ENGINEERING STUDY

NEW Translator for WDXW (AM), Bridgeport, AL

FCC 349 Long-Form Engineering Statement

TECHNICAL STATEMENT

This technical statement and attached exhibits were prepared on behalf of Partners Media Investment, LLC, licensee of AM radio station WDXW, 1480 kHz, Facility ID # 57794 (Formerly WVOV). This application is being filed pursuant to the major change window Auction 99: AM Revitalization/ FM Translators (DA FCC-17-67). The original application for this facility (BNPFT-20170726APG) is on the "Singleton" list and therefore eligible to file this long form application.

Facilities Proposed

Location (NAD27)	35° 02' 50" N Latitude, 85° 18' 39" W Longitude
Channel	239D (95.7 MHz)
Tower Overall AGL Height-	58m
Tower ASR	N/A- Building with pole- TOWAIR OK
Proposed Antenna	Kathrein Scala CLFM-V Array
Antenna AGL Height-	57m
Site AMSL Height-	205m
ERP	99 Watts- DIRECTIONAL (Exhibit A)

COMPLIANCE WITH 74.1204(a) [contour overlap]

The proposed translator on channel 239D will be fully compliant with 74.1204(a). A table showing the allocation is attached as Exhibit B and a map depicting the two closest pertinent facilities is attached as Exhibit C.

There will be no actual interference to either second adjacent facility, WPLZ (237C3) or W241AF (241D). The 74.1204(d) analysis is shown in Exhibit D.

COMPLIANCE WITH 74.1201(g) [AM fill-in]

Exhibit E demonstrates that the proposed translator will be entirely contained within 25 miles of the WDXW transmitter.

The proposed facility is not within 320km of the common border between the US and Mexico or Canada.

ENVIRONMENTAL EXHIBIT

The proposed translator facility will utilize a directional antenna attached to a pole on top of an existing building. Because the pole extension above the existing building is less than 6.1 meters (20ft), the addition of the pole to the top of the building is permitted and the TOWAIR determination results are attached as Exhibit F. The attachment of the proposed translator antenna will not alter the existing building structure for purposes of the Nationwide Programmatic Agreement and the NHPA Section 106.

Because the the proposed translator will operate at a power level below 100 watts, the proposed facility is categorically excluded from further Environmental Assessment under 47CFR 1.1306 and 1.1307.

The proposed new FM translator along with other users at the site will maintain an occupational safety policy and agrees to reduce power or cease operation during periods of maintenance to avoid potentially harmful exposure of personnel to non-ionizing RF radiation.

Respectfully Submitted

Bert Goldman
Technical Consultant

EXHIBIT A- ANTENNA PATTERN

WVOV Antenna Pattern

Pre-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	0.514
10.0	0.385
20.0	0.209
30.0	0.089
40.0	0.058
50.0	0.058
60.0	0.058
70.0	0.058
80.0	0.058
90.0	0.058
100.0	0.058
110.0	0.058
120.0	0.104
130.0	0.246
140.0	0.418
150.0	0.57
160.0	0.71
170.0	0.83
180.0	0.93
190.0	0.978
200.0	1.0
210.0	0.97
220.0	0.907
230.0	0.854
240.0	0.87
250.0	0.9
260.0	0.898
270.0	0.86
280.0	0.86
290.0	0.92
300.0	0.978
310.0	1.0
320.0	0.97
330.0	0.907
340.0	0.808
350.0	0.682

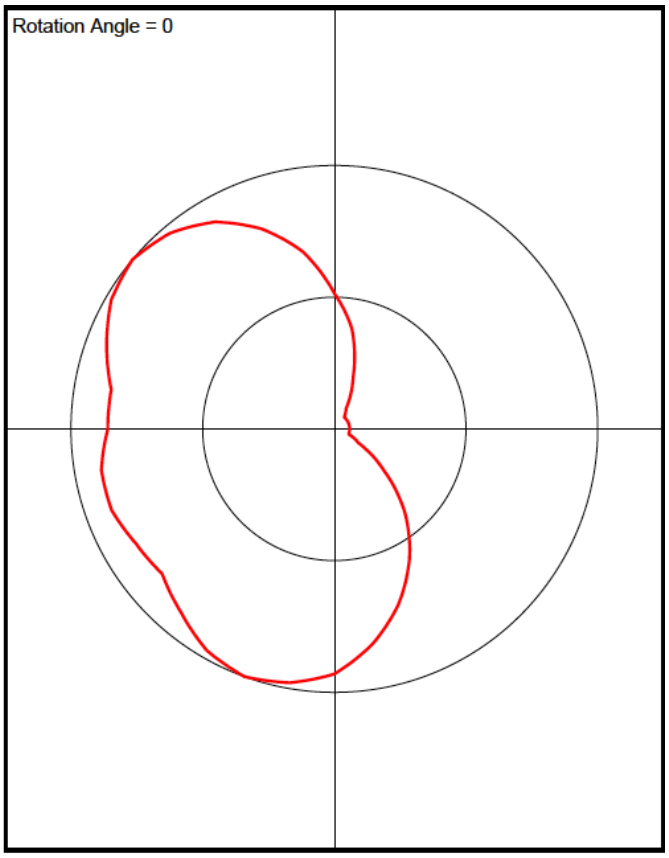


EXHIBIT B- ALLOCATION STUDY

ComStudy 2.2 search of channel 239 (95.7 MHz Class D) at 35-02-50.0 N, 85-18-39.0 W.

CALL	CITY	ST	CHN	CL	DIST	SEP	BRNG	CLEARANCE
WPLZ	OOLTEWAH	TN	237	C3	9.33	0.00	347.0	-30.21 dB- EXHIBIT D
W241AF	ROSSVILLE	GA	241	D	5.21	0.00	215.6	-26.85 dB- EXHIBIT D
NEW	CHATTANOOGA	TN	239	D	0.00	0.00	90.0	-24.96 dB- SHORT-FORM
WSKZ	CHATTANOOGA	TN	293	C0	12.71	25.00	356.9	-12.3km - IF SHORT 99W LIM
WATG	TRION	GA	239	A	64.11	0.00	178.8	7.80 dB
WAYB-FM	GRAYSVILLE	TN	239	A	43.51	0.00	21.9	9.61 dB
871022MC	TRION	GA	239	A	55.73	0.00	178.5	15.96 dB
W239AE	WINCHESTER	TN	239	D	74.29	0.00	274.8	18.43 dB
WPLZ	CLEVELAND	TN	237	A	43.69	0.00	72.4	23.86 dB
NEW	ETOWAH	TN	238	D	79.05	0.00	67.1	26.83 dB
NEW	ETOWAH	TN	238	D	79.05	0.00	67.1	26.83 dB
WAYB-FM	GRAYSVILLE	TN	239	A	50.40	0.00	19.0	27.02 dB
WRTT-FM	HUNTSVILLE	AL	236	C2	124.56	0.00	257.5	28.90 dB
WWPW	ATLANTA	GA	241	C0	163.99	0.00	146.9	28.58 dB
WLQK	LIVINGSTON	TN	240	C2	126.47	0.00	355.9	29.03 dB
WTWX-FM	GUNTERSVILLE	AL	240	C3	118.66	0.00	228.6	29.65 dB
WSBB-FM	DORAVILLE	GA	238	C1	167.92	0.00	127.2	30.24 dB

CDBS AS OF 12/15/2017

EXHIBIT C Pertinent Protection Contours

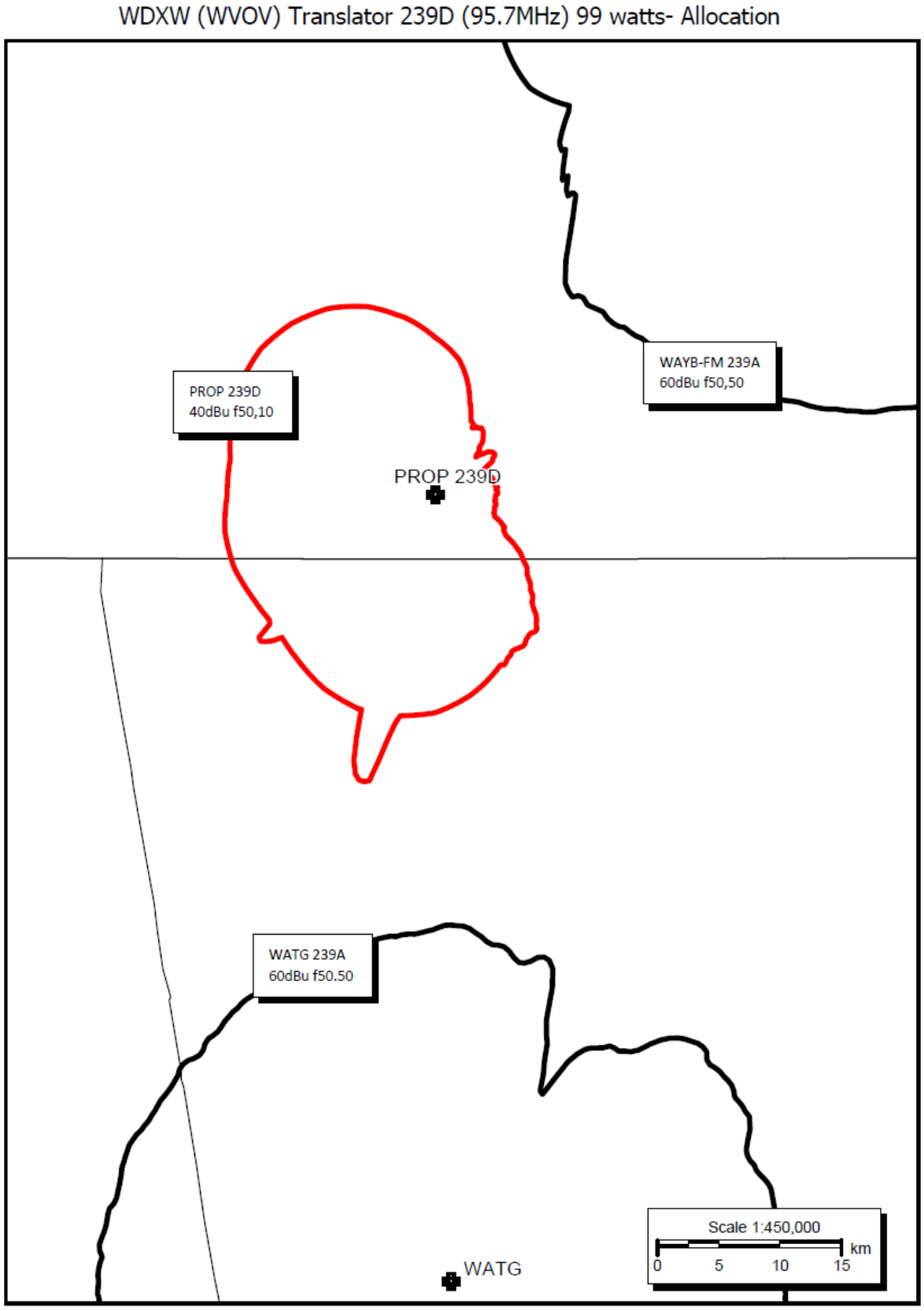
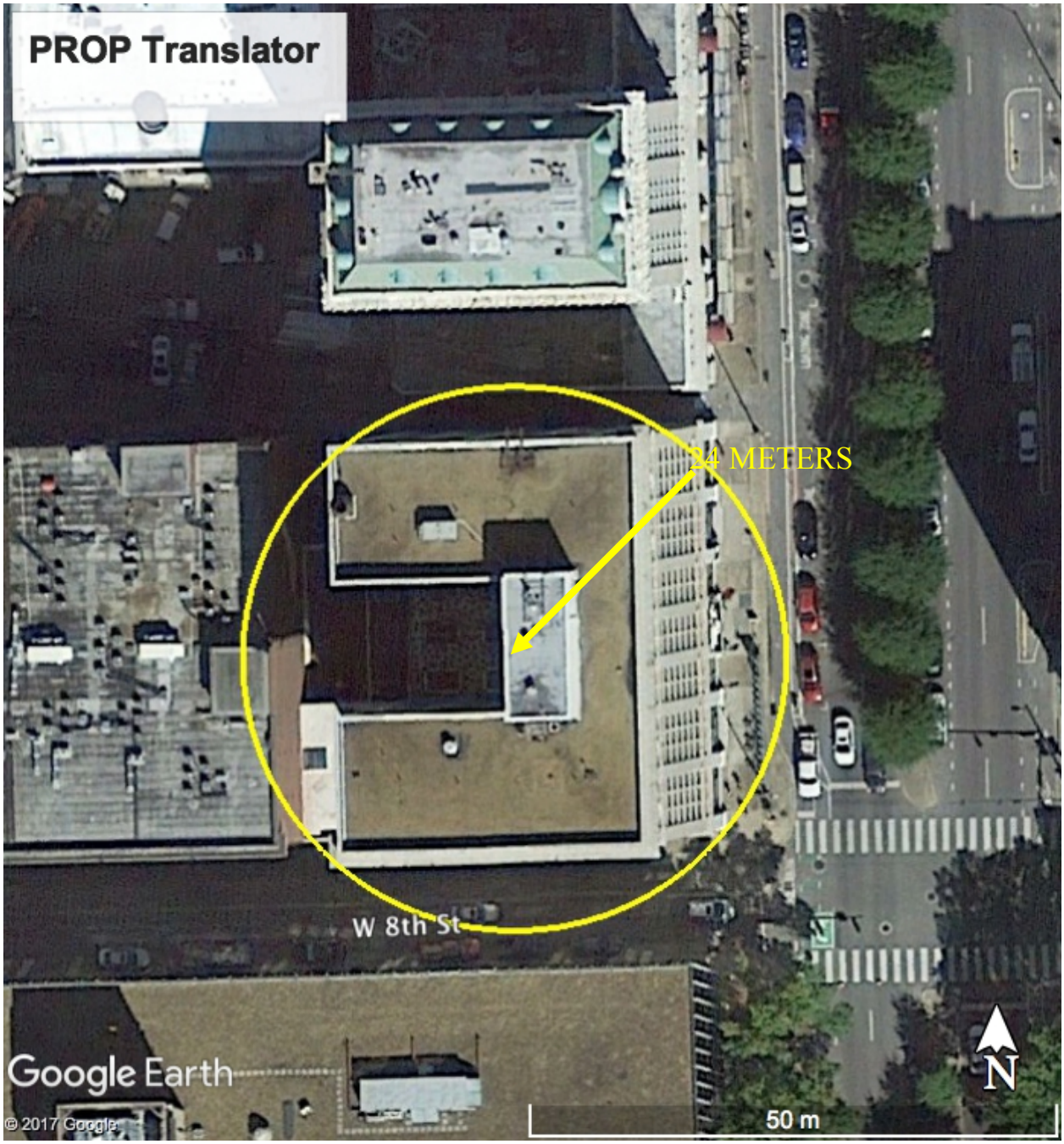


EXHIBIT D- 74.1204(d) Study



Building Location:
(NAD 83) 35-02-50/85-18-39
(NAD 27) 35-02-50/85-18-39

AMSL Height at street level:	205m
AGL to lower roof	50m
Lower Roof to Penthouse roof	5m
Pole above Penthouse	5m (less than 6.1m)
COR above lower roof	9m

PROP Chattanooga, TN, Showing Protection to WPLZ
74.1204(d) Study - Using FCC 30 SEC Terrain Database
HEIGHT OF INTERFERING CONTOUR ABOVE ROOF
Translator or LPFM Maximum Licensed ERP = 0.099
Translator or LPFM Antenna Height AG = 9 Meters
PROP Antenna Model = CL-FM_0098-MHZ_VPOL_000DT

Protected Station's Contour = 89.06398 dBu
Translator's or LPFM's full Interference contour 129.06398

Review Azimuth = 0 Degrees True
Relative Field on the horizon at Review Azimuth = 0.695
Translator/LPFM ERP on the horizon at Review Azimuth = 0.048 kW
Distance between stations = 9.3 km
Protected Station= WPLZ, 3.4 kW, 649 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)	
00.00	1.0	0.7	0.0688	020.4933	020.4933	009.000	
01.00	0.996	0.7	0.0683	020.4113	020.4082	008.644	
02.00	0.992	0.7	0.0677	020.3293	020.3169	008.291	
03.00	0.988	0.7	0.0672	020.2473	020.2196	007.940	
04.00	0.984	0.7	0.0666	020.1654	020.1162	007.593	
05.00	0.98	0.7	0.0661	020.0834	020.0070	007.250	
06.00	0.974	0.7	0.0653	019.9604	019.8511	006.914	
07.00	0.968	0.7	0.0645	019.8375	019.6896	006.582	
08.00	0.962	0.7	0.0637	019.7145	019.5227	006.256	
09.00	0.956	0.7	0.0629	019.5916	019.3503	005.935	
10.00	0.95	0.7	0.0621	019.4686	019.1728	005.619	
11.00	0.939	0.7	0.0607	019.2432	018.8896	005.328	
12.00	0.928	0.7	0.0593	019.0177	018.6022	005.046	
13.00	0.917	0.7	0.0579	018.7923	018.3107	004.773	
14.00	0.906	0.7	0.0565	018.5669	018.0154	004.508	
15.00	0.895	0.7	0.0551	018.3415	017.7165	004.253	
16.00	0.88	0.7	0.0533	018.0341	017.3355	004.029	
17.00	0.865	0.7	0.0515	017.7267	016.9521	003.817	
18.00	0.85	0.7	0.0497	017.4193	016.5667	003.617	
19.00	0.835	0.7	0.0480	017.1119	016.1796	003.429	
20.00	0.82	0.7	0.0463	016.8045	015.7910	003.253	
21.00	0.803	0.7	0.0444	016.4561	015.3631	003.103	
22.00	0.786	0.7	0.0425	016.1077	014.9348	002.966	
23.00	0.769	0.7	0.0407	015.7593	014.5065	002.842	
24.00	0.752	0.7	0.0389	015.4109	014.0786	002.732	
25.00	0.735	0.7	0.0372	015.0625	013.6513	002.634	
26.00	0.717	0.7	0.0354	014.6937	013.2066	002.559	
27.00	0.699	0.7	0.0336	014.3248	012.7635	002.497	
28.00	0.681	0.7	0.0319	013.9559	012.3223	002.448	
29.00	0.663	0.7	0.0302	013.5870	011.8835	002.413	
30.00	0.645	0.7	0.0286	013.2182	011.4473	002.391	
31.00	0.629	0.7	0.0272	012.8800	011.0403	002.366	
32.00	0.612	0.7	0.0258	012.5419	010.6361	002.354	
33.00	0.596	0.7	0.0244	012.2037	010.2349	002.353	MIN
34.00	0.579	0.7	0.0231	011.8656	009.8370	002.365	
35.00	0.563	0.7	0.0218	011.5275	009.4427	002.388	
36.00	0.544	0.7	0.0204	011.1483	009.0192	002.447	
37.00	0.526	0.7	0.0190	010.7692	008.6007	002.519	
38.00	0.507	0.7	0.0177	010.3901	008.1875	002.603	
39.00	0.489	0.7	0.0164	010.0110	007.7800	002.700	
40.00	0.47	0.7	0.0152	009.6318	007.3784	002.809	
41.00	0.448	0.7	0.0138	009.1810	006.9290	002.977	
42.00	0.426	0.7	0.0125	008.7301	006.4877	003.158	
43.00	0.404	0.7	0.0112	008.2793	006.0551	003.354	
44.00	0.382	0.7	0.0100	007.8284	005.6313	003.562	
45.00	0.36	0.7	0.0089	007.3776	005.2167	003.783	

46.00	0.338	0.7	0.0079	006.9267	004.8117	004.017
47.00	0.316	0.7	0.0069	006.4759	004.4165	004.264
48.00	0.294	0.7	0.0059	006.0250	004.0315	004.523
49.00	0.272	0.7	0.0051	005.5742	003.6570	004.793
50.00	0.25	0.7	0.0043	005.1233	003.2932	005.075
51.00	0.231	0.7	0.0037	004.7339	002.9792	005.321
52.00	0.212	0.7	0.0031	004.3446	002.6748	005.576
53.00	0.193	0.7	0.0026	003.9552	002.3803	005.841
54.00	0.174	0.7	0.0021	003.5658	002.0959	006.115
55.00	0.155	0.7	0.0017	003.1765	001.8219	006.398
56.00	0.141	0.7	0.0014	002.8895	001.6158	006.604
57.00	0.127	0.7	0.0011	002.6026	001.4175	006.817
58.00	0.113	0.7	0.0009	002.3157	001.2272	007.036
59.00	0.099	0.7	0.0007	002.0288	001.0449	007.261
60.00	0.085	0.7	0.0005	001.7419	000.8710	007.491
61.00	0.077	0.7	0.0004	001.5780	000.7650	007.620
62.00	0.069	0.7	0.0003	001.4140	000.6638	007.751
63.00	0.061	0.7	0.0003	001.2501	000.5675	007.886
64.00	0.053	0.7	0.0002	001.0861	000.4761	008.024
65.00	0.045	0.7	0.0001	000.9222	000.3897	008.164
66.00	0.04	0.7	0.0001	000.8197	000.3334	008.251
67.00	0.035	0.7	0.0001	000.7173	000.2803	008.340
68.00	0.03	0.7	0.0001	000.6148	000.2303	008.430
69.00	0.025	0.7	0.0000	000.5123	000.1836	008.522
70.00	0.02	0.7	0.0000	000.4099	000.1402	008.615
71.00	0.018	0.7	0.0000	000.3689	000.1201	008.651
72.00	0.016	0.7	0.0000	000.3279	000.1013	008.688
73.00	0.014	0.7	0.0000	000.2869	000.0839	008.726
74.00	0.012	0.7	0.0000	000.2459	000.0678	008.764
75.00	0.01	0.7	0.0000	000.2049	000.0530	008.802
76.00	0.01	0.7	0.0000	000.2049	000.0496	008.801
77.00	0.01	0.7	0.0000	000.2049	000.0461	008.800
78.00	0.01	0.7	0.0000	000.2049	000.0426	008.800
79.00	0.01	0.7	0.0000	000.2049	000.0391	008.799
80.00	0.01	0.7	0.0000	000.2049	000.0356	008.798
81.00	0.01	0.7	0.0000	000.2049	000.0321	008.798
82.00	0.01	0.7	0.0000	000.2049	000.0285	008.797
83.00	0.01	0.7	0.0000	000.2049	000.0250	008.797
84.00	0.01	0.7	0.0000	000.2049	000.0214	008.796
85.00	0.01	0.7	0.0000	000.2049	000.0179	008.796
86.00	0.01	0.7	0.0000	000.2049	000.0143	008.796
87.00	0.01	0.7	0.0000	000.2049	000.0107	008.795
88.00	0.01	0.7	0.0000	000.2049	000.0072	008.795
89.00	0.01	0.7	0.0000	000.2049	000.0036	008.795
90.00	0.01	0.7	0.0000	000.2049	000.0000	008.795

PROP Chattanooga, TN, Showing Protection to W241AF
74.1204(d) Study - Using FCC 30 SEC Terrain Database

HEIGHT OF INTERFERING CONTOUR ABOVE ROOF

Translator or LPFM Maximum Licensed ERP = 0.099
Translator or LPFM Antenna Height AG = 9 Meters
PROP Antenna Model = CL-FM_0098-MHZ_VPOL_000DT

Protected Station's Contour = 84.89294 dBu
Translator's or LPFM's full Interference contour 124.89294

Review Azimuth = 0 Degrees True
Relative Field on the horizon at Review Azimuth = 0.695
Translator/LPFM ERP on the horizon at Review Azimuth = 0.048 kW
Distance between stations = 5.2 km
Protected Station= W241AF, .25 kW, 673 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	0.7	0.0688	033.1255	033.1255	010.000
01.00	0.996	0.7	0.0683	032.9930	032.9880	009.424
02.00	0.992	0.7	0.0677	032.8605	032.8405	008.853
03.00	0.988	0.7	0.0672	032.7280	032.6832	008.287
04.00	0.984	0.7	0.0666	032.5955	032.5161	007.726
05.00	0.98	0.7	0.0661	032.4630	032.3395	007.171
06.00	0.974	0.7	0.0653	032.2643	032.0875	006.627
07.00	0.968	0.7	0.0645	032.0655	031.8265	006.092
08.00	0.962	0.7	0.0637	031.8668	031.5566	005.565
09.00	0.956	0.7	0.0629	031.6680	031.2781	005.046
10.00	0.95	0.7	0.0621	031.4693	030.9912	004.535
11.00	0.939	0.7	0.0607	031.1049	030.5334	004.065
12.00	0.928	0.7	0.0593	030.7405	030.0687	003.609
13.00	0.917	0.7	0.0579	030.3761	029.5976	003.167
14.00	0.906	0.7	0.0565	030.0117	029.1203	002.740
15.00	0.895	0.7	0.0551	029.6474	028.6372	002.327
16.00	0.88	0.7	0.0533	029.1505	028.0212	001.965
17.00	0.865	0.7	0.0515	028.6536	027.4016	001.622
18.00	0.85	0.7	0.0497	028.1567	026.7786	001.299
19.00	0.835	0.7	0.0480	027.6598	026.1529	000.995
20.00	0.82	0.7	0.0463	027.1629	025.5248	000.710
21.00	0.803	0.7	0.0444	026.5998	024.8331	000.467
22.00	0.786	0.7	0.0425	026.0367	024.1408	000.246
23.00	0.769	0.7	0.0407	025.4735	023.4485	000.047
24.00	0.752	0.7	0.0389	024.9104	022.7568	-000.132
25.00	0.735	0.7	0.0372	024.3473	022.0661	-000.290
26.00	0.717	0.7	0.0354	023.7510	021.3473	-000.412
27.00	0.699	0.7	0.0336	023.1548	020.6310	-000.512
28.00	0.681	0.7	0.0319	022.5585	019.9180	-000.591
29.00	0.663	0.7	0.0302	021.9622	019.2086	-000.648
30.00	0.645	0.7	0.0286	021.3660	018.5035	-000.683
31.00	0.629	0.7	0.0272	020.8194	017.8457	-000.723
32.00	0.612	0.7	0.0258	020.2728	017.1923	-000.743
33.00	0.596	0.7	0.0244	019.7263	016.5438	-000.744[1]
34.00	0.579	0.7	0.0231	019.1797	015.9007	-000.725
35.00	0.563	0.7	0.0218	018.6331	015.2634	-000.688
36.00	0.544	0.7	0.0204	018.0203	014.5787	-000.592
37.00	0.526	0.7	0.0190	017.4075	013.9022	-000.476
38.00	0.507	0.7	0.0177	016.7947	013.2344	-000.340
39.00	0.489	0.7	0.0164	016.1818	012.5756	-000.184
40.00	0.47	0.7	0.0152	015.5690	011.9265	-000.008
41.00	0.448	0.7	0.0138	014.8402	011.2001	000.264
42.00	0.426	0.7	0.0125	014.1115	010.4869	000.558
43.00	0.404	0.7	0.0112	013.3827	009.7875	000.873
44.00	0.382	0.7	0.0100	012.6540	009.1025	001.210

[1] Worst case interfering contour at roof-top, 2.4ft below lower roof, more than 2m above any habitable space on top floor. No residences on top floor.

45.00	0.36	0.7	0.0089	011.9252	008.4324	001.568
46.00	0.338	0.7	0.0079	011.1964	007.7777	001.946
47.00	0.316	0.7	0.0069	010.4677	007.1389	002.344
48.00	0.294	0.7	0.0059	009.7389	006.5166	002.763
49.00	0.272	0.7	0.0051	009.0101	005.9112	003.200
50.00	0.25	0.7	0.0043	008.2814	005.3232	003.656
51.00	0.231	0.7	0.0037	007.6520	004.8156	004.053
52.00	0.212	0.7	0.0031	007.0226	004.3236	004.466
53.00	0.193	0.7	0.0026	006.3932	003.8475	004.894
54.00	0.174	0.7	0.0021	005.7638	003.3879	005.337
55.00	0.155	0.7	0.0017	005.1345	002.9450	005.794
56.00	0.141	0.7	0.0014	004.6707	002.6118	006.128
57.00	0.127	0.7	0.0011	004.2069	002.2913	006.472
58.00	0.113	0.7	0.0009	003.7432	001.9836	006.826
59.00	0.099	0.7	0.0007	003.2794	001.6890	007.189
60.00	0.085	0.7	0.0005	002.8157	001.4078	007.562
61.00	0.077	0.7	0.0004	002.5507	001.2366	007.769
62.00	0.069	0.7	0.0003	002.2857	001.0731	007.982
63.00	0.061	0.7	0.0003	002.0207	000.9174	008.200
64.00	0.053	0.7	0.0002	001.7557	000.7696	008.422
65.00	0.045	0.7	0.0001	001.4906	000.6300	008.649
66.00	0.04	0.7	0.0001	001.3250	000.5389	008.790
67.00	0.035	0.7	0.0001	001.1594	000.4530	008.933
68.00	0.03	0.7	0.0001	000.9938	000.3723	009.079
69.00	0.025	0.7	0.0000	000.8281	000.2968	009.227
70.00	0.02	0.7	0.0000	000.6625	000.2266	009.377
71.00	0.018	0.7	0.0000	000.5963	000.1941	009.436
72.00	0.016	0.7	0.0000	000.5300	000.1638	009.496
73.00	0.014	0.7	0.0000	000.4638	000.1356	009.557
74.00	0.012	0.7	0.0000	000.3975	000.1096	009.618
75.00	0.01	0.7	0.0000	000.3313	000.0857	009.680
76.00	0.01	0.7	0.0000	000.3313	000.0801	009.679
77.00	0.01	0.7	0.0000	000.3313	000.0745	009.677
78.00	0.01	0.7	0.0000	000.3313	000.0689	009.676
79.00	0.01	0.7	0.0000	000.3313	000.0632	009.675
80.00	0.01	0.7	0.0000	000.3313	000.0575	009.674
81.00	0.01	0.7	0.0000	000.3313	000.0518	009.673
82.00	0.01	0.7	0.0000	000.3313	000.0461	009.672
83.00	0.01	0.7	0.0000	000.3313	000.0404	009.671
84.00	0.01	0.7	0.0000	000.3313	000.0346	009.671
85.00	0.01	0.7	0.0000	000.3313	000.0289	009.670
86.00	0.01	0.7	0.0000	000.3313	000.0231	009.670
87.00	0.01	0.7	0.0000	000.3313	000.0173	009.669
88.00	0.01	0.7	0.0000	000.3313	000.0116	009.669
89.00	0.01	0.7	0.0000	000.3313	000.0058	009.669
90.00	0.01	0.7	0.0000	000.3313	000.0000	

EXHIBIT E - 74.1201(g) Compliance

WDXW (WVOV) Translator 239D (95.7MHz) 99 watts

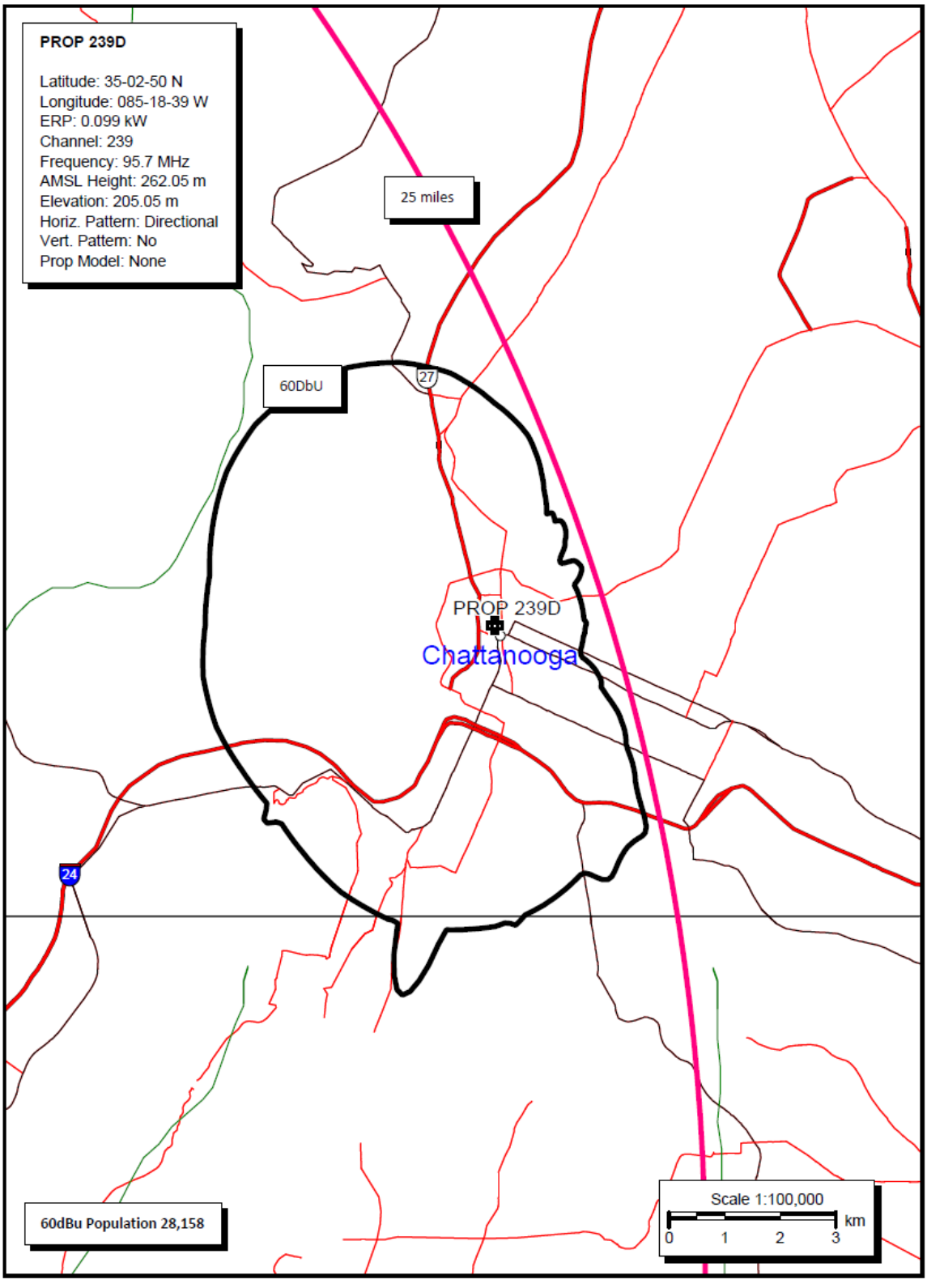


EXHIBIT F TOWAIR DETERMINATION

TOWAIR Determination Results

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results

Structure does not require registration. The structure meets the 6.10-meter (20-foot) Rule criteria.

Your Specifications

NAD83 Coordinates	
Latitude	35-02-50.0 north
Longitude	085-18-39.0 west
Measurements (Meters)	
Overall Structure Height (AGL)	59
Support Structure Height (AGL)	54
Site Elevation (AMSL)	205
Structure Type	
BPOLE - Building with Pole	