

MINOR LICENSE MODIFICATION APPLICATION
W300CZ, Perth Amboy, NJ

TECHNICAL STATEMENT

This technical statement and attached exhibits have been prepared on behalf of Best Media, Inc (“Best”), Licensee of translator station W300CZ, Facility ID number 141281. The applicant proposes a minor modification to the CP for W300CZ (W292GG). This modification seeks to remain on channel 300 at the same location as the current CP using a different antenna. This modification will be contingent on the completion of WOLD-LP’s frequency change and move to channel 280. This translator will continue to rebroadcast WPRB (FM), Princeton, NJ Facility ID 53567, as a fill-in translator in compliance with 47 CFR 74.1201. The translator community of license will be Perth Amboy.

Facilities Proposed

Location (NAD83)	40° 30’ 35.3” N Latitude, 74° 17’ 16.7” W Longitude
Channel	300D (107.9MHz)
Tower Overall AGL Height-	93m
Tower ASR	1061413
Proposed Antenna	Custom Log P Antenna
Antenna AGL Height-	90.5m
Site AMSL Height-	3.4m
COR AMSL Height	93.9m
ERP	250w DIRECTIONAL (SEE EXHIBIT A)

Interference Study

ComStudy 2.2 search of channel 300 (107.9 MHz Class D) at 40-30-35.3 N,74-17-16.7 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE
WOLD-LP	WOODBIDGE	NJ 300 LP100	9.11	24.00	283.8	-33.98 dB MOVE to 280L1
WBLS	NEW YORK	NY 298 B	36.83	0.00	43.8	-13.11 dB Exhibit C
W300EI	NEW YORK	NY 300 D	32.08	0.00	47.2	1.83 dB Exhibit B
WCFT-LP	DOVER	NJ 300 LP100	42.82	24.00	334.0	2.32 dB Exhibit B
WWPH	PRINCETON JUNCTION	NJ 300 D	36.22	0.00	231.2	2.02 dB Exhibit B
WMDI-LP	LAKEWOOD	NJ 300 LP100	46.27	24.00	173.0	5.31 dB
NEW	FLEMINGTON	NJ 300 LP100	42.01	24.00	273.8	8.52 dB
WEBE	WESTPORT	CT 300 B	126.23	0.00	46.9	11.66 dB
WSRX-LP	VERNON	NJ 300 LP100	79.53	24.00	345.4	12.39 dB
WEBE	WESTPORT	CT 300 B	126.23	0.00	46.9	13.83 dB
WPPZ-FM	PENNSAUKEN	NJ 300 A	97.12	0.00	230.6	14.28 dB
WQHT	NEW YORK	NY 246 B	31.04	15.00	5.1	16.0
WQET-LP	MIDDLETOWN	NY 300 LP100	107.75	24.00	352.3	17.99 dB
W300AO	MANAHAWKIN	NJ 300 D	90.23	0.00	177.1	17.29 dB
WKRF	TOBYHANNA	PA 300 A	109.44	0.00	303.3	19.00 dB
WRRC	LAWRENCEVILLE	NJ 299 D	45.95	0.00	236.1	20.54 dB
WQHT	NEW YORK	NY 246 B	36.81	15.00	43.8	21.8
WBYN-FM	BOYERTOWN	PA 298 B	116.30	0.00	264.6	22.46 dB
WRML-LP	MAYS LANDING	NJ 300 LP100	121.28	24.00	196.3	23.45 dB
WELV-LP	ELLENVILLE	NY 300 LP100	134.52	24.00	356.4	23.60 dB
NEW	A A R P INS	NJ 300 LP100	129.20	24.00	186.0	26.28 dB
NEW	LIBERTY	NY 300 LP100	148.80	24.00	345.1	26.11 dB
NEW	ATLANTIC CITY	NJ 300 LP100	127.89	24.00	185.0	26.10 dB

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 except WOLD-LP (300L100). WOLD has a Construction Permit to change to channel 280L100 (Application 0000219834). This application for W300CZ is contingent on the relocation of WOLD-LP to channel 280L100 and the subsequent availability of channel 300 for the W300CZ modification.

Exhibit D 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 W300CZ will be completely contained within the 54dBu contour of WPRB (FM).

Exhibit C demonstrates that the proposed facility will protect station WBLS (298B). As shown in the attached table, no location at ground level will receive a signal from W300CZ that is more than 40dB higher than that of WBLS. The proposed facility will thus be compliant with 74.1204(d).

Exhibit E demonstrates that the proposed W300CZ 60dBu contour will overlap a portion of the licensed facility and is thus compliant with 74.1233(a).

Environmental Exhibit

The proposed W300CZ facility as proposed will utilize a directional antenna located on an existing ASR-registered tower, (ASR 1061413). The RF density near the tower was calculated using a worst-case EPA type 1 antenna at 250 watts horizontal and vertical and 90.5m above the ground. Using the FCC program “FM Model¹”, it was calculated that the

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

proposed antenna contributes approximately $1.2\mu\text{W}/\text{cm}^2$ or 0.6 % of the total allowable $200\mu\text{W}/\text{cm}^2$ maximum over the north lobe directions.

The proposed facility will be operating at 90.5m on an existing tower. There are no non-excluded facilities collocated on the proposed tower. Based on the preceding, it is believed that the proposed facility is compliant under §1.1307(b)(3) and is excluded from further environmental review under §1.1306 of the FCC rules and regulations.

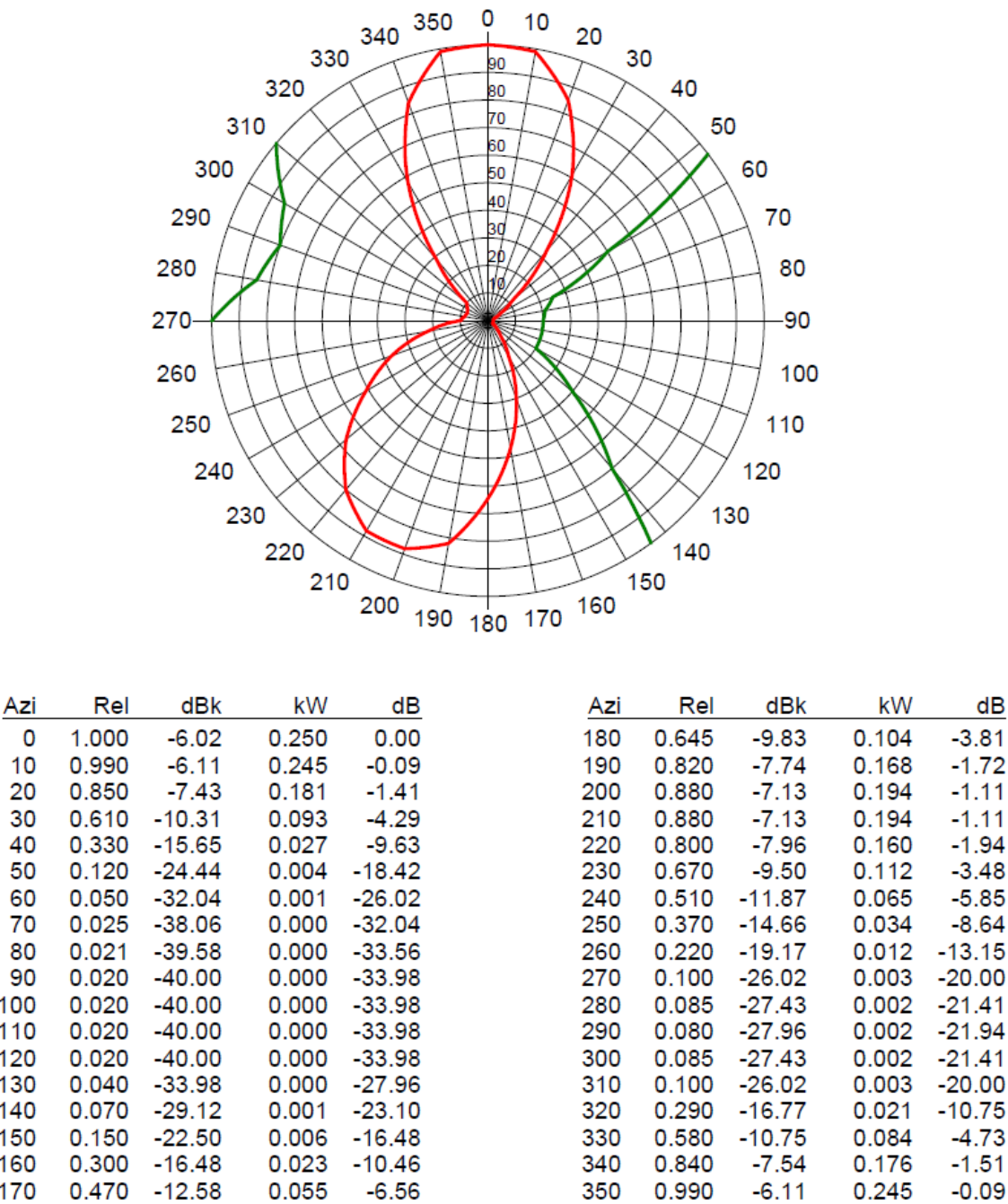
Respectfully Submitted

A handwritten signature in black ink, appearing to read 'Bert Goldman', with a stylized flourish at the end.

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EXHIBIT A: 2-level Log-P Antenna 0.94 wavelength spaced

W300CZ PROP Pattern 2-19-24



Rotation Angle = 0

EXHIBIT B- 74.1204(a) Compliance

W300CZ Allocation Map 300D

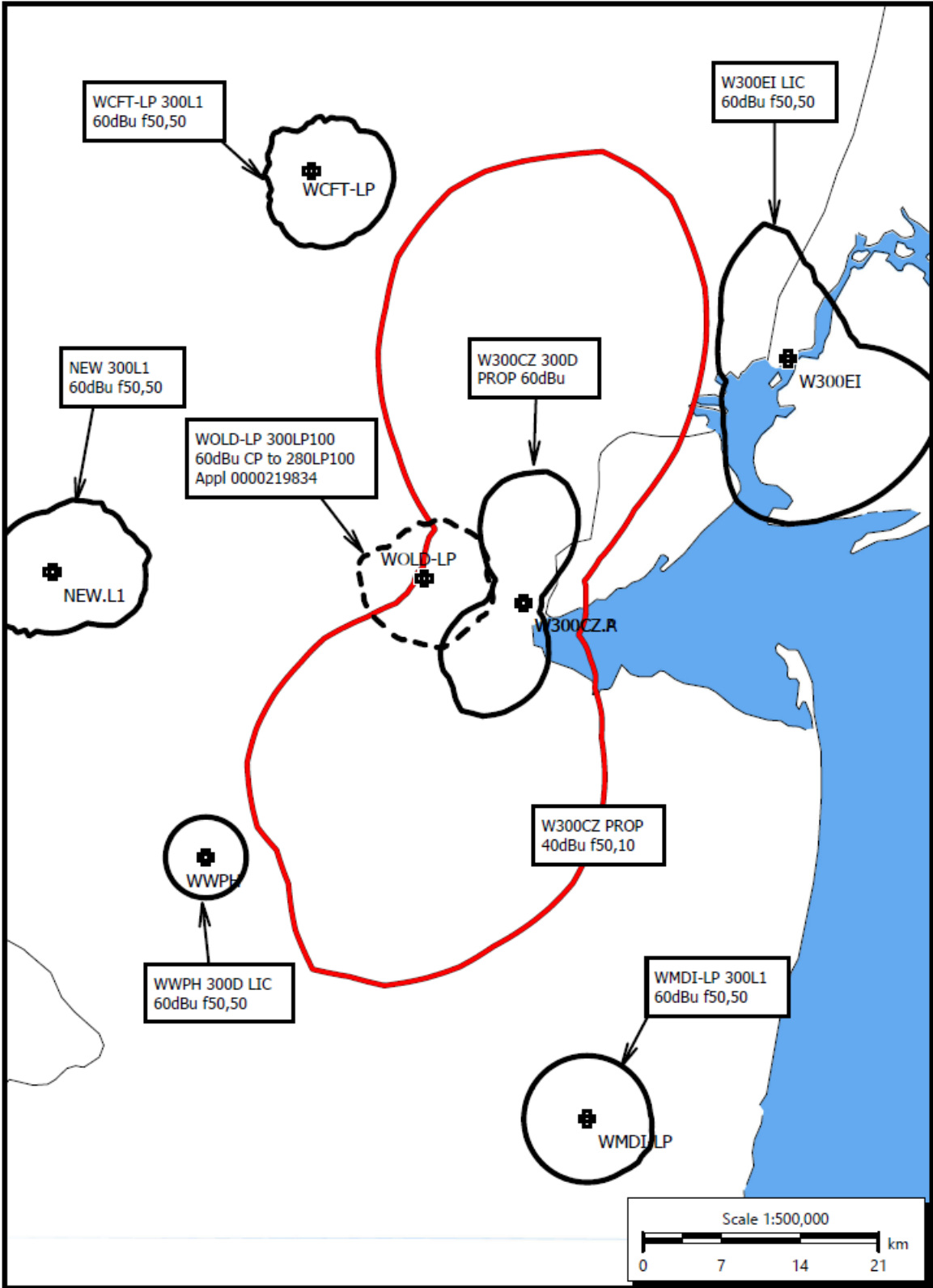


EXHIBIT C- 74.1204(d) Compliance to WBLS (298B)

W300CZ-PROP Perth Amboy, NJ, Showing Protection to WBLS, Channel: 298

Geographic Coordinates: N. 403035.3 W. 741716.7

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

Translator or LPFM Maximum Licensed ERP = 0.25 kW, Channel: 300

Translator or LPFM Antenna Height AG = 90.5 meters

W300CZ-292 Antenna Azimuth Model = Vertical Model Name = 2-CL-FM V STACK OPT94 WL SPC

Protected Station's Contour = 66.43488 dBu

Translator's or LPFM's full Interference contour 106.43488

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 = 36.8 km

Protected Station= WBLS, 4.2 kW, 429 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	528.7203	528.7203	090.500
05.00	0.914	1.0	0.2088	483.2504	481.4115	048.382
10.00	0.828	1.0	0.1714	437.7804	431.1296	014.480
14.00	0.671	1.0	0.1126	354.8771	344.3357	004.647
15.00	0.632	1.0	0.0999	334.1512	322.7653	004.015
16.00	0.593	1.0	0.0879	313.4254	301.2838	004.108
20.00	0.436	1.0	0.0475	230.5221	216.6199	011.657
25.00	0.249	1.0	0.0154	131.3870	119.0771	034.973
30.00	0.061	1.0	0.0009	032.2519	027.9310	074.374
35.00	0.063	1.0	0.0010	033.0450	027.0689	071.546
40.00	0.15	1.0	0.0056	079.3081	060.7535	039.522
45.00	0.178	1.0	0.0079	094.1122	066.5474	023.953
50.00	0.159	1.0	0.0063	084.0665	054.0369	026.101
55.00	0.116	1.0	0.0034	061.3316	035.1783	040.260
60.00	0.071	1.0	0.0013	037.5391	018.7696	057.990
65.00	0.045	1.0	0.0005	023.7924	010.0551	068.937
70.00	0.019	1.0	0.0001	010.0457	003.4358	081.060
75.00	0.015	1.0	0.0001	007.6664	001.9842	083.095
80.00	0.01	1.0	0.0000	005.2872	000.9181	085.293
85.00	0.01	1.0	0.0000	005.2872	000.4608	085.233
90.00	0.01	1.0	0.0000	005.2872	000.0000	085.213

EXHIBIT D- 74.1201(g) Fill-In Compliance

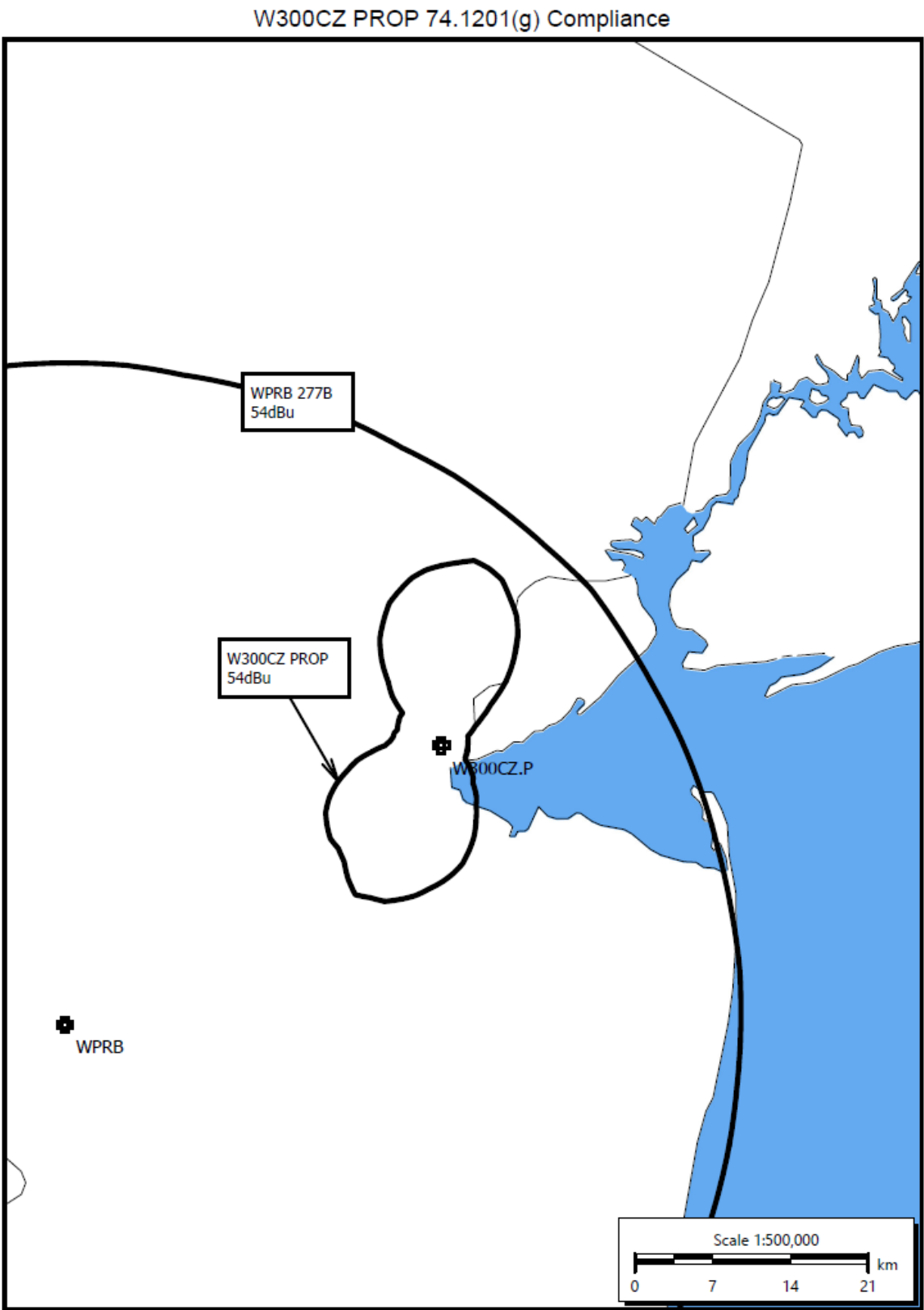


EXHIBIT E- 74.1233(a) Compliance

