

**MINOR CP MODIFICATION APPLICATION
W244DA, Baltimore, MD**

TECHNICAL STATEMENT

This technical statement and attached exhibits have been prepared on behalf of Best Media, Inc (“Best”), Licensee of translator station W244DA, Facility ID number 138103. The applicant proposes a minor modification of the Construction permit to locate higher on the same proposed tower. The ERP remains the same and the pattern is slightly modified.. This translator will continue to rebroadcast WZBA (FM), Westminster, MD Facility ID 59985, as a fill-in translator in compliance with 47 CFR 74.1201. The translator community of license will remain Baltimore, MD.

Facilities Proposed

Location (NAD83)	39° 20' 10.4" N Latitude, 76° 38' 57" W Longitude
Channel	244D (96.7MHz)
Tower Overall AGL Height-	390m
Tower ASR	1044237
Proposed Antenna	2-level custom log-Periodic Antenna
Antenna AGL Height-	213m
Site AMSL Height-	82m
COR AMSL Height	295m
ERP	250w DIRECTIONAL (SEE EXHIBIT A)

Interference Study

ComStudy 2.2 search of channel 244 (96.7 MHz Class D) at 39-20-10.4 N, 76-38-57.0 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE
WASH	WASHINGTON	DC 246 B	56.73	0.00	221.0	-3.53 dB Exhibit C
WHUR-FM	WASHINGTON	DC 242 B	56.73	0.00	221.0	-3.35 dB Exhibit C
WLAN-FM	LANCASTER	PA 245 B	80.72	0.00	11.7	1.15 dB Exhibit B
WCEI-FM	EASTON	MD 244 B1	63.98	0.00	131.2	1.02 dB Exhibit B
WQER-LP	ROCKVILLE	MD 244 LP100	51.01	24.00	239.4	1.13 dB Exhibit B
WERA-LP	ARLINGTON	VA 244 LP100	62.33	24.00	217.4	3.29 dB Exhibit B
WSOX	RED LION	PA 241 B	63.38	0.00	5.4	6.70 dB
WDLD	HALFWAY	MD 244 A	98.74	0.00	288.9	9.83 dB
W244EB	BURKE	VA 244 D	84.70	0.00	224.1	11.91 dB
WRVV	HARRISBURG	PA 247 B	113.61	0.00	350.6	17.61 dB
WTDY-FM	PHILADELPHIA	PA 243 B	144.33	0.00	56.6	21.47 dB
W243BR	HARRISBURG	PA 243 D	95.40	0.00	348.3	23.90 dB
WRVV	HARRISBURG	PA 247 B	113.59	0.00	350.6	23.03 dB
WVNW	BURNHAM	PA 244 A	165.02	0.00	327.7	27.72 dB
W243DS	COLUMBIA	PA 243 D	80.78	0.00	11.7	28.10 dB
WENJ	MILLVILLE	NJ 247 B	161.94	0.00	90.0	28.90 dB
WFPG	ATLANTIC CITY	NJ 245 B	189.81	0.00	87.9	29.80 dB

LMS as of 12-15-23

COMPLIANCE, 74.1201(g), 74.1204(a), 74.1233(a)(1), and 74.1204(d)

Exhibit B demonstrates compliance with 74.1204(a). There are no impermissible contour overlaps to any other facilities.

Exhibit B demonstrates compliance with 74.1201(g) governing the use of a translator as a fill-in for an FM station. The 54dBu contour of the proposed W244DA will be completely contained within the 54dBu contour of WZBA (FM).

Exhibit C demonstrates that the proposed facility will protect stations WASH (246B) and WHUR (242B) signals. There will be no location at ground level that receives a signal more than 20dB above the signal from WASH or WHUR. The proposed facility will thus be compliant with 74.1204(d).

As demonstrated in Exhibit B, the proposed W244DA 60dBu contour will overlap a portion of the licensed facility and is thus compliant with 74.1233(a).

Environmental Exhibit

The proposed W244DA facility as proposed will utilize a directional antenna located on an existing ASR-registered tower, (ASR 1035558). The RF density near the tower was calculated using a worst-case EPA type 1 antenna at 250 watts horizontal and vertical and 213m above the ground. Using the FCC program “FM Model¹”, it was calculated that the proposed antenna contributes approximately $0.033\mu\text{W}/\text{cm}^2$ or 0.016 % of the total allowable $200\mu\text{W}/\text{cm}^2$. The maximum was found to be 39 meters from the base of the tower.

The proposed facility will be operating at 213m on a multiple-user tower. Because the RF at ground level is expected to be well under 5% of the maximum level allowed, the proposed

¹ <https://www.fcc.gov/general/fm-model>

facility can be considered independently of other RF sources on the tower and thus compliant under §1.1307(b)(3) and is excluded from further environmental review under §1.1306 of the FCC rules and regulations.

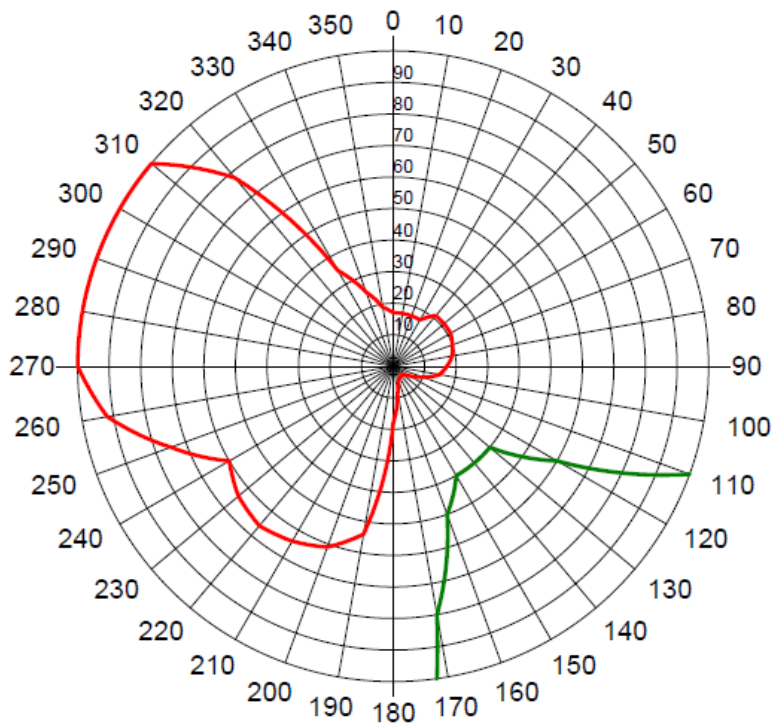
Respectfully Submitted

A handwritten signature in cursive script that reads "Bert Goldman".

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EXHIBIT A: Custom 2-Level Log-Periodic Antenna

W244DA PROP 213m AGL Pattern



Azi	Rel	dBk	kW	dB	Azi	Rel	dBk	kW	dB
0	0.170	-21.41	0.007	-15.39	180	0.180	-20.92	0.008	-14.89
10	0.170	-21.41	0.007	-15.39	190	0.540	-11.37	0.073	-5.35
20	0.170	-21.41	0.007	-15.39	200	0.610	-10.31	0.093	-4.29
30	0.170	-21.41	0.007	-15.39	210	0.640	-9.90	0.102	-3.88
40	0.210	-19.58	0.011	-13.56	220	0.660	-9.63	0.109	-3.61
50	0.210	-19.58	0.011	-13.56	230	0.640	-9.90	0.102	-3.88
60	0.210	-19.58	0.011	-13.56	240	0.600	-10.46	0.090	-4.44
70	0.200	-20.00	0.010	-13.98	250	0.750	-8.52	0.141	-2.50
80	0.190	-20.45	0.009	-14.42	260	0.920	-6.74	0.212	-0.72
90	0.170	-21.41	0.007	-15.39	270	1.000	-6.02	0.250	0.00
100	0.150	-22.50	0.006	-16.48	280	1.000	-6.02	0.250	0.00
110	0.100	-26.02	0.003	-20.00	290	1.000	-6.02	0.250	0.00
120	0.060	-30.46	0.001	-24.44	300	1.000	-6.02	0.250	0.00
130	0.040	-33.98	0.000	-27.96	310	1.000	-6.02	0.250	0.00
140	0.040	-33.98	0.000	-27.96	320	0.780	-8.18	0.152	-2.16
150	0.040	-33.98	0.000	-27.96	330	0.350	-15.14	0.031	-9.12
160	0.050	-32.04	0.001	-26.02	340	0.250	-18.06	0.016	-12.04
170	0.080	-27.96	0.002	-21.94	350	0.190	-20.45	0.009	-14.42

Rotation Angle = 0

EXHIBIT B- 74.1201(a), 74.1201(g), 74.1233(a)(1) Compliance

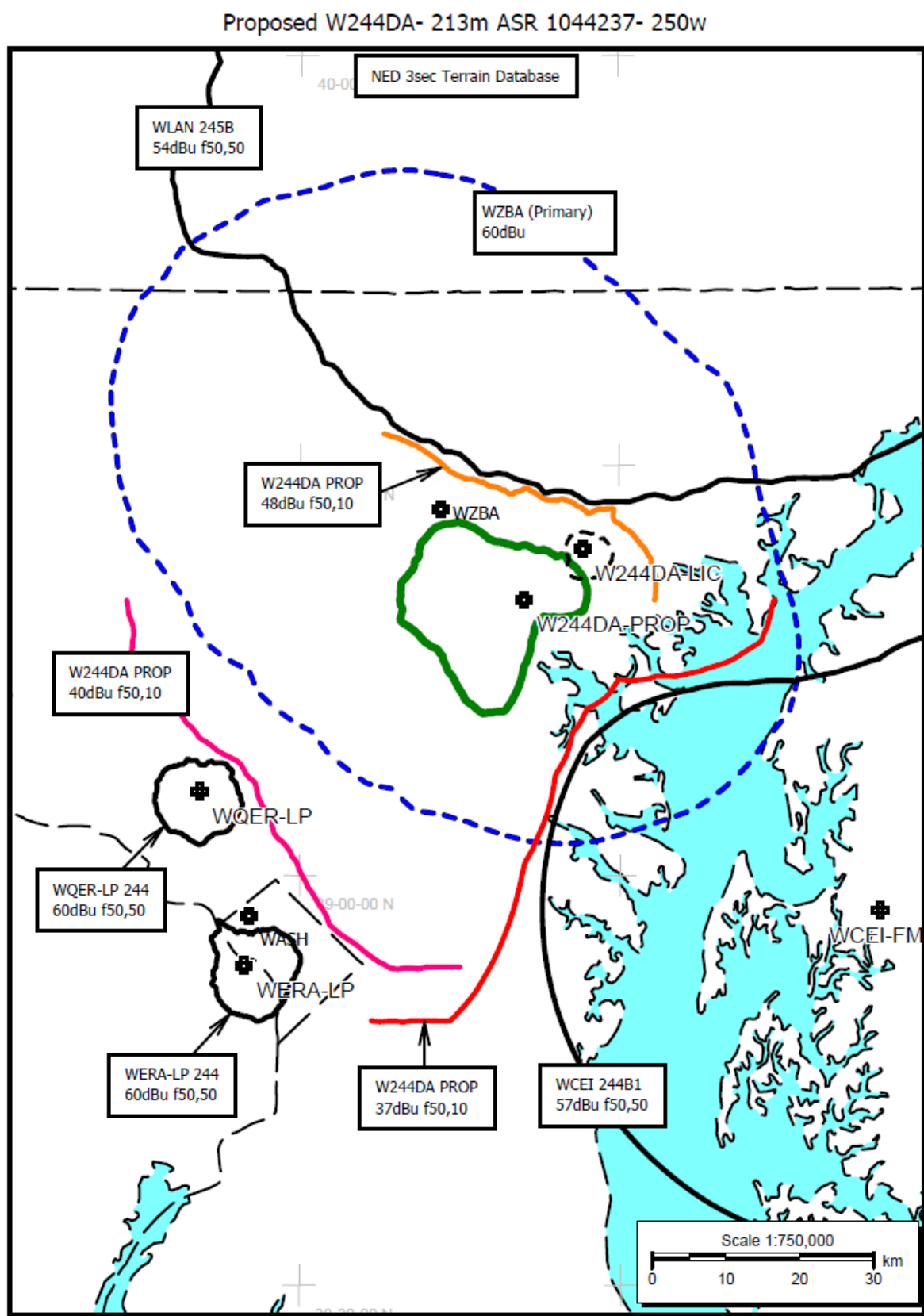


EXHIBIT C- 74.1204D Compliance to WASH

ASR1044237 Baltimore, MD, Showing Protection to WASH, Channel: 246

Geographic Coordinates: N. 392010.4 W. 763857.9

74.1204(d) Study - Using NED 03 SEC Terrain Database

Translator or LPFM Maximum Licensed ERP = 0.25 kW, Channel: 244

Translator or LPFM Antenna Height AG = 213 meters

ASR1044237 Antenna Azimuth Model = Vertical Model Name = PSI Log-Periodic

Protected Station's Contour = 56.71169 dBu

Translator's or LPFM's full Interference contour 96.71169

Review Azimuth = 0 Degrees True

Horizontal Relative Field at Review Azimuth = 1.000

Translator/LPFM ERP on the horizontal at Review Azimuth = 0.25 kW

Distance between stations = 56.7 km

Protected Station= WASH, 17.5 kW, 315 M meters COR AMSL

Depression Angle From Degree (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	1.0	0.2500	1619.5170	1619.5170	213.000
05.00	0.82	1.0	0.1681	1328.0039	1322.9505	097.257
10.00	0.64	1.0	0.1024	1036.4908	1020.7442	033.015
15.00	0.338	1.0	0.0286	547.3967	528.7446	071.323
20.00	0.036	1.0	0.0003	058.3026	054.7866	193.059
25.00	0.12	1.0	0.0036	194.3420	176.1337	130.868
30.00	0.204	1.0	0.0104	330.3815	286.1187	047.809
35.00	0.16	1.0	0.0064	258.3130	211.5976	064.838
40.00	0.092	1.0	0.0021	148.9956	114.1372	117.227
45.00	0.01	1.0	0.0000	016.1952	011.4517	201.548
50.00	0.052	1.0	0.0007	084.2149	054.1323	148.488
55.00	0.064	1.0	0.0010	102.8393	058.9862	128.759
60.00	0.051	1.0	0.0007	082.5954	041.2977	141.470
65.00	0.034	1.0	0.0003	055.0636	023.2709	163.095
70.00	0.017	1.0	0.0001	027.5318	009.4164	187.129
75.00	0.014	1.0	0.0000	021.8635	005.6587	191.882
80.00	0.01	1.0	0.0000	016.1952	002.8123	197.051
85.00	0.01	1.0	0.0000	016.1952	001.4115	196.866
90.00	0.01	1.0	0.0000	016.1952	000.0000	196.805

EXHIBIT C- 74.1204D Compliance to WHUR

ASR1044237 Baltimore, MD, Showing Protection to WHUR-FM , Channel: 242
 Geographic Coordinates: N. 392010.4 W. 763857.9
 74.1204(d) Study - Using NED 03 SEC Terrain Database
 Translator or LPFM Maximum Licensed ERP = 0.25 kW, Channel: 244
 Translator or LPFM Antenna Height AG = 213 meters
 ASR1044237 Antenna Azimuth Model = Vertical Model Name = PSI Log-Periodic

Protected Station's Contour = 56.56369 dBu
 Translator's or LPFM's full Interference contour 96.56369

Review Azimuth = 0 Degrees True
 Horizontal Relative Field at Review Azimuth = 1.000
 Translator/LPFM ERP on the horizontal at Review Azimuth = 0.25 kW
 Distance between stations = 56.7 km
 Protected Station= WHUR-FM, 16.5 kW, 317.8 M meters COR AMSL

Depression Angle From Degree (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	1.0	0.2500	1647.3486	1647.3486	213.000
05.00	0.82	1.0	0.1681	1350.8258	1345.6855	095.268
10.00	0.64	1.0	0.1024	1054.3031	1038.2858	029.922
15.00	0.338	1.0	0.0286	556.8038	537.8312	068.889
20.00	0.036	1.0	0.0003	059.3046	055.7281	192.717
25.00	0.12	1.0	0.0036	197.6818	179.1606	129.456
30.00	0.204	1.0	0.0104	336.0591	291.0357	044.970
35.00	0.16	1.0	0.0064	262.7521	215.2339	062.292
40.00	0.092	1.0	0.0021	151.5561	116.0987	115.582
45.00	0.01	1.0	0.0000	016.4735	011.6485	201.351
50.00	0.052	1.0	0.0007	085.6621	055.0626	147.379
55.00	0.064	1.0	0.0010	104.6066	059.9999	127.311
60.00	0.051	1.0	0.0007	084.0148	042.0074	140.241
65.00	0.034	1.0	0.0003	056.0099	023.6708	162.238
70.00	0.017	1.0	0.0001	028.0049	009.5782	186.684
75.00	0.014	1.0	0.0000	022.2392	005.7559	191.519
80.00	0.01	1.0	0.0000	016.4735	002.8606	196.777
85.00	0.01	1.0	0.0000	016.4735	001.4358	196.589
90.00	0.01	1.0	0.0000	016.4735	000.0000	196.527