

**W258CC, ATHENS, GA: MINOR MODIFICATION OF CONSTRUCTION PERMIT**  
 Minor change showins and 1st adjacent channel study

Radio Data Services

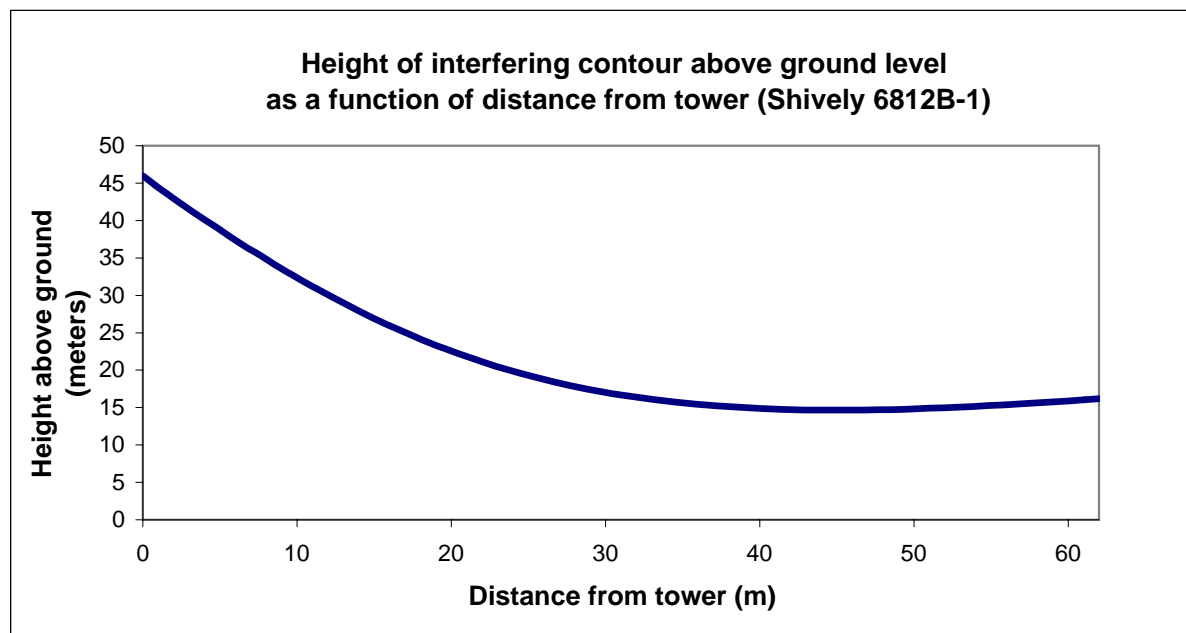


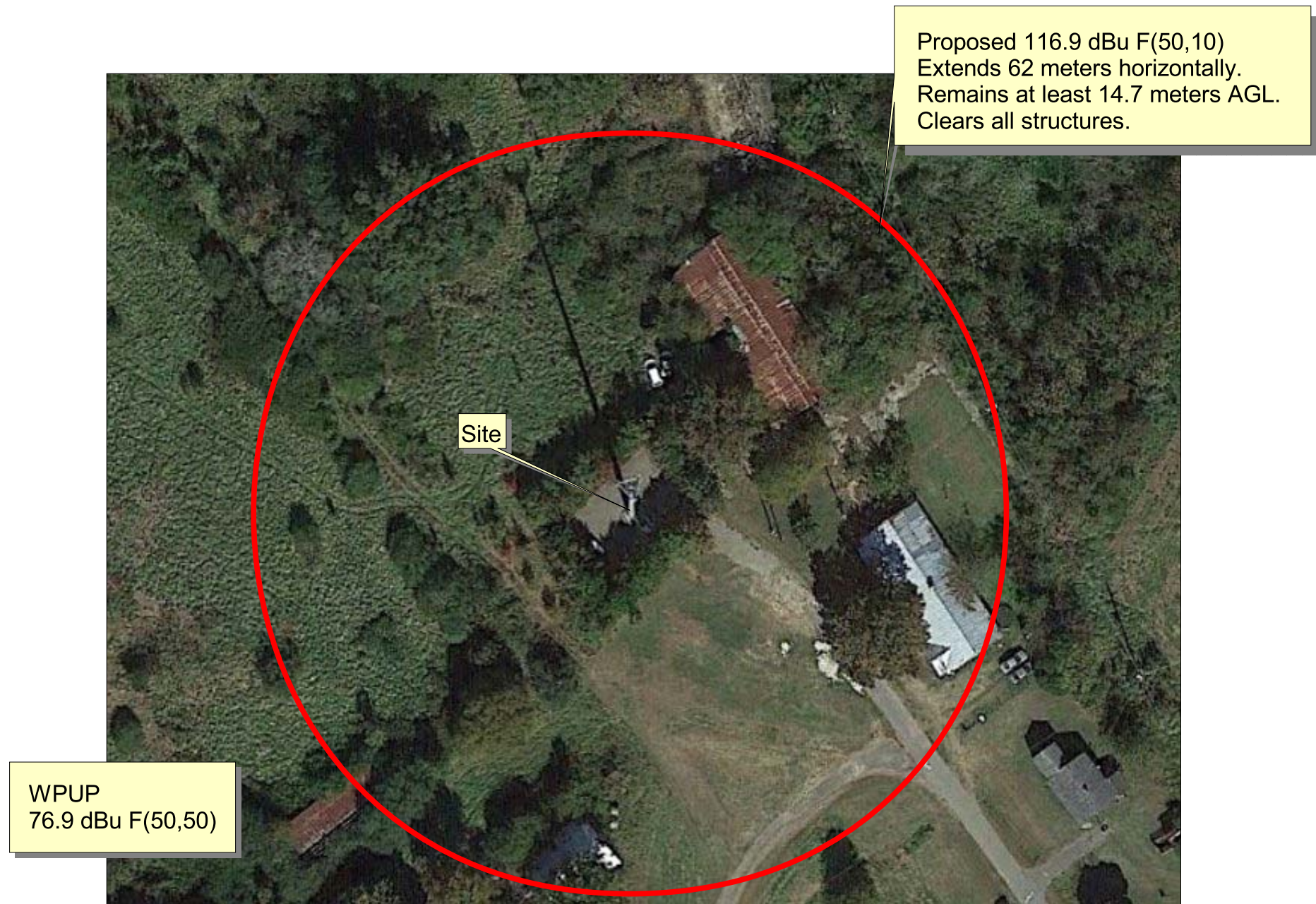
**Table 1****W258CC, MINOR MODIFICATION OF CONSTRUCTION PERMIT  
Channel Study**

Chan	Class	Call Letters	Type	Status	City	State	Country	Owner	Distance (km)	Bearing TO (deg)	Req. Dist. (km)	Clearance (km)	Field Strength (dBu)
205	C3	WMSL	FM	LIC	ATHENS	GA	US	PRINCE EDUCATIONAL MEDIA, II	18.0	236.0	12.0	6.0	
255	D	W255CN	FX	CP	ATHENS	GA	US	SOUTHERN BROADCASTING OF	8.8	224.7	7.8	1.0	
255	D	W255CN	FX	APP	ATHENS	GA	US	SOUTHERN BROADCASTING OF	8.8	224.7	7.7	1.1	
255	D	W255CN	FX	APP	ATHENS	GA	US	SOUTHERN BROADCASTING OF	8.8	224.7	7.4	1.4	
256	D	W256CP	FX	CP	BOGART	GA	US	RADIO TRAINING NETWORK, INC	23.0	251.2	7.2	15.8	
256	L1	NEW	FL	APP	LOGANVILLE	GA	US	NEW VISION OUTREACH & PERF	54.1	249.0	6.5	47.6	
257	D	W257CI	FX	LIC	ATHENS-CLARKE CO	GA	US	THE B&GRS	10.3	163.3	10.0	0.3	
257	D	W257CI	FX	CP	ATHENS-CLARKE CO	GA	US	THE B&GRS	14.5	175.8	11.9	2.6	
257	C2	WCON-FM	FM	LIC	CORNELIA	GA	US	HABERSHAM BROADCASTING C	66.6	331.4	61.9	4.8	
258	D	W258CC	FX	CP	ATHENS	GA	US	GEORGIA-CAROLINA RADIOCAS	0.0	0.0	18.0	-18.0	(same as applicant)
258	D	W258CC	FX	APP	ELBERTON	GA	US	GEORGIA-CAROLINA RADIOCAS	43.4	72.6	48.0	-4.5	(same as applicant)
259	C0	WWWQ	FM	LIC	ATLANTA	GA	US	SUSQUEHANNA RADIO CORP.	95.4	257.5	82.5	12.9	
261	A	WPUP	FM	LIC	WATKINSVILLE	GA	US	COX RADIO, INC.	8.8	224.7	23.9	-15.1	76.9 (See Note)

**NOTE: (SEE FIGURE 2)**

(with respect to WPUP) 3rd adjacent WPUP has a field strength of 76.9 dBu F(50,50) at the proposed site. Therefore the proposed translator's interfering contour is the 116.9 dBu F(50,10) contour. The proposed translator's 116.9 dBu F(50,10) extends 62 meters horizontally from the tower. Using a SHIVELY 6812-B 1-bay antenna at 46 meters AGL, the proposed translator's 116.9 dBu F(50,10) does not fall lower than 14.7 meters above ground level and will clear all nearby structures which are single story. Therefore this proposal is compliant with the allowance of Rule 74.1204(d).





**W258CC, ATHENS, GA: MINOR MODIFICATION OF CONSTRUCTION PERMIT  
2nd adjacent channel study: with respect to WPUP**

**Figure 2**



## Elevation pattern



Antenna model: 6812b, single bay

Test frequency: 98.1 MHz

Gain (maximum):

Power	dB
0.46	-3.39 dB

Document No. 6812b 1-bay fw (130701)

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Degrees	Rel. Field
1	1.000
2	0.999
3	0.999
4	0.998
5	0.996
6	0.995
7	0.993
8	0.991
9	0.988
10	0.985
11	0.982
12	0.979
13	0.975
14	0.971
15	0.967
16	0.963
17	0.958
18	0.953

Degrees	Rel. Field
19	0.948
20	0.942
21	0.936
22	0.930
23	0.924
24	0.917
25	0.910
26	0.903
27	0.895
28	0.887
29	0.879
30	0.871
31	0.862
32	0.854
33	0.845
34	0.835
35	0.826
36	0.816

Degrees	Rel. Field
37	0.806
38	0.796
39	0.785
40	0.774
41	0.763
42	0.752
43	0.741
44	0.729
45	0.717
46	0.705
47	0.693
48	0.680
49	0.667
50	0.654
51	0.641
52	0.628
53	0.614
54	0.600

Degrees	Rel. Field
55	0.586
56	0.572
57	0.558
58	0.544
59	0.529
60	0.514
61	0.499
62	0.484
63	0.469
64	0.453
65	0.437
66	0.422
67	0.406
68	0.390
69	0.373
70	0.357
71	0.341
72	0.324

Degrees	Rel. Field
73	0.307
74	0.290
75	0.273
76	0.256
77	0.239
78	0.221
79	0.204
80	0.186
81	0.168
82	0.151
83	0.133
84	0.114
85	0.096
86	0.078
87	0.059
88	0.040
89	0.021
90	0.000

## Elevation Pattern Tabulation

Antenna model: 6812b, single bay

Relative Field at 0° Depression = 1.000

## Radiofrequency Electromagnetic Exposure Analysis

Source	Height AGL(m)	Antenna type	Bays	Horizontal ERP (kw)	Vertical ERP (kw)	Power Density $\mu\text{W}/\text{cm}^2$ at 2 meters AGL				
						within 10 meters distance	% controlled environment limit (1000 $\mu\text{W}/\text{cm}^2$ )	Max. PD beyond 10 m	% uncontrolled environment limit (200 $\mu\text{W}/\text{cm}^2$ )	Distance to maximum PD (m)
PROPOSED W258CC	46	SHI6812B	1	0.038	0.038	0.05	0.01%	0.3	0.2%	45.6
						0.05	<b>0.01%</b>	0.3	<b>0.2%</b>	45.6

The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments).

Calculations made using FCC FMModel

**Table 3.**

**W258CC, MINOR MODIFICATION OF CONSTRUCTION PERMIT**

<b>Radial (deg.)</b>	<b>HAAT (m) FCC/NGDC 30 Second Terrain</b>	<b>MERP per FCC 73.1235(b)1 (watts)</b>	<b>Actual ERP (watts)</b>
0	5	250	38.0
30	29	250	38.0
60	51	80	38.0
90	61	55	38.0
120	56	80	38.0
150	70	38	20.8
180	71	38	38.0
210	76	38	38.0
240	67	55	38.0
270	61	55	38.0
300	59	55	38.0
330	35	170	38.0