

The Interference Contour corresponding to the W249AR - Asheville, NC Protected Contour at the proposed Translator site has been calculated to be no less than the 128.8 dBμ F(50:10) Interference Contour corresponding to the worst case W249AR(FM) 88.6 dBμ F(50:50) Protected Contour. This represents the proposed interference contour which falls wholly within the 40:1 dBu ratio. As seen on the map, there is a lack of population, housing, buildings or major roads within this 128.8 dBμ F(50:10) (Free Space Equation distance of >10 meters) interference area. The applicant would like to note the existence of several dedicated transmitter buildings located within this restricted access Spivey Mountain, mountain top antenna farm complex. However, structures of this nature have been exempt as a matter of FCC Policy.

**Exhibit 13.1 - Copy of USGS Aerial  
Photograph of Existing Site &  
§74.1204(d) Second Adjacent Channel  
Given Interference Waiver Request  
with W249AR - Asheville, NC (CH249D)**

**128.8 dBμ F(50:10) Interference Contour  
(<10 meters - Free Space Equation)**

**Proposed Site  
35° 36' 04" NL  
82° 39' 07" WL  
NAD 1927**



0 100 200ft



## Exhibit 13.2

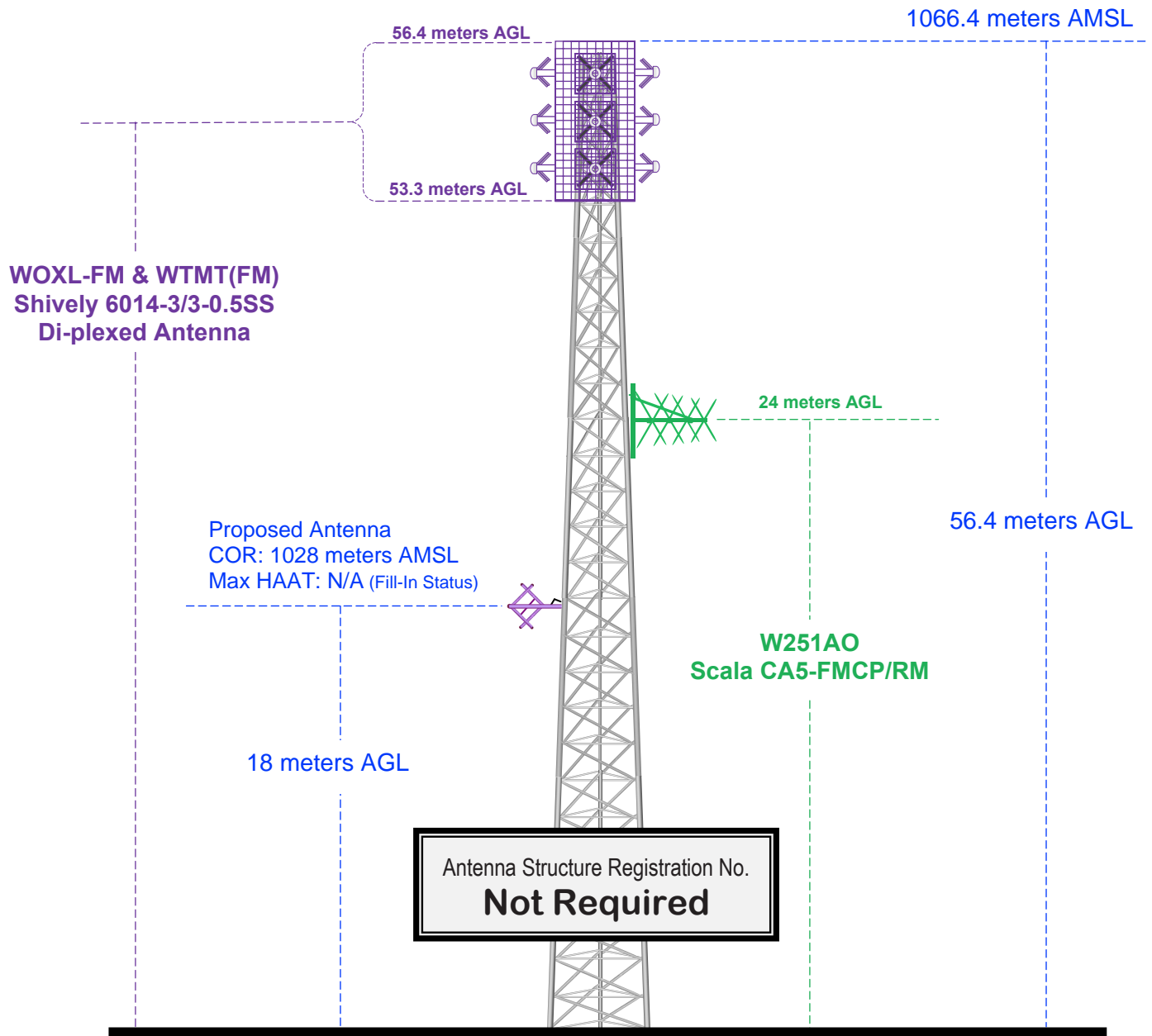
### Vertical Plan of Antenna System

The site is located on top of Spivey Mountain  
at the end of Spivey Mountain Road  
the city of Asheville, Buncombe County, North Carolina.

#### Site Location (NAD 27)

NL: 35° 36' 04"

WL: 82° 39' 07"



Ground Elevation = 1010.0 m AMSL  
Drawing is not to Scale



CH247D.short-form  
Canton, NC  
BNPFT20030317AHL  
Facility ID: 141108  
Latitude: 35-31-58 N  
Longitude: 082-51-58 W  
ERP: 0.105 kW  
Channel: 247D  
Frequency: 97.3 MHz  
AMSL Height: 933.0 m  
Horiz. Pattern: Omni

60 dBμ Contour  
Total Population: 25,238  
Total Area: 184 sq. km

CH247D.long-form  
Canton, NC  
Proposed Operation  
Facility ID: 141108  
Latitude: 35-36-04 N  
Longitude: 082-39-07 W  
ERP: 0.015 kW  
Channel: 247D  
Frequency: 97.3 MHz  
AMSL Height: 1028.0 m  
Horiz. Pattern: Directional

60 dBμ Contour  
Total Population: 104,208  
Total Area: 360 sq. km

Terrain  
438 1842 m

USGS 03 SEC Terrain Database  
U.S. Census 2010 PL Database

## Exhibit 13.3 Present vs. Proposed Service Contour Study

*Long-Form 60 dBμ F(50:50) Contour*

*Short-Form 60 dBμ F(50:50) Contour*

CH247D.long-form  
+

CH247D.short-form  
+

Waynesville

Lake Junaluska

Clyde

Canton

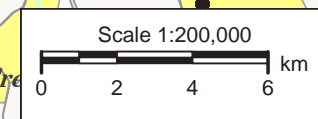
Weaverville

Woodfin

Asheville

Biltmore Forest

Avery Creek



V-Soft Communications LLC ©

Terrain  
189 2031 m

NED 03 SEC Terrain Database  
US Census 2010 PL Database

25 mile AM Site Radius

## Exhibit 13.4 Proposed vs. Primary Service Contour Study

WISE(AM)  
ASHEVILLE, NC  
BL-  
Facility ID: 68835  
Freq: 1310 kHz  
ASHEVILLE, NC, US  
Hours: D  
Lat: 35-37-09 N  
Lng: 082-34-21 W  
Power: 5.0 kW  
Theo RMS: 294.51 mV/m  
@ 1km @ 1kW

CH247D.long-form  
Canton, NC  
Proposed Operation  
Facility ID: 141108  
Latitude: 35-36-04 N  
Longitude: 082-39-07 W  
ERP: 0.015 kW  
Channel: 247D  
Frequency: 97.3 MHz  
AMSL Height: 1028.0 m  
Horiz. Pattern: Directional

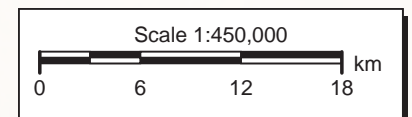
Daytime 2 mV/m AM Contour

Proposed 60 dBµ F(50:50) Contour

WISE(AM)

CH247D.long-form

Asheville



# Exhibit 13.5

## Tabulation of Proposed Allocation

Saga Communications Of North Carolina, LLC											
REFERENCE		CH#	247D	-	97.3 MHz, Pwr= 0.015 kW DA, HAAT= 317.3 M, COR= 1028 M	DISPLAY DATES		DATA 07-31-13			
35 36 04.0 N.				Average Protected F(50-50)= 11.51 km				SEARCH 07-31-13			
82 39 07.0 W.				Standard Directional							
CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap	*OUT* in km)
247C North Wilkesboro	WKBC-FM	LIC DE_ NC		68.5 249.4	147.10 BLH19970711KA	36 04 34.0 81 07 43.0	100.000 403	171.3 803	72.6 Wilkes Broadcasting	-35.7*<	36.1 Compan
249D Asheville	W249AR	LIC _C_ NC		237.5 57.4	2.35 BLFT20000811AAU	35 35 23.0 82 40 26.0	0.100 358	0.7 1089	20.1 Entercom	-8.8*<	-18.0*< Greenville Licens
247D Canton	632628	APP _C_ NC		248.6 68.5	20.80 BNPFT20030317AHL	35 31 58.0 82 51 58.0	0.105 1	22.4 933	6.7 Saga Communications Of Nor	-9.0*<	-10.8<
247L1 Hendersonville	WFHC-LP	LIC _C_ NC		147.3 327.4	26.97 BLL20120611ACF	35 23 48.3 82 29 28.8	0.100 30	31.7 735	9.5 Jbn Inc.	-8.7*<	0.4
248C Knoxville	WJXB-FM	LIC _CY TN		291.9 111.1	124.09 BLH19890928KC	36 00 36.0 83 55 57.0	100.000 395	121.4 706	81.7 South Central Communicatio	-7.5<	28.1
245C Bristol	WXBQ-FM	LIC DCN VA		26.5 206.8	103.46 BLH19950914KB	36 25 59.0 82 08 11.0	75.000 683	13.6 1308	93.9 Bristol Broadcasting Compa	77.1	9.2
247D Balfour	626602	APP DC_ NC		151.4 331.5	31.32 BNPFT20030312ARH	35 21 13.0 82 29 12.0	0.010 1023	7.7 1710	0.8 Frank G. Mccoy	19.7	13.6
248D Brevard Translator for WLFJ, Greenville, SC	970915TG	APP DC_ NC		183.1 3.1	46.91 BNPFT19970915TG	35 10 47.0 82 40 47.0	0.008	15.5 1134	10.7 Radio Training Network, In	21.0	21.6
246L1 Hendersonville	WICE-LP	LIC _C_ NC		147.5 327.7	42.75 BLL20090805ACL	35 16 35.0 82 23 57.0	0.100 30	9.0 689	6.3 Ebenezer Pentecostal Radio	29.8	29.9
249D Lake Toxaway	1563808	APP DC_ NC		210.0 29.8	60.19 BNPFT20030312ANI	35 07 55.0 82 59 00.0	0.009	0.0 1465	2.3 Charisma Radio Corp.	48.4	57.6
250C Concord	WPEG	LIC DCY NC		100.7 281.5	138.07 BLH19901207KC	35 21 44.0 81 09 19.0	95.000 491	11.4 727	82.2 Cbs Radio Stations Inc.	114.1	55.6
247D Greenville Translator For WNCW, Spindale, NC	W247AB	LIC _CN SC		164.6 344.7	86.37 BLFT19930907TD	34 51 07.0 82 24 00.0	0.019 78	13.6 367	4.3 Isothermal Community Colle	66.2	58.2
246C Gainesville	WSRV	LIC _CY GA		214.2 33.5	197.57 BLH19980825KB	34 07 32.0 83 51 32.0	100.000 483	127.1 797	85.4 Cox Radio, Inc.	58.9	95.5
249D Greenville	W249CB	LIC DC_ SC		163.1 343.2	77.42 BLFT20111215AAA	34 56 05.0 82 24 16.0	0.250	0.6 629	15.6 Tower Above Media LLC	70.8	61.7

Terrain database is NED 03 SEC , R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM  
 Contour distances are on direct line to and from reference station. Reference zone= East Zone, Co to 3rd adjacent.  
 All separation margins (if shown) include rounding  
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
 "\*"affixed to 'IN' or 'OUT' values = site inside protected contour.  
 < = Contour Overlap

Green Text denotes the Auction 83 Application facility to be modified by this Form 349 Long-Form filing. This facility need not be protected.

Blue Highlighted Text denotes supplemental contour protection studies toward select facilities as included in **Exhibit(s) 13.6**.

Yellow highlighted text denotes a §74.1204(d) Second Adjacent Channel Given Interference Waiver Request toward W249AR - Asheville, NC (CH47D) as included in **Exhibit(s) 13.1**. Full protection will be afforded the facility as the proposed interference area has been shown to be void of all population, housing, buildings, or major roads based on current USGS Aerial Photography.

## Exhibit 13.6

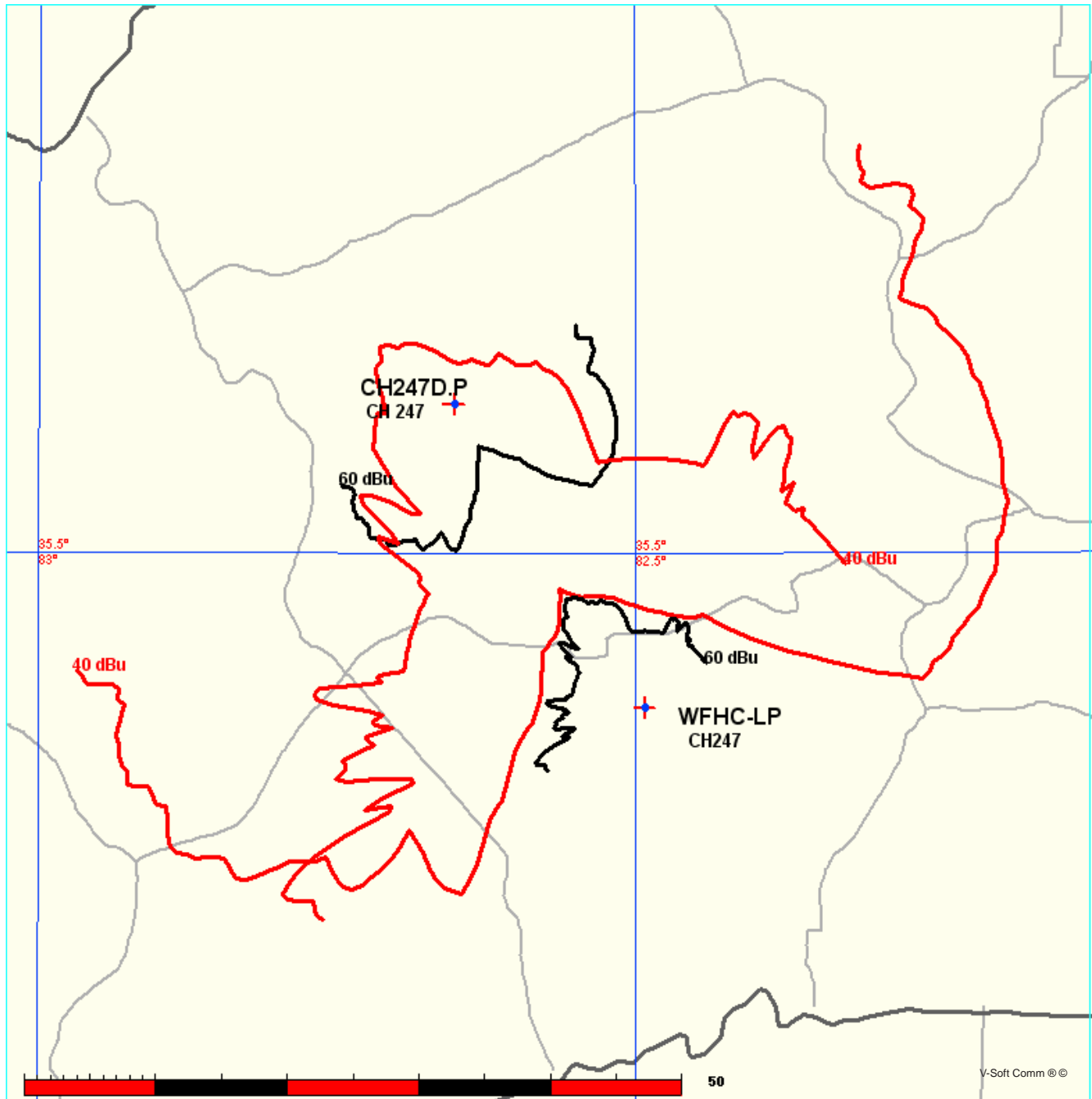
### Contour Protection Studies Toward WFHC-LP - Hendersonville, NC

Saga Communications Of North Carolina, LLC

FMCommander Single Allocation Study - 07-31-2013 - NED 03 SEC  
CH247D.P's Overlaps (In= -8.66 km, Out= 0.36 km)

CH247D.P CH 247 D DA  
Lat= 35 36 04.0, Lng= 82 39 07.0  
0.015 kW 317.3 M HAAT, 1028 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

WFHC-LP CH 247 L1 BLL20120611ACF  
Lat= 35 23 48.3, Lng= 82 29 28.8  
0.1 kW 30 M HAAT, 735 M COR  
Prot.= 60 dBu, Intef.= 40 dBu



## Exhibit 13.6

### Contour Protection Studies Toward WFHC-LP - Hendersonville, NC

07-31-2013

Terrain Data: NED 03 SEC

FMOver Analysis

CH247D.P

WFHC-LP BLL20120611ACF

Channel = 247D  
Max ERP = 0.015 kW  
RCAMSL = 1028 M  
N. Lat. 35 36 04.0  
W. Lng. 82 39 07.0  
Protected  
60 dBu

Channel = 247L1  
Max ERP = 0.1 kW  
RCAMSL = 735 M  
N. Lat. 35 23 48.3  
W. Lng. 82 29 28.8  
Interfering  
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
104.0	000.0150	0380.7	012.6	353.1	000.0204	0006.9	019.8	32.09	
105.0	000.0150	0383.6	012.6	353.0	000.0204	0008.3	019.6	32.28	
106.0	000.0150	0386.8	012.6	352.8	000.0205	0009.4	019.4	32.47	
107.0	000.0150	0388.0	012.7	352.6	000.0206	0010.4	019.2	32.66	
108.0	000.0150	0385.5	012.6	352.2	000.0208	0012.2	019.0	32.86	
109.0	000.0150	0383.2	012.6	351.9	000.0211	0014.1	018.8	33.05	
110.0	000.0150	0382.8	012.6	351.5	000.0212	0016.4	018.6	33.24	
111.0	000.0150	0383.7	012.6	351.2	000.0214	0018.1	018.4	33.44	
112.0	000.0150	0377.3	012.5	350.7	000.0217	0019.4	018.3	33.62	
113.0	000.0150	0374.4	012.5	350.2	000.0220	0020.9	018.1	33.81	
114.0	000.0150	0370.9	012.4	349.7	000.0224	0020.4	017.9	34.02	
115.0	000.0150	0369.1	012.4	349.2	000.0228	0023.2	017.8	34.24	
116.0	000.0150	0371.0	012.4	348.9	000.0232	0026.4	017.6	34.46	
117.0	000.0150	0366.2	012.4	348.2	000.0238	0032.9	017.5	35.42	
118.0	000.0150	0360.2	012.3	347.6	000.0245	0040.0	017.4	37.34	
119.0	000.0150	0362.3	012.3	347.2	000.0248	0042.6	017.2	38.14	
120.0	000.0150	0358.5	012.2	346.5	000.0255	0047.3	017.1	39.35	
121.0	000.0131	0352.1	011.7	344.8	000.0272	0055.8	017.3	41.00*	1.17
122.0	000.0113	0354.0	011.3	343.5	000.0287	0057.5	017.4	41.34*	1.58
123.0	000.0096	0349.4	010.8	341.9	000.0304	0062.5	017.7	42.02*	2.41
124.0	000.0081	0345.8	010.3	340.4	000.0320	0062.1	018.0	41.93*	2.31
125.0	000.0067	0349.0	009.8	339.1	000.0328	0063.9	018.3	42.03*	2.44
126.0	000.0055	0355.7	009.3	337.8	000.0332	0068.0	018.6	42.31*	2.81
127.0	000.0043	0361.1	008.7	336.5	000.0337	0069.7	019.0	42.22*	2.73
128.0	000.0033	0369.0	008.1	335.3	000.0341	0067.5	019.5	41.61*	1.98
129.0	000.0025	0376.8	007.4	334.0	000.0346	0070.0	020.1	41.46*	1.83
130.0	000.0017	0384.0	006.5	332.7	000.0350	0072.6	020.9	41.23*	1.57
131.0	000.0016	0390.2	006.4	332.3	000.0352	0072.4	021.0	41.16*	1.47
132.0	000.0015	0391.1	006.2	331.8	000.0353	0072.8	021.1	41.12*	1.43
133.0	000.0014	0388.0	006.0	331.4	000.0355	0073.4	021.2	41.09*	1.40
134.0	000.0012	0385.8	005.8	331.0	000.0357	0073.7	021.4	41.03*	1.32
135.0	000.0011	0382.2	005.6	330.6	000.0358	0074.0	021.5	40.96*	1.23
136.0	000.0010	0381.7	005.4	330.2	000.0359	0076.0	021.7	41.07*	1.40
137.0	000.0009	0380.5	005.2	329.8	000.0360	0077.3	021.9	41.10*	1.44



## Exhibit 13.6

### Contour Protection Studies Toward WFHC-LP - Hendersonville, NC

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	
138.0	000.0008	0378.8	005.0	329.5	000.0359	0078.2	022.1	41.05*	1.38
139.0	000.0007	0379.6	004.8	329.2	000.0359	0079.7	022.2	41.07*	1.42
140.0	000.0007	0377.7	004.6	328.9	000.0359	0081.8	022.4	41.15*	1.54
141.0	000.0006	0377.8	004.5	328.7	000.0358	0083.4	022.5	41.27*	1.70
142.0	000.0006	0376.1	004.4	328.4	000.0358	0084.7	022.6	41.34*	1.81
143.0	000.0006	0373.7	004.3	328.2	000.0358	0085.4	022.7	41.36*	1.84
144.0	000.0005	0378.2	004.2	328.0	000.0358	0084.9	022.7	41.25*	1.69
145.0	000.0005	0380.6	004.2	327.8	000.0357	0084.0	022.8	41.09*	1.48
146.0	000.0005	0384.8	004.1	327.6	000.0357	0083.9	022.9	41.02*	1.38
147.0	000.0005	0383.9	004.0	327.5	000.0357	0084.4	023.0	41.00*	1.36
148.0	000.0004	0385.1	003.9	327.3	000.0357	0085.5	023.1	41.05*	1.44
149.0	000.0004	0379.9	003.8	327.1	000.0357	0086.7	023.2	41.10*	1.51
150.0	000.0004	0377.1	003.7	327.0	000.0356	0087.6	023.3	41.12*	1.54
151.0	000.0004	0378.6	003.9	326.8	000.0356	0088.6	023.1	41.34*	1.85
152.0	000.0005	0376.4	004.0	326.6	000.0356	0088.9	023.0	41.48*	2.04
153.0	000.0005	0377.3	004.2	326.4	000.0356	0089.5	022.8	41.66*	2.29
154.0	000.0006	0379.6	004.3	326.1	000.0355	0089.4	022.7	41.77*	2.42
155.0	000.0006	0380.0	004.5	325.9	000.0355	0089.4	022.5	41.87*	2.55
156.0	000.0007	0372.9	004.6	325.6	000.0355	0089.5	022.4	41.95*	2.67
157.0	000.0007	0365.7	004.7	325.4	000.0354	0089.2	022.3	42.00*	2.72
158.0	000.0008	0357.1	004.9	325.1	000.0354	0089.3	022.2	42.07*	2.82
159.0	000.0009	0351.3	005.0	324.8	000.0354	0090.1	022.1	42.22*	3.02
160.0	000.0009	0342.9	005.1	324.5	000.0353	0090.7	022.1	42.34*	3.18
161.0	000.0011	0340.2	005.4	324.0	000.0353	0092.3	021.7	42.73*	3.72
162.0	000.0014	0338.1	005.7	323.5	000.0352	0092.6	021.5	42.97*	4.03
163.0	000.0016	0341.7	006.1	322.9	000.0352	0093.4	021.2	43.28*	4.44
164.0	000.0018	0342.1	006.4	322.4	000.0351	0090.9	020.9	43.22*	4.32
165.0	000.0021	0335.6	006.7	321.8	000.0350	0088.8	020.7	43.15*	4.19
166.0	000.0024	0328.8	006.9	321.2	000.0350	0088.5	020.5	43.26*	4.31
167.0	000.0027	0319.5	007.1	320.6	000.0349	0088.5	020.4	43.35*	4.43
168.0	000.0030	0313.8	007.3	320.1	000.0348	0085.5	020.3	43.14*	4.11
169.0	000.0034	0308.1	007.5	319.5	000.0356	0081.3	020.2	42.86*	3.70
170.0	000.0037	0306.0	007.8	318.8	000.0366	0078.1	020.0	42.73*	3.51
171.0	000.0045	0303.1	008.2	317.8	000.0382	0075.2	019.7	42.82*	3.59
172.0	000.0054	0300.8	008.6	316.8	000.0399	0076.6	019.5	43.36*	4.29
173.0	000.0063	0300.1	009.0	315.8	000.0416	0074.6	019.3	43.51*	4.46
174.0	000.0073	0292.6	009.2	314.9	000.0430	0072.7	019.2	43.52*	4.45
175.0	000.0084	0283.8	009.4	314.2	000.0443	0071.3	019.1	43.52*	4.45
176.0	000.0096	0290.5	009.9	312.9	000.0466	0067.7	018.9	43.49*	4.37
177.0	000.0108	0302.0	010.4	311.4	000.0492	0057.2	018.7	42.58*	3.15
178.0	000.0121	0301.9	010.7	310.4	000.0512	0045.9	018.6	40.80*	0.96
179.0	000.0135	0304.4	011.0	309.2	000.0533	0043.6	018.5	40.55*	0.66
180.0	000.0150	0286.0	011.0	308.9	000.0538	0045.1	018.7	40.76*	0.91
181.0	000.0150	0283.1	010.9	308.7	000.0543	0046.6	018.9	40.96*	1.16
182.0	000.0150	0275.0	010.7	308.8	000.0542	0046.3	019.1	40.68*	0.82
183.0	000.0150	0263.2	010.5	309.0	000.0537	0044.8	019.4	40.09*	0.11
184.0	000.0150	0243.6	010.1	309.6	000.0525	0042.1	019.8	39.11	



## Exhibit 13.6

### Contour Protection Studies Toward WFHC-LP - Hendersonville, NC

07-31-2013

Terrain Data: NED 03 SEC

FMOver Analysis

WFHC-LP BLL20120611ACF

CH247D.P

Channel = 247L1

Max ERP = 0.1 kW

RCAMSL = 735 M

N. Lat. 35 23 48.3

W. Lng. 82 29 28.8

Protected

60 dBu

Channel = 247D

Max ERP = 0.015 kW

RCAMSL = 1028 M

N. Lat. 35 36 04.0

W. Lng. 82 39 07.0

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
282.0	000.1000	0008.2	005.6	157.2	000.0008	0363.9	023.4	36.85	
283.0	000.1000	0002.1	005.6	157.1	000.0008	0365.1	023.3	36.89	
284.0	000.1000	0011.0	005.6	156.9	000.0007	0366.3	023.2	36.93	
285.0	000.1000	0012.8	005.6	156.8	000.0007	0367.3	023.1	36.96	
286.0	000.1000	0006.9	005.6	156.6	000.0007	0368.2	023.0	36.98	
287.0	000.1000	0002.3	005.6	156.5	000.0007	0368.9	023.0	37.00	
288.0	000.1000	0001.8	005.6	156.3	000.0007	0369.7	022.9	37.02	
289.0	000.1000	-0004.6	005.6	156.1	000.0007	0371.2	022.8	37.05	
290.0	000.1000	-0021.2	005.6	156.0	000.0007	0373.2	022.8	37.09	
291.0	000.1000	-0036.5	005.6	155.8	000.0007	0375.2	022.7	37.13	
292.0	000.1000	-0036.7	005.6	155.6	000.0007	0376.6	022.6	37.15	
293.0	000.1000	-0031.7	005.6	155.4	000.0007	0378.1	022.5	37.17	
294.0	000.1000	-0021.4	005.6	155.3	000.0006	0379.2	022.5	37.18	
295.0	000.1000	-0015.9	005.6	155.1	000.0006	0379.8	022.4	37.17	
296.0	000.1000	0003.7	005.6	154.9	000.0006	0380.3	022.4	37.15	
297.0	000.1000	0022.6	005.6	154.7	000.0006	0380.4	022.3	37.13	
298.0	000.1000	0033.0	005.9	154.9	000.0006	0380.4	022.0	37.39	
299.0	000.1000	0033.3	005.9	154.7	000.0006	0380.4	022.0	37.37	
300.0	000.1000	0034.3	006.0	154.6	000.0006	0380.4	021.8	37.43	
301.0	000.1000	0047.2	007.0	155.9	000.0007	0374.2	020.9	38.49	
302.0	000.1000	0048.5	007.1	155.8	000.0007	0375.4	020.8	38.59	
303.0	000.1000	0042.9	006.7	154.8	000.0006	0380.4	021.1	38.13	
304.0	000.1000	0046.8	007.0	155.0	000.0006	0380.0	020.7	38.43	
305.0	000.1000	0058.4	007.9	156.0	000.0007	0373.2	019.9	39.27	
306.0	000.1000	0060.9	008.0	155.9	000.0007	0374.5	019.7	39.44	
307.0	000.1000	0058.4	007.9	155.3	000.0006	0379.0	019.8	39.27	
308.0	000.1000	0052.5	007.4	154.4	000.0006	0380.0	020.1	38.68	
309.0	000.1000	0044.8	006.8	153.3	000.0005	0378.7	020.6	37.85	
310.0	000.1000	0042.8	006.7	152.9	000.0005	0376.7	020.7	37.52	

## Exhibit 13.6

### Contour Protection Studies Toward WFHC-LP - Hendersonville, NC

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
311.0	000.1000	0053.8	007.5	153.5	000.0005	0378.8	019.9	38.49
312.0	000.1000	0060.8	008.0	153.6	000.0006	0379.1	019.3	38.98
313.0	000.1000	0068.6	008.6	153.8	000.0006	0379.3	018.8	39.47
314.0	000.1000	0070.8	008.7	153.5	000.0006	0378.8	018.6	39.49
315.0	000.1000	0072.7	008.8	153.2	000.0005	0378.1	018.5	39.47
316.0	000.1000	0074.8	008.9	152.8	000.0005	0376.7	018.3	39.43
317.0	000.1000	0076.4	009.0	152.5	000.0005	0376.2	018.2	39.36
318.0	000.1000	0074.6	008.9	151.9	000.0005	0376.9	018.2	39.09
319.0	000.1000	0079.1	009.2	151.6	000.0005	0379.0	017.9	39.25
320.0	000.1000	0085.2	009.5	151.3	000.0004	0379.4	017.5	39.43
321.0	000.1000	0088.9	009.7	150.9	000.0004	0378.6	017.3	39.41
322.0	000.1000	0089.1	009.8	150.3	000.0004	0377.6	017.3	39.16
323.0	000.1000	0093.6	010.0	149.9	000.0004	0377.0	017.0	39.22
324.0	000.1000	0092.3	009.9	149.3	000.0004	0379.0	017.1	39.39
325.0	000.1000	0089.4	009.8	148.7	000.0004	0380.8	017.2	39.48
326.0	000.1000	0089.4	009.8	148.1	000.0004	0384.7	017.2	39.73
327.0	000.1000	0087.5	009.7	147.5	000.0004	0386.1	017.3	39.83
328.0	000.1000	0084.8	009.5	147.0	000.0005	0383.9	017.4	39.78
329.0	000.1000	0081.0	009.3	146.5	000.0005	0384.7	017.7	39.75
330.0	000.1000	0076.9	009.1	146.0	000.0005	0384.8	017.9	39.67
331.0	000.1000	0073.7	008.9	145.5	000.0005	0382.7	018.1	39.56
332.0	000.1000	0072.7	008.8	145.1	000.0005	0380.8	018.2	39.56
333.0	000.1000	0072.5	008.8	144.6	000.0005	0380.0	018.2	39.62
334.0	000.1000	0069.9	008.6	144.2	000.0005	0379.2	018.4	39.55
335.0	000.1000	0067.9	008.5	143.8	000.0005	0377.2	018.6	39.46
336.0	000.1000	0068.8	008.6	143.4	000.0006	0374.2	018.5	39.52
337.0	000.1000	0070.3	008.7	142.8	000.0006	0374.1	018.5	39.68
338.0	000.1000	0067.1	008.4	142.6	000.0006	0374.9	018.7	39.57
339.0	000.1000	0063.9	008.2	142.3	000.0006	0375.6	019.0	39.45
340.0	000.1000	0063.1	008.2	141.9	000.0006	0376.1	019.1	39.47
341.0	000.1000	0062.2	008.1	141.6	000.0006	0376.7	019.2	39.47
342.0	000.1000	0062.5	008.1	141.2	000.0006	0377.4	019.2	39.56
343.0	000.1000	0058.8	007.9	141.0	000.0006	0377.7	019.5	39.37
344.0	000.1000	0057.3	007.8	140.8	000.0006	0378.1	019.6	39.31
345.0	000.1000	0055.3	007.7	140.6	000.0006	0378.5	019.8	39.21
346.0	000.1000	0050.7	007.3	140.7	000.0006	0378.3	020.2	38.89
347.0	000.1000	0043.9	006.8	141.0	000.0006	0377.7	020.7	38.38
348.0	000.1000	0035.5	006.1	141.6	000.0006	0376.7	021.4	37.73
349.0	000.1000	0024.9	005.6	141.9	000.0006	0376.1	021.8	37.31
350.0	000.1000	0020.8	005.6	141.6	000.0006	0376.6	021.9	37.34
351.0	000.1000	0018.6	005.6	141.4	000.0006	0376.9	021.9	37.36
352.0	000.1000	0013.2	005.6	141.2	000.0006	0377.4	022.0	37.38
353.0	000.1000	0008.0	005.6	141.0	000.0006	0377.8	022.0	37.40
354.0	000.1000	-0001.9	005.6	140.8	000.0006	0378.2	022.1	37.42
355.0	000.1000	-0002.2	005.6	140.6	000.0006	0378.6	022.1	37.43
356.0	000.1000	0004.7	005.6	140.3	000.0007	0378.1	022.2	37.42
357.0	000.1000	0010.5	005.6	140.1	000.0007	0377.7	022.2	37.41

# Exhibit 13.7

## Proposed Directional Antenna Information

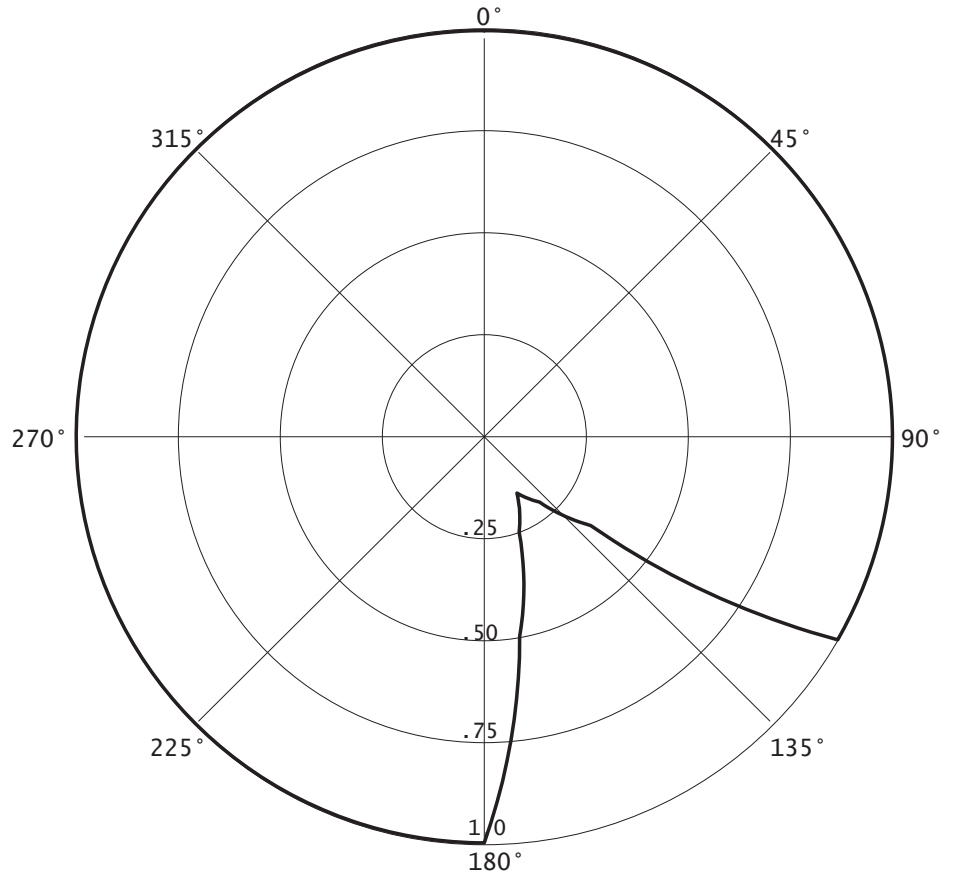
CH247D.P

07-26-2013

RMS(V)= .933

Graph is Relative Field

Azi	Field	dBk	kw
000	1.000	-18.239	0.015
010	1.000	-18.239	0.015
020	1.000	-18.239	0.015
030	1.000	-18.239	0.015
040	1.000	-18.239	0.015
050	1.000	-18.239	0.015
060	1.000	-18.239	0.015
070	1.000	-18.239	0.015
080	1.000	-18.239	0.015
090	1.000	-18.239	0.015
100	1.000	-18.239	0.015
110	1.000	-18.239	0.015
120	1.000	-18.239	0.015
130	0.340	-27.610	0.002
140	0.210	-31.795	0.001
150	0.160	-34.157	0.000
160	0.250	-30.280	0.001
170	0.500	-24.260	0.004
180	1.000	-18.239	0.015
190	1.000	-18.239	0.015
200	1.000	-18.239	0.015
210	1.000	-18.239	0.015
220	1.000	-18.239	0.015
230	1.000	-18.239	0.015
240	1.000	-18.239	0.015
250	1.000	-18.239	0.015
260	1.000	-18.239	0.015
270	1.000	-18.239	0.015
280	1.000	-18.239	0.015
290	1.000	-18.239	0.015
300	1.000	-18.239	0.015
310	1.000	-18.239	0.015
320	1.000	-18.239	0.015
330	1.000	-18.239	0.015
340	1.000	-18.239	0.015
350	1.000	-18.239	0.015



The antenna proposed in this application will be mounted in accordance with specific instructions provided by the antenna manufacturer. The antenna will be tested by the manufacturer using the type of mounting which will be employed in the field.

No other antennas of any type are or will be mounted on the same tower level as the directional antenna.

No antenna is or will be mounted within any vertical or horizontal distance specified by the antenna manufacturer as being necessary for proper operation of the directional antenna. In addition, the antenna will be assembled under the supervision of a qualified engineer and installed pursuant to the manufacturer's instructions and manufacturer specified antenna orientation.

The directional antenna pattern will be produced by means of parasitic elements and/or reflective panels adjusted to produce the required pattern.

The antenna pattern will be measured by the manufacturer on the test range, and the measurement results will be supplied to the Commission at the time Form 350-FM is filed covering the construction.