee, FL. This statement demonstrates that a lack of population and/or other factors allow this proposal to be compliant with Section 74.1204. The process commonly called "Living Way," allows for the use of U/D Analysis, also known as "signal strength ratio methodology." In this instant case the facilities to be protected are second adjacent and are to be afforded protection from signals 40 dB stronger than they present in the location of the proposed antenna location.

The W239CG F(50,50) 60 dBu contour does not overlap with the proposed W237FB transmit location. However, the attached Map One shows the W239CG F(50,50) 60 dBu protected contour and the W237FB F(50,10) 100 dBu contour overlap slightly. Map Two shows the distance from the W237FB transmit location and the W239CG F(50,50) 60 dBu is 650 meters at the closest point.

Using the FCC's FM propagation curves program (see attached), the W237FB F(50,10) 100 dBu contour was calculated to extend 698 meters from the antenna. A copy of the Nicom BKG-77 two bay 0.85 wave length antenna vertical elevation pattern is attached. Using the data provided in the vertical elevation pattern, the ERP was calculated for every ten degrees of elevation. The respective contour distance for the proposed new FM translator interfering contour was then calculated using the FCC's FM propagation curves program. The contour distance ranges from a maximum of 698 meters at 0 degrees to a minimum of 77 meters at 30 degrees. The attached spreadsheet then plotted the interfering curve from the antenna into free space. The interfering contour only reaches the ground from approximately 70 meters to 150 meters from the tower base. This is well outside the W239CG FCC F(50,50) 60 dBu contour. The attached chart shows the proposed W237FB interfering with contour at the W239FB 60 dBu contour is 94 meters (308.4 ft.) above ground level. The contour rises quickly from that point. There are high rise buildings in the area around the tower. The proposed W237FB modification will not cause prohibited interference to W239CG as there is no overlapping of prohibited contours at ground level to 2 meters above ground level. Therefore, it is believed that the proposed W237FB modification is in compliance with Section 74.1204 contour protection with respect to W239CG.

W239CG

Tallahassee, FL
Latitude: 30-28-11.98 N
Longitude: 084-17-15.96 W
ERP: 0.01 kW
HAAT: 83.65 m
Channel: 239
Frequency: 95.7 MHz
AMSL Height: 120.0 m
Elevation: 63.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

W237FB

Tallahassee, FL
0000091112
Latitude: 30-25-41.10 N
Longitude: 084-14-54.60 W
ERP: 0.099 kW
HAAT: 134.72 m
Channel: 237
Frequency: 95.3 MHz
AMSL Height: 164.2 m
Elevation: 62.2 m
Horiz. Pattern: Omni
Vert. Pattern: No

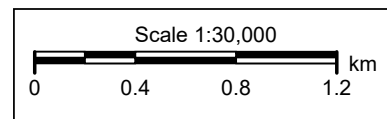
Map One

Section 74.1204 Contour Protection
W239CG Channel 239D Tallahassee, FL
(contour overlap shown on map)

W239CG FCC F(50,50)
60 dBu contour

+ W237FB

W237FB FCC F(50,10)
100 dBu contour



V-Soft Communications LLC ©

W239CG

Tallahassee, FL
Latitude: 30-28-11.98 N
Longitude: 084-17-15.96 W
ERP: 0.01 kW
HAAT: 83.65 m
Channel: 239
Frequency: 95.7 MHz
AMSL Height: 120.0 m
Elevation: 63.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

W237FB

Tallahassee, FL
0000091112
Latitude: 30-25-41.10 N
Longitude: 084-14-54.60 W
ERP: 0.099 kW
HAAT: 134.72 m
Channel: 237
Frequency: 95.3 MHz
AMSL Height: 164.2 m
Elevation: 62.2 m
Horiz. Pattern: Omni
Vert. Pattern: No

Map Two

Section 74.1204 Contour Protection
W239CG Channel 239D Tallahassee, FL
(distance to W239FB 60 dBu contour)

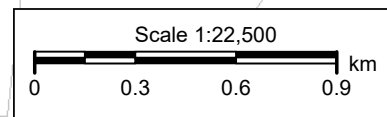
Leon

**W239CG FCC F(50,50)
60 dBu contour**

+ W237FB

650 meter radius

HORIZON
BROADCAST SOLUTIONS



V-Soft Communications LLC ©

FM and TV Propagation Curves

Databases & Searches

AM Query

Antenna Height Above Average
Terrain (HAAT) Calculator

Antenna Structure Registration
(ASRN) Records Within A Radius

Broadcast Station Mailing
Address Search

Call Sign Reservation and
Authorization System (CSRS)

CDBS Database Public Files

Children's Educational
Television Reporting - Form
2100, Schedule H

Children's Programming Query

COLORIT HTML Color Generator

Degrees Minutes Seconds
to/from Decimal Degrees

Distance and Azimuths
Between Two Sets of
Coordinates

Electioneering Communications
Database

EEO Filing Search

Filing Systems and Databases

Find Community Coordinates

Find Terminal Coordinates

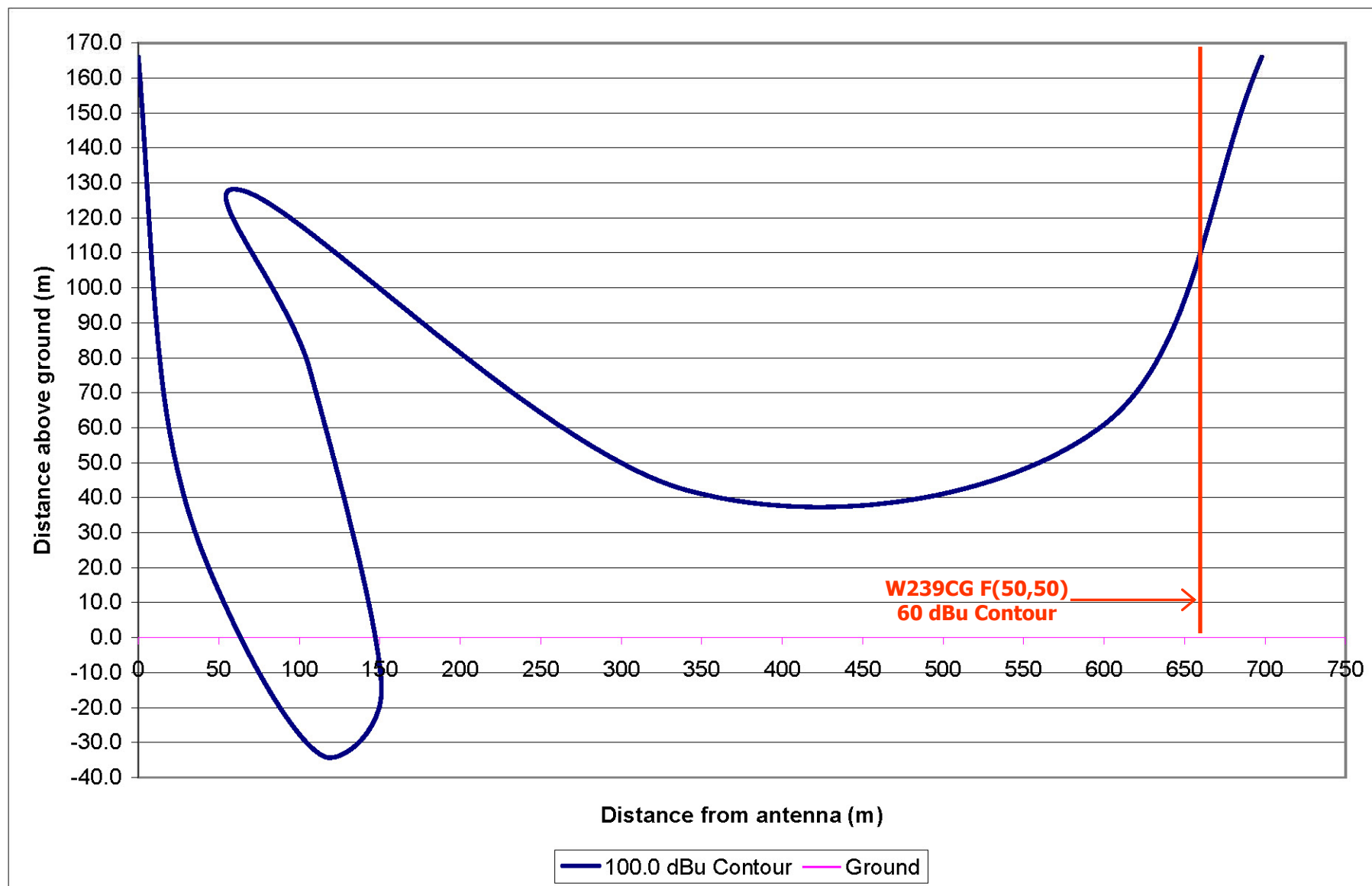
This Javascript calculator uses the FM or TV propagation curves to find the distance to a service or interfering contour, or the corresponding field strength at a given contour distance. [More after the form.](#)

Select Contour Type:	<div>F(50,50) Service Contour -- FM and NTSC (analog) TV F(50,10) Interfering Contour F(50,90) Digital TV Service Contour</div>
Select Channel Range: (not TV Virtual Channel)	<div>FM Radio or TV Transmit Channels 2-6 TV Transmit Channels 7-13 TV Transmit Channels 14-69</div>
Find This:	<div>Field Strength, given a Distance (in km) Distance, Given a Field Strength (in dBu) FM ERP, given Distance and Field Strength [F(50,50) Service Contour]</div>
<div>.099</div> ERP (kW)	<div></div> Distance (km)
<div>135</div> HAAT (meters)	<div>100</div> Field (dBu)
<div>Find Result</div>	<div>Clear Form</div>
Results: <div><div>Calculated Distance = 0.698 km</div><div>Free Space equation used to compute distance.</div></div>	

This function uses the FCC's CURVES program to make calculations of the F(50,50) FM and NTSC (analog) TV service curves, the F(50,10) interfering signal curves, and the F(50,90) digital TV service curves. Printable copies of these propagation curves are available at [FM and TV Propagation Curves Graphs](#).

W237FG Channel 237D Tallahassee, FL
Section 74.1204 Contour Protection to W239CG.CP Channel 239D, Tallahassee, FL

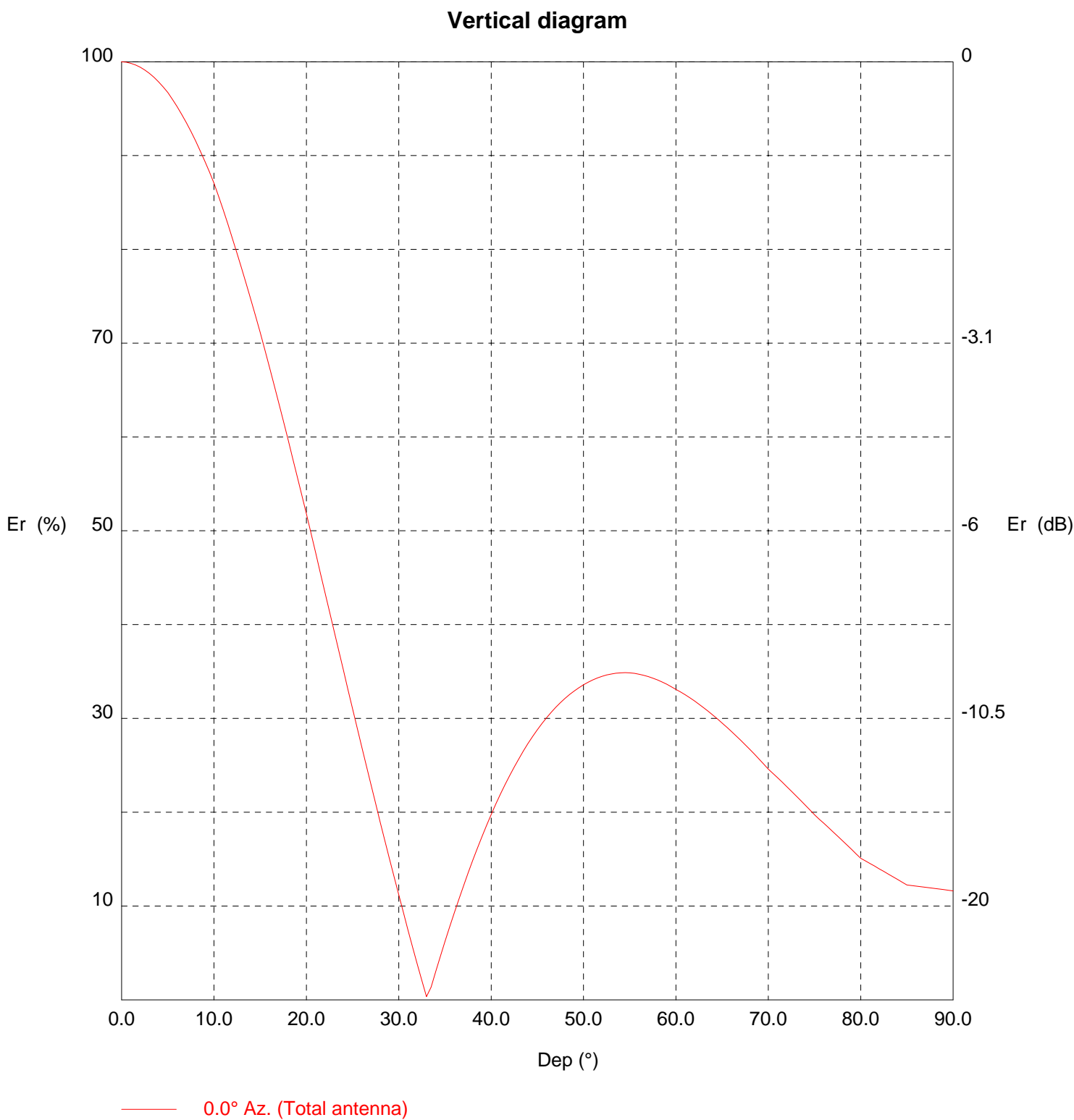
(100.0 dBu F(50,10) interfering contour shown)



The proposed 100.0 dBu interfering contour with respect to W239CG.CP does not reach the ground within the W239CG F(50,50) 60 dBu contour.

Angle of Elevation (degrees)	Relative Field Value	ERP (dBk)	ERP (watts)	100.0 dBu contour (meters)
-----	-----	-----	-----	-----
0	1.000	-10.044	99	698
10	0.871	-11.243	75.1	608
20	0.518	-15.757	26.6	362
30	0.112	-29.059	1.2	77
40	0.198	-24.11	3.9	139
50	0.336	-19.517	11.2	235
60	0.331	-19.647	10.8	231
70	0.246	-22.225	6.0	172
80	0.151	-26.464	2.3	106
90	0.117	-28.68	1.4	83

Θ (°)	Θ (radians)	R (m)	x'	y'	$y = 166 - y'$	Gnd
0	0	698	698	0	166.0	0
10	0.175	608	598.8	105.6	60.4	0
20	0.349	362	340.2	123.8	42.2	0
30	0.524	77	66.7	38.5	127.5	0
40	0.698	139	106.5	89.3	76.7	0
50	0.873	235	151.1	180.0	-14.0	0
60	1.047	231	115.5	200.1	-34.1	0
70	1.222	172	58.8	161.6	4.4	0
80	1.396	106	18.4	104.4	61.6	0
90	1.571	83	0.0	83	166	0



TX station: BKG77/2 GENERIC

Site name: 3/4 WAVE SEPARATION

Frequency: 98.10 MHz

Vertical diagram at an azimuth of 0° degrees

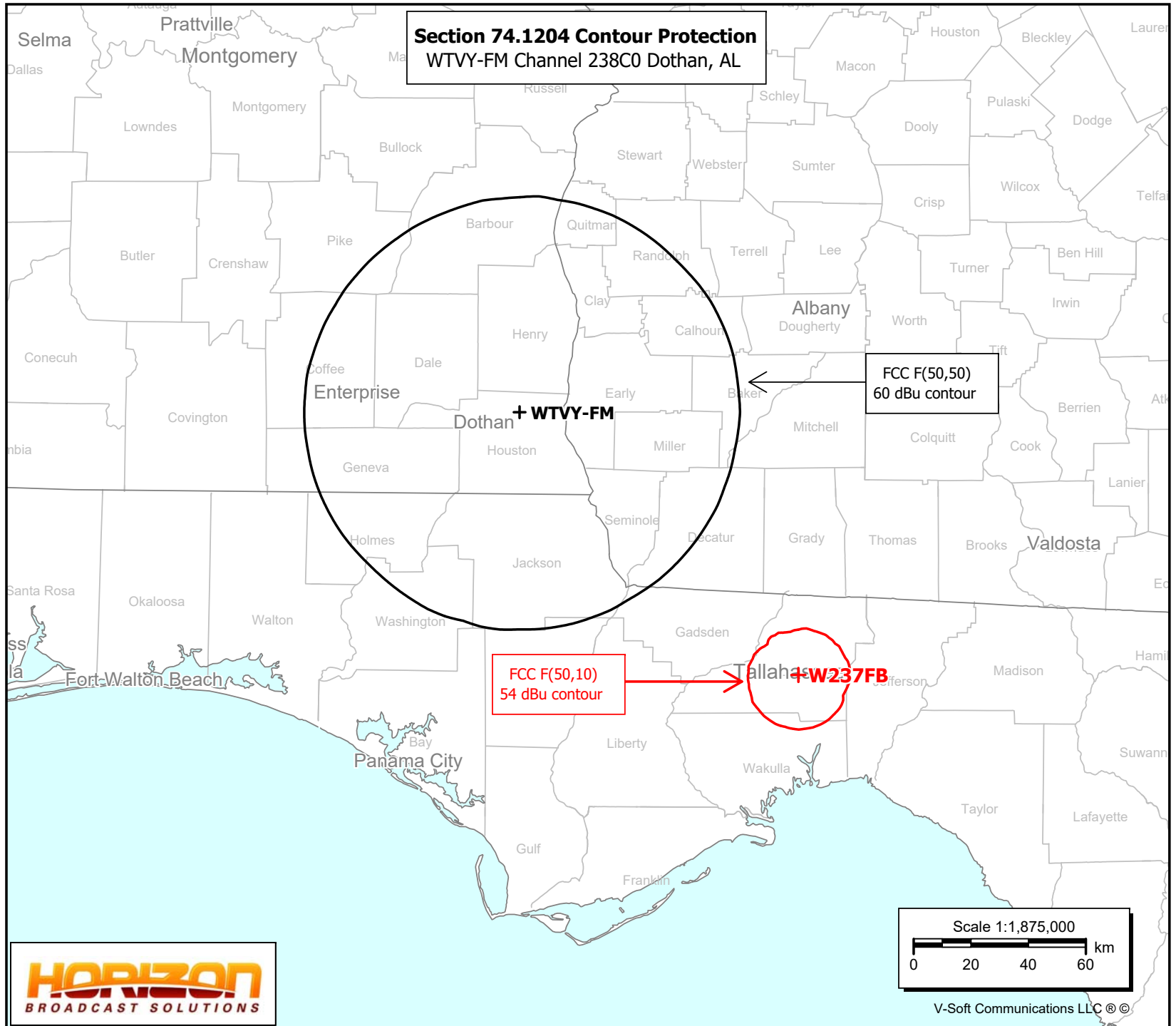
Dep (°)	Er (%)	ERP (W)	Dep (°)	Er (%)	ERP (W)	Dep (°)	Er (%)	ERP (W)
0.0	100.0	914.2	30.0	11.2	11.5	60.0	33.1	100.1
0.5	100.0	913.3	30.5	9.3	7.9	60.5	32.8	98.4
1.0	99.8	911.3	31.0	7.5	5.1	61.0	32.5	96.7
1.5	99.7	908.1	31.5	5.6	2.9	61.5	32.2	94.8
2.0	99.4	903.9	32.0	3.8	1.3	62.0	31.9	92.8
2.5	99.1	898.4	32.5	2.1	0.4	62.5	31.5	90.8
3.0	98.8	891.9	33.0	0.3	0.0	63.0	31.1	88.7
3.5	98.4	884.3	33.5	1.4	0.2	63.5	30.8	86.5
4.0	97.9	875.7	34.0	3.0	0.8	64.0	30.4	84.2
4.5	97.3	865.9	34.5	4.6	2.0	64.5	29.9	81.9
5.0	96.7	855.2	35.0	6.2	3.5	65.0	29.5	79.5
5.5	96.0	842.7	35.5	7.8	5.5	65.5	29.1	77.2
6.0	95.2	829.2	36.0	9.3	7.9	66.0	28.6	74.8
6.5	94.4	814.9	36.5	10.7	10.5	66.5	28.2	72.5
7.0	93.5	799.7	37.0	12.1	13.5	67.0	27.7	70.0
7.5	92.6	783.6	37.5	13.5	16.7	67.5	27.2	67.6
8.0	91.6	766.9	38.0	14.9	20.2	68.0	26.7	65.1
8.5	90.5	749.4	38.5	16.1	23.8	68.5	26.2	62.7
9.0	89.4	731.2	39.0	17.4	27.7	69.0	25.7	60.2
9.5	88.3	712.5	39.5	18.6	31.6	69.5	25.1	57.8
10.0	87.1	693.1	40.0	19.8	35.7	70.0	24.6	55.3
10.5	85.7	670.8	40.5	20.9	39.8	70.5	24.1	53.3
11.0	84.2	648.2	41.0	21.9	43.9	71.0	23.7	51.2
11.5	82.7	625.3	41.5	22.9	48.1	71.5	23.2	49.2
12.0	81.2	602.3	42.0	23.9	52.2	72.0	22.7	47.2
12.5	79.6	579.0	42.5	24.8	56.4	72.5	22.2	45.2
13.0	78.0	555.7	43.0	25.7	60.4	73.0	21.7	43.2
13.5	76.3	532.4	43.5	26.5	64.4	73.5	21.2	41.3
14.0	74.6	509.1	44.0	27.3	68.3	74.0	20.7	39.3
14.5	72.9	485.8	44.5	28.1	72.1	74.5	20.2	37.4
15.0	71.1	462.7	45.0	28.8	75.8	75.0	19.7	35.5
15.5	69.3	439.1	45.5	29.5	79.3	75.5	19.3	33.9
16.0	67.4	415.8	46.0	30.1	82.7	76.0	18.8	32.4
16.5	65.6	392.9	46.5	30.7	85.9	76.5	18.4	30.8
17.0	63.6	370.3	47.0	31.2	88.9	77.0	17.9	29.3
17.5	61.7	348.1	47.5	31.7	91.8	77.5	17.4	27.8
18.0	59.8	326.5	48.0	32.1	94.4	78.0	17.0	26.4
18.5	57.8	305.3	48.5	32.6	96.9	78.5	16.5	24.9
19.0	55.8	284.7	49.0	32.9	99.2	79.0	16.0	23.5
19.5	53.8	264.7	49.5	33.3	101.2	79.5	15.6	22.1
20.0	51.8	245.3	50.0	33.6	103.1	80.0	15.1	20.8
20.5	49.7	226.1	50.5	33.9	104.8	80.5	14.8	20.0
21.0	47.6	207.5	51.0	34.1	106.3	81.0	14.5	19.3
21.5	45.6	189.8	51.5	34.3	107.6	81.5	14.3	18.6
22.0	43.5	172.8	52.0	34.5	108.7	82.0	14.0	17.8
22.5	41.4	156.7	52.5	34.6	109.6	82.5	13.7	17.1
23.0	39.3	141.3	53.0	34.7	110.3	83.0	13.4	16.4
23.5	37.2	126.8	53.5	34.8	110.8	83.5	13.1	15.7
24.0	35.2	113.0	54.0	34.9	111.1	84.0	12.8	15.0
24.5	33.1	100.1	54.5	34.9	111.2	84.5	12.5	14.4
25.0	31.0	88.1	55.0	34.9	111.1	85.0	12.2	13.7
25.5	29.0	76.8	55.5	34.8	110.7	85.5	12.2	13.6
26.0	26.9	66.3	56.0	34.7	110.2	86.0	12.1	13.4
26.5	24.9	56.7	56.5	34.6	109.4	86.5	12.1	13.3
27.0	22.9	47.9	57.0	34.5	108.5	87.0	12.0	13.2
27.5	20.9	39.9	57.5	34.3	107.5	87.5	11.9	13.0
28.0	18.9	32.7	58.0	34.1	106.3	88.0	11.9	12.9
28.5	17.0	26.3	58.5	33.9	104.9	88.5	11.8	12.8
29.0	15.0	20.6	59.0	33.6	103.5	89.0	11.7	12.6
29.5	13.1	15.7	59.5	33.4	101.8	89.5	11.7	12.5

W237FB

Tallahassee, FL
0000091112
Latitude: 30-25-41.10 N
Longitude: 084-14-54.60 W
ERP: 0.099 kW
HAAT: 134.72 m
Channel: 237
Frequency: 95.3 MHz
AMSL Height: 164.2 m
Elevation: 62.2 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%
HAAT Mthd: FCC

WTVY-FM

Dothan, AL
BLH19880323KD
Latitude: 31-15-16 N
Longitude: 085-15-39 W
ERP: 100.00 kW
HAAT: 323.0 m
Channel: 238
Frequency: 95.5 MHz
AMSL Height: 423.0 m
Elevation: 104.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Section 74.1204 Contour Protection
WTVY-FM Channel 238C0 Dothan, AL

**Human Exposure to Radiofrequency Electromagnetic Field
&
Section 106 Compliance
(Environmental)**

A study has been made to determine whether this proposal is in compliance with 47 C.F.R. 1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997, regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. Live Communications, Inc. seeks to modify FM translator W237FB, Facility ID No. 202900, Tallahassee, FL. The proposed W237FB facility would simulcast co-owned primary AM station WTAL, Facility ID No. 55330, licensed to Tallahassee, FL. The tower is located at 30° 25' 41.1" N ~ 84° 14' 54.6" W (NAD 83) . The tower is 105.3 meters in overall height and is registered with the Antenna Registration Structure "ASR" number 1028859. The proposed antenna is a side mounted Nicom Model BKG77 two bay 0.85 wave length circularly polarized antenna with a center of radiation of 102 meters AGL. W237FB would operate on Channel 237D, 95.3 MHz, with 99 watts ERP non-directional at 135 meters HAAT. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of § 1.1306 of the FCC Rules. Because the proposed new facility proposes to operate from an existing tower, is exempt from a Section 106 review by the SHPO/THPO.

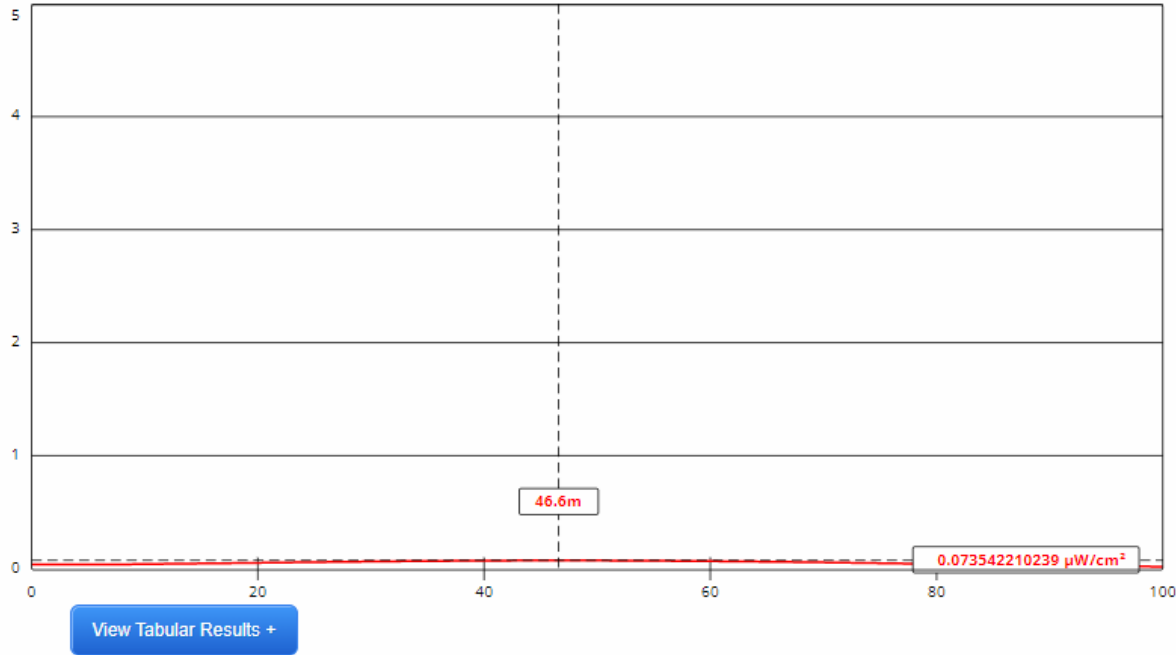
The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. The Nicom antenna is included in the recently revised OET FM Model Program under Type 2, Opposed "V" dipole. Using this antenna, the maximum calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $0.0735 \mu\text{W}/\text{cm}^2$ at 46.6 meters, which is 0.0368 percent of the general population/uncontrolled maximum permitted exposure limit. This is well below the five percent threshold limit described in 1.1307(b) regarding sites with multiple emitters, which excludes applicant from responsibility for taking any corrective action in areas where the proposal's contribution is less than five percent.

The applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

FM Model

- Radio Frequency Safety
- FCC Policy on Human Exposure
- RF Safety FAQ
- Body Tissue Dielectric Parameters
- RF Safety Highlighted Releases
- FM Model

The FM Model calculator determines the potential exposure from radiofrequency (RF) electromagnetic fields produced by FM broadcast station antennas at ground level. The FM Model software was originally developed by the FCC in 1997 as a standalone executable program and this improved version provides more precise predictions and runs via a JavaScript enabled web browser. The FM Model is originally based on measured data published in 1985 by the EPA. [Show More....](#)



Channel Selection	Channel 237 (95.3 MHz) ▼		
Antenna Type +	EPA Type 2: Opposed V Dipole ▼		
Height (m)	102	Distance (m)	100
ERP-H (W)	99	ERP-V (W)	99
Num of Elements	2	Element Spacing (?)	0.85
Num of Points	500	Apply	

Bureau/Office:
[Engineering & Technology](#)