

EXHIBIT 1

The application complies with Section 73.3555 of the rules because the licensee only owns WMEX(AM).

ENGINEERING REPORT COVERING
REQUEST FOR CONSTRUCTION PERMIT
L&J MEDIA, LLC
FOR WMEX 1510 KILOHERTZ
QUINCY, MASSACHUSETTS

AUGUST 2022

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SUMMARY

The engineering exhibit of which this statement is part was prepared on behalf of L&J Media, LLC., hereinafter referred to as "L&J", in support of an application for construction permit for AM station WMEX Quincy, Massachusetts. L&J is the licensee of WMEX. WMEX is licensed to operate as a Class D station on a frequency of 1510 kilohertz on an unlimited time basis utilizing a non-directional antenna system with power of 10 kilowatts daytime, 2 kilowatts critical hours and .1 kilowatt nighttime diplexed with station WBIX Boston, Massachusetts. The purpose of this application is to request a daytime power increase and convert critical hours and nighttime operation to directional using a single mode directional antenna system utilizing the WBIX three tower array. Requested power is 25 kilowatts for the daytime and critical hours and 1.8 kilowatts for the nighttime proposal. No other changes are proposed.

DAYTIME AND CRITICAL HOURS ALLOCATION CONSIDERATIONS

An allocation study was conducted for the proposed WMEX 25 kilowatt non-directional daytime and critical hours operations. Figures 1-3 are allocation mappings of the co, first, second and third adjacent channels. The proposed WMEX daytime and critical hours operation will not cause or receive prohibited overlap with any station.

CLASS A CRITICAL HOURS ALLOCATION CONSIDERATIONS

WMEX operates on 1510 kilohertz which is a US Class A frequency and must provide critical hours protection to Class A station WLAC Nashville, Tennessee. Figure 4 is a map showing the WLAC 0.1 mV/m contour and associated allocation study points. Permissible radiation computations for the study points obtained using the FCC Critical Hours program are shown in Table 1. The proposed field strength toward WLAC is below the maximum permitted values, and accordingly, it can be safely concluded the proposed 25 kilowatt directional antenna critical hours operation will be compliant with FCC limits for daytime radiation during the critical hours.

NIGHTTIME ALLOCATION CONSIDERATIONS

The primary nighttime protection considerations for WMEX are Class A station co-channel WLAC Nashville, Tennessee and adjacent channel Class A stations WFED Washington, DC and WWKB Buffalo, New York. There is prohibited contour overlap from the existing WMEX nighttime operation to WLAC. The proposed WMEX 1.8 kilowatt directional reduces the total amount of overlap and moves most of the overlap further

from the Nashville market area. Figure 5 is a mapping of the existing and proposed WLAC overlap area. Figure 6 shows no prohibited contour overlap is caused to WWKB or WFED.

TECHNICAL DATA AND EXHIBITS

WMEX is licensed to Quincy, Massachusetts. Figure 7 shows the 5 mV/m contours for the proposed WMEX daytime and critical hours operation cover 100% of the area of Quincy and the nighttime interference free 7.41 mV/m contour covers greater than 50% of the area of Quincy. Therefore, the proposal is compliant with Section 73.24(i) of the rules.

Figure 8 plots the 1000 mV/m contours. The population within the 1000 mV/m contours is 4,068 daytime, 5,585 critical hours and 1,002 nighttime. The population within the 25 mV/m contours is 634,183 daytime, 784,996 critical hours and 195,628 nighttime. The population in the daytime 1000 mV/m contour is 0.64% of the population of the 25 mV/m contour, for the critical hours it is 0.71% and the nighttime is 0.51%. Therefore, this proposal is compliant with Section 73.24(g) of the blanketing interference rules, as the population within the 1000 mV/m contour is less than 1% of the 25 mV/m population.

Figures 9 and 10 are plots of the proposed critical hours and nighttime directional antenna pattern with horizontal radiation tabulations for each operating mode.

All distance to contour calculations used in plotting the allocation maps were based on M-3 soil conductivity data.

ANSI RADIATION GUIDELINES

A study of the proposed WMEX facility was conducted with respect to standards set forth in FCC Bulletin OST Number 65, Edition 97-01, regarding human exposure to radiofrequency radiation. The study was based on data provided in Tables 2 and 3 of Supplement A, "Predicted Distances for Compliance with FCC Limits" and assumed a worst-case scenario where the WMEX maximum power of 25 kilowatts would be directed into a single tower. In addition, the worst-case single tower contribution from co-located station WBIX of 5 kilowatts was included in the calculations. Based on Tables 2 and 3, a distance of 3 meters from the tower would have to be observed to achieve ANSI radiofrequency compliance.

When it is necessary for workers to be within the hazard area near the towers, an appropriate power reduction or temporary cessation of broadcasting will be implemented. Access to the towers is prevented by a fence with a locked gate. Signs, warning of an RF hazard, are conspicuously posted at the site.

DECLARATION

The foregoing was prepared by or under the immediate supervision of Charles A. Hecht of Charles A. Hecht & Associates, Inc., Freehold, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. All statements herein are true and correct of his knowledge except such statements made on information and belief, and as to those statements, he believes them to be true and correct under the penalty of perjury.

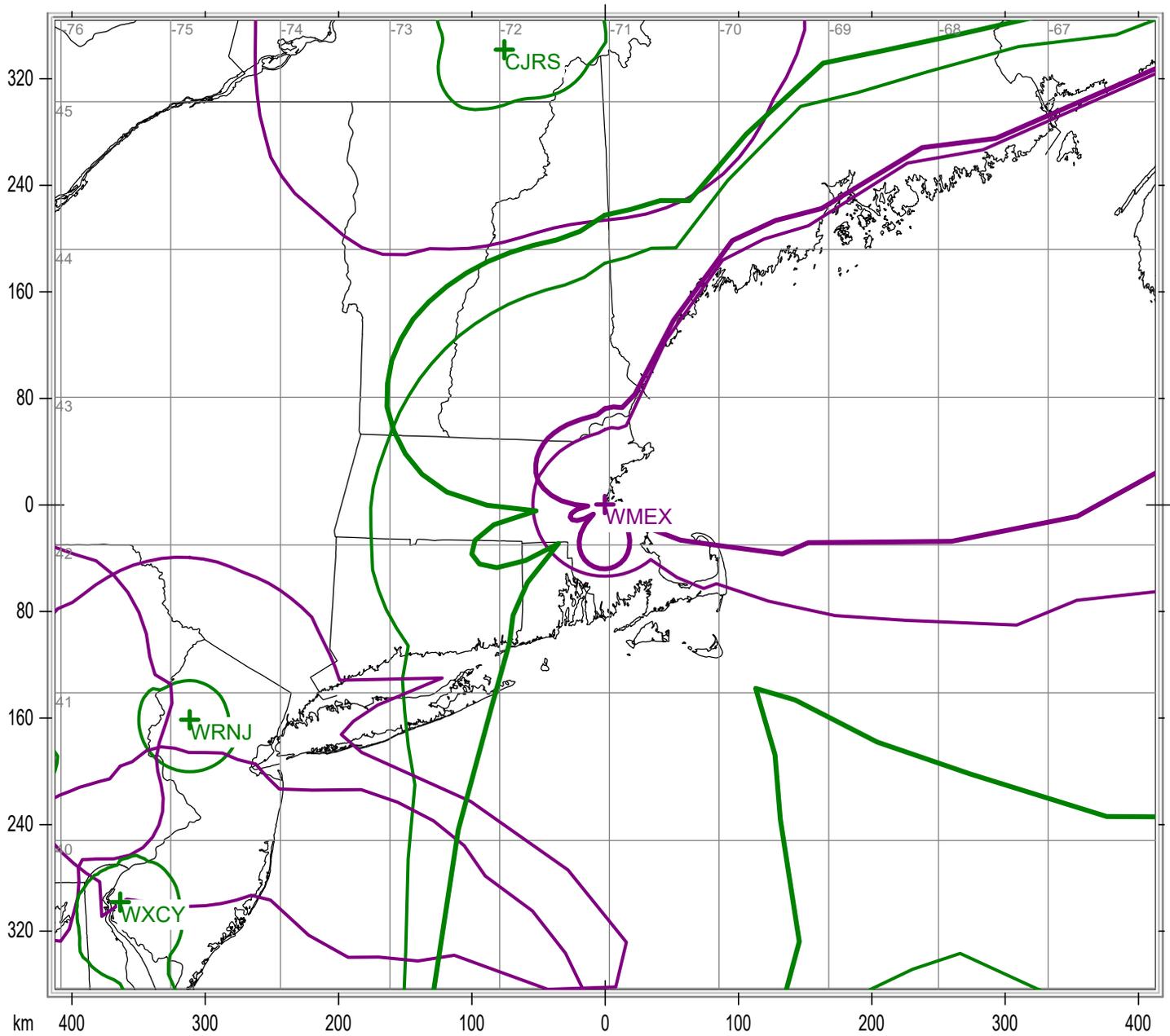
Respectfully submitted,

Charles A. Hecht

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August 8, 2022

FIGURE 1 - DAY/CH CO-CHANNEL ALLOCATION STUDY

SHOWING .5 AND .025 MV/M CONTOURS, CRITICAL HOURS IN BOLDFACE

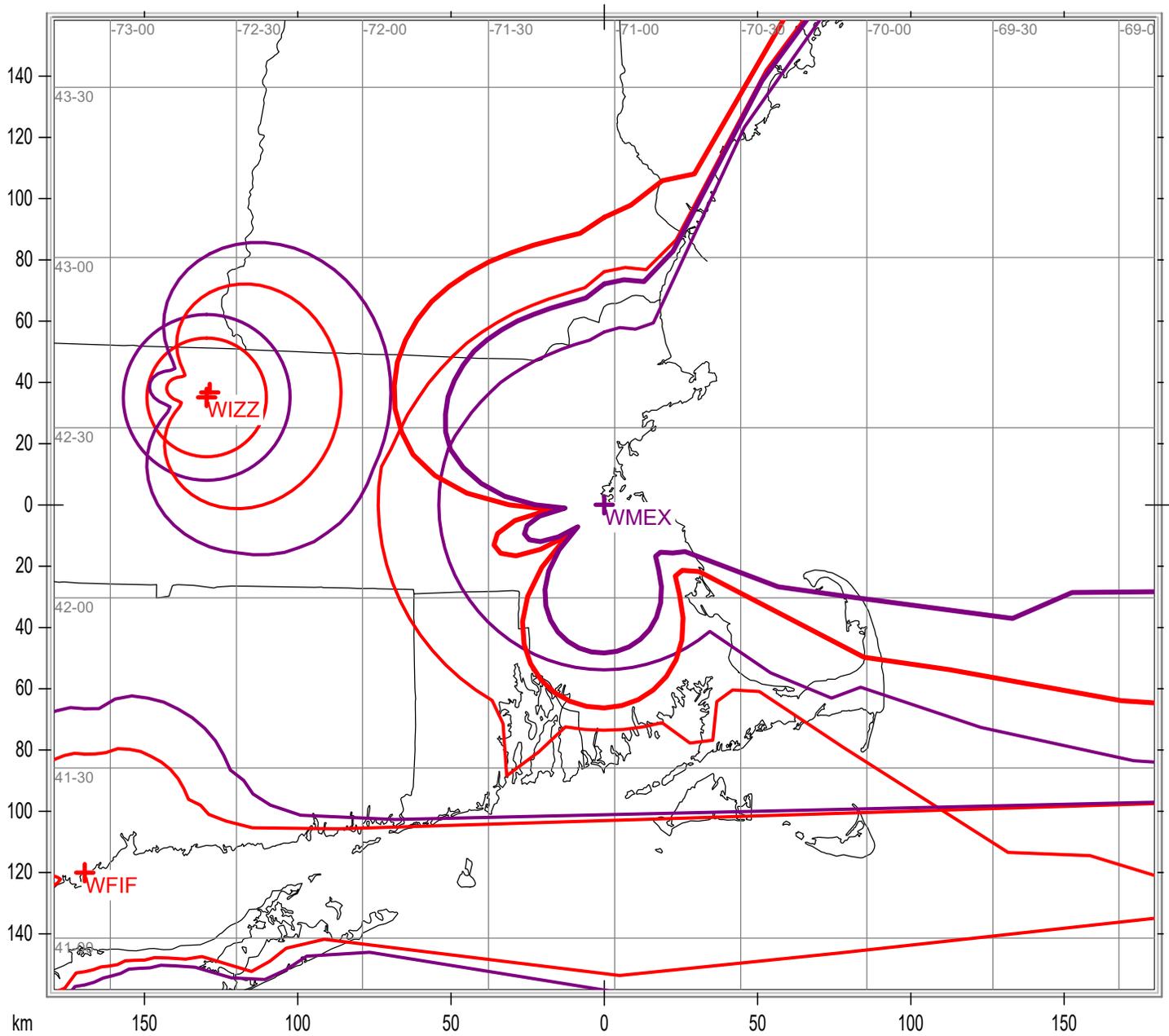


WMEX 1510 KILOHERTZ 25 KW ND AND 25 KW DA-CH QUINCY, MASSACHUSETTS

State Borders Lat/Lon Grid

FIGURE 2 - DAY/CH ADJ CHANNEL ALLOCATION STUDY

SHOWING .5 AND .25 MV/M CONTOURS, CRITICAL HOURS IN BOLDFACE

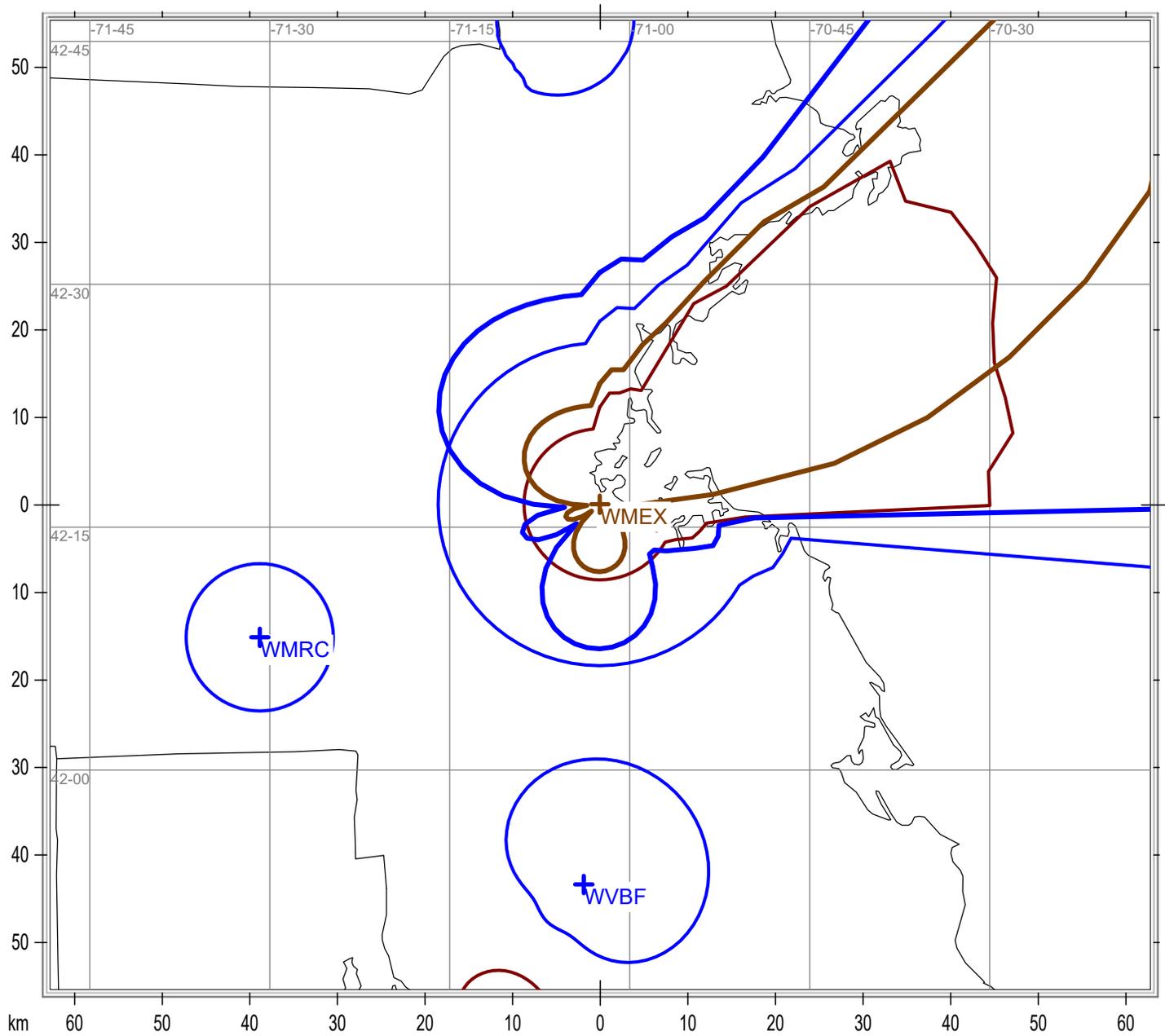


WMEX 1510 KILOHERTZ 25 KW ND AND 25 KW DA-CH QUINCY, MASSACHUSETTS

State Borders Lat/Lon Grid

FIG 3 - 2ND & 3RD ADJ CHANNEL ALLOCATION STUDY

SHOWING 5 AND 25 MV/M CONTOURS, CRITICAL HOURS IN BOLDFACE

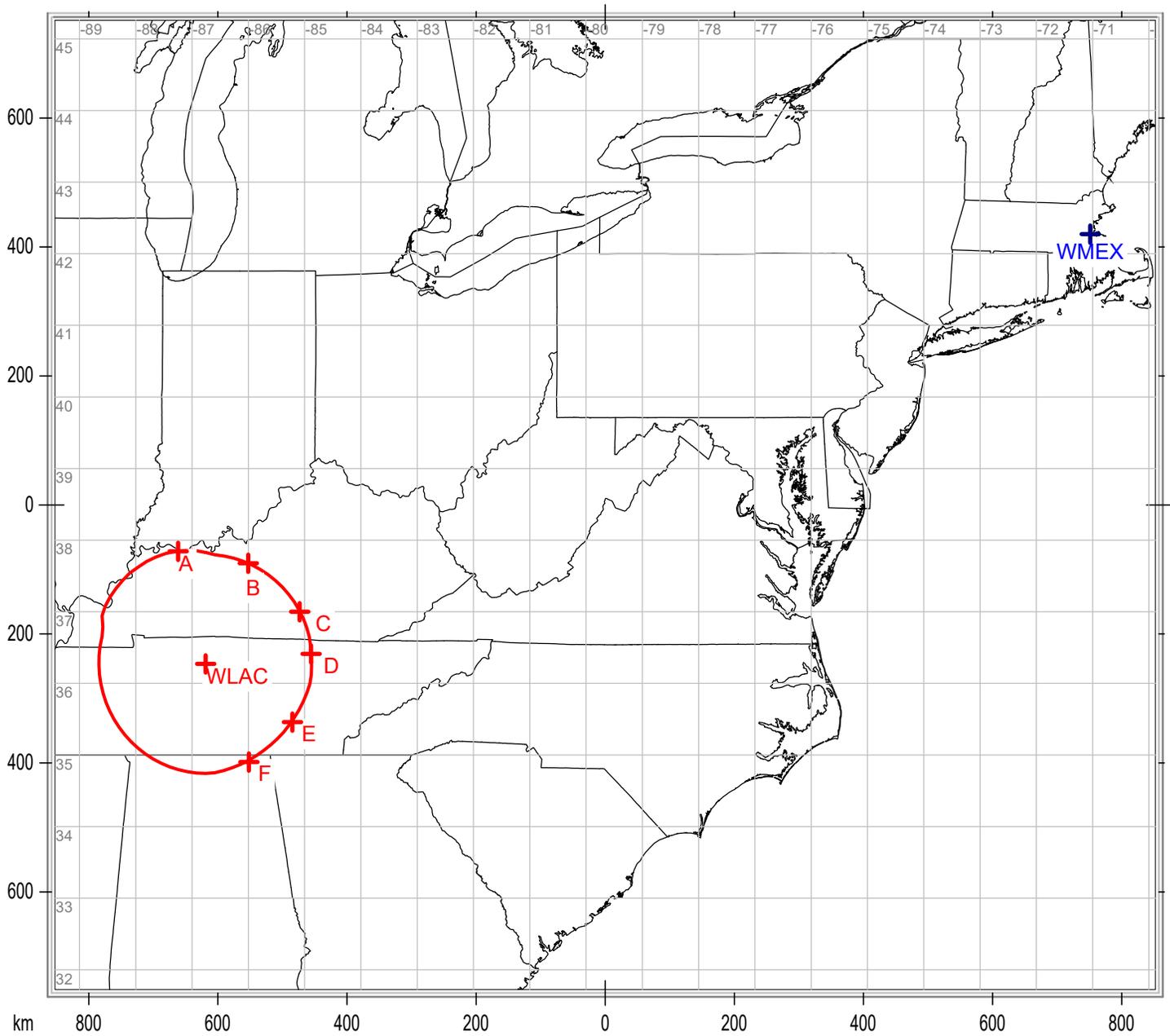


WMEX 1510 KILOHERTZ 25 KW ND AND 25 KW DA-CH QUINCY, MASSACHUSETTS

State Borders Lat/Lon Grid

FIGURE 4 - CRITICAL HOURS ALLOCATION MAP

SHOWING WLAC 0.1 MV/M CONTOUR AND WMEX STUDY POINTS

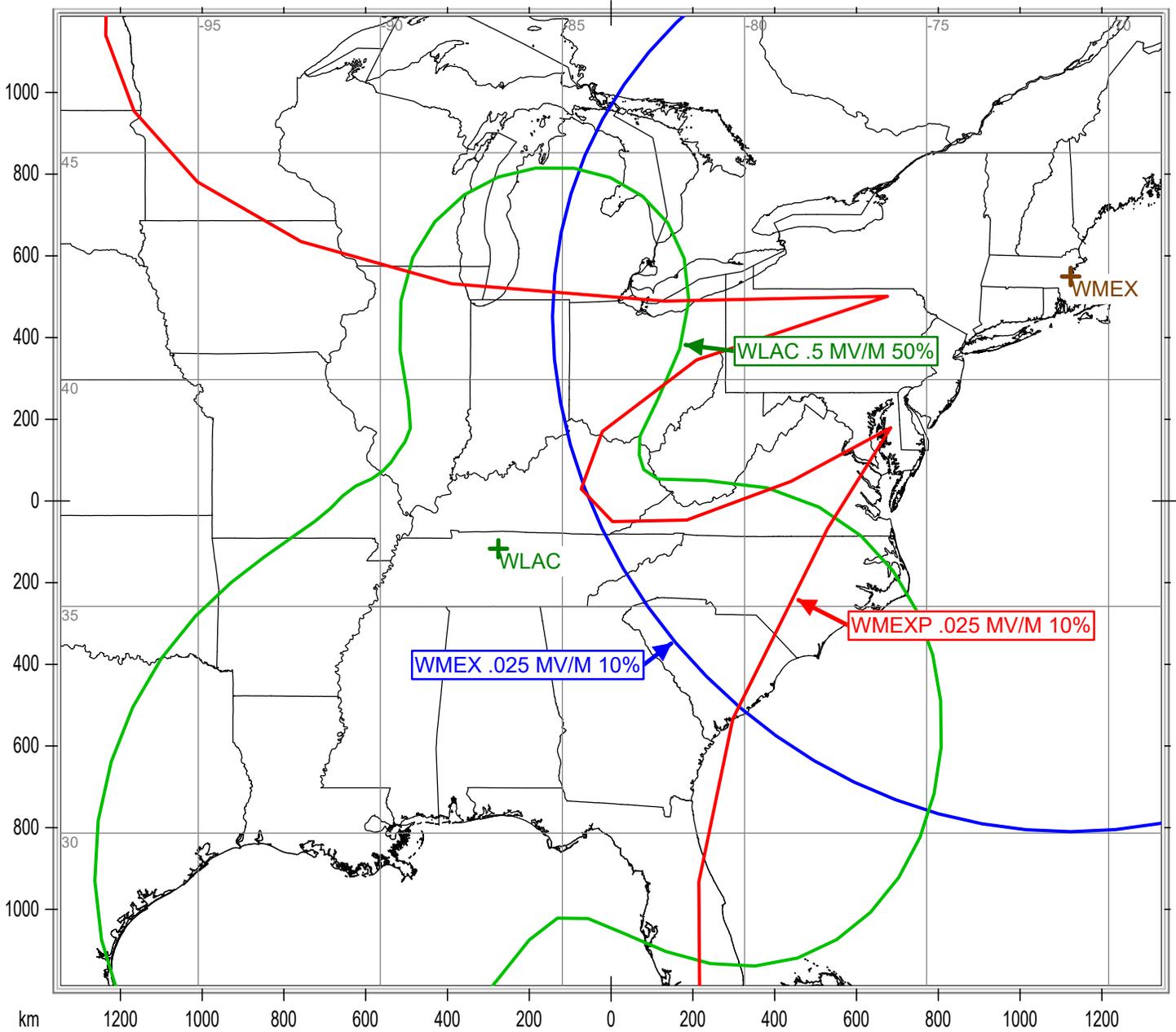


WMEX 1510 KILOHERTZ 25 KW DA QUINCY, MASSACHUSETTS

State Borders Lat/Lon Grid

FIG 5 -CLASS A CO-CHANNEL NIGHT ALLOCATION MAP

SHOWING .5 50% AND .025 10% MV/M SKYWAVE CONTOURS

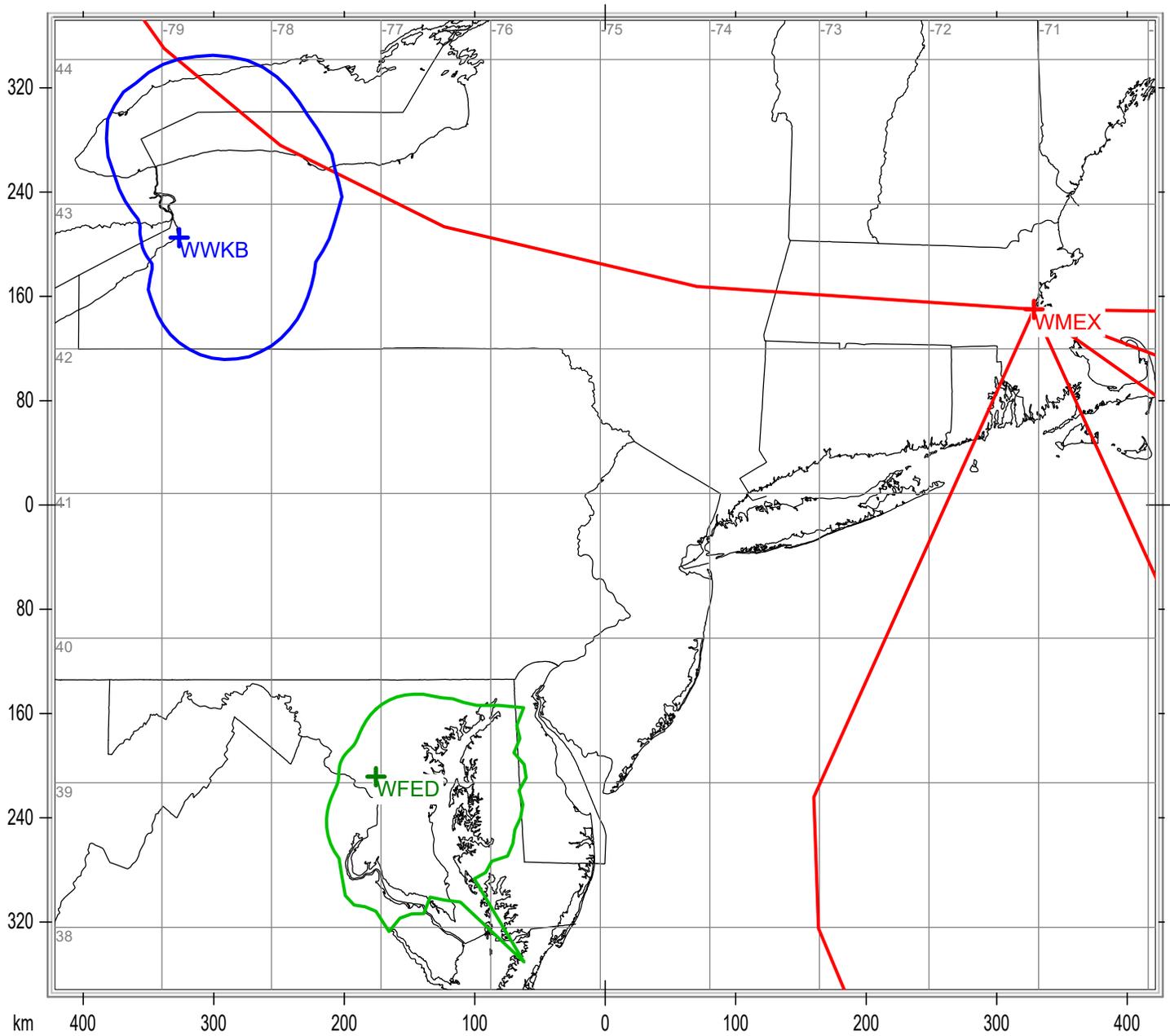


WMEX 1510 KILOHERTZ 1.8 KW DA QUINCY, MASSACHUSETTS

State Borders Lat/Lon Grid

FIG 6 - CLASS A ADJ CHANNEL NIGHT ALLOCATION MAP

SHOWING WWKB AND WFED .5 MV/M GROUDWAVE AND WMEX .025 10% MV/M SKYWAVE CONTOURS

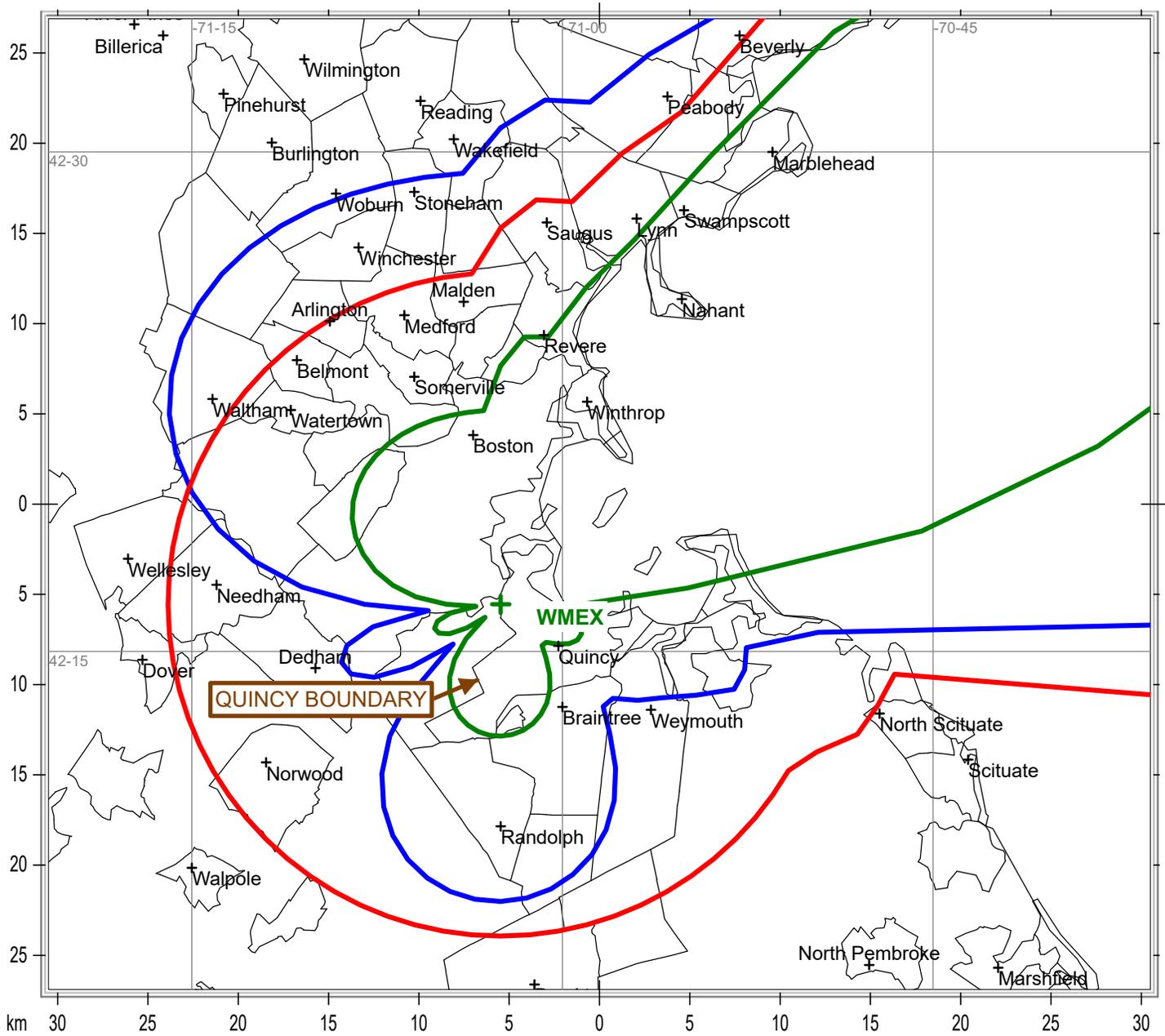


WMEX 1510 KILOHERTZ 1.8 KW DA QUINCY, MASSACHUSETTS

State Borders Lat/Lon Grid

FIGURE 7 - CITY GRADE SERVICE MAP

SHOWING DAY AND CH 5 MV/M CONTOURS AND NIGHT 7.41 MV/M NIF, DAY IN RED, CH IN BLUE AND CH GREEN

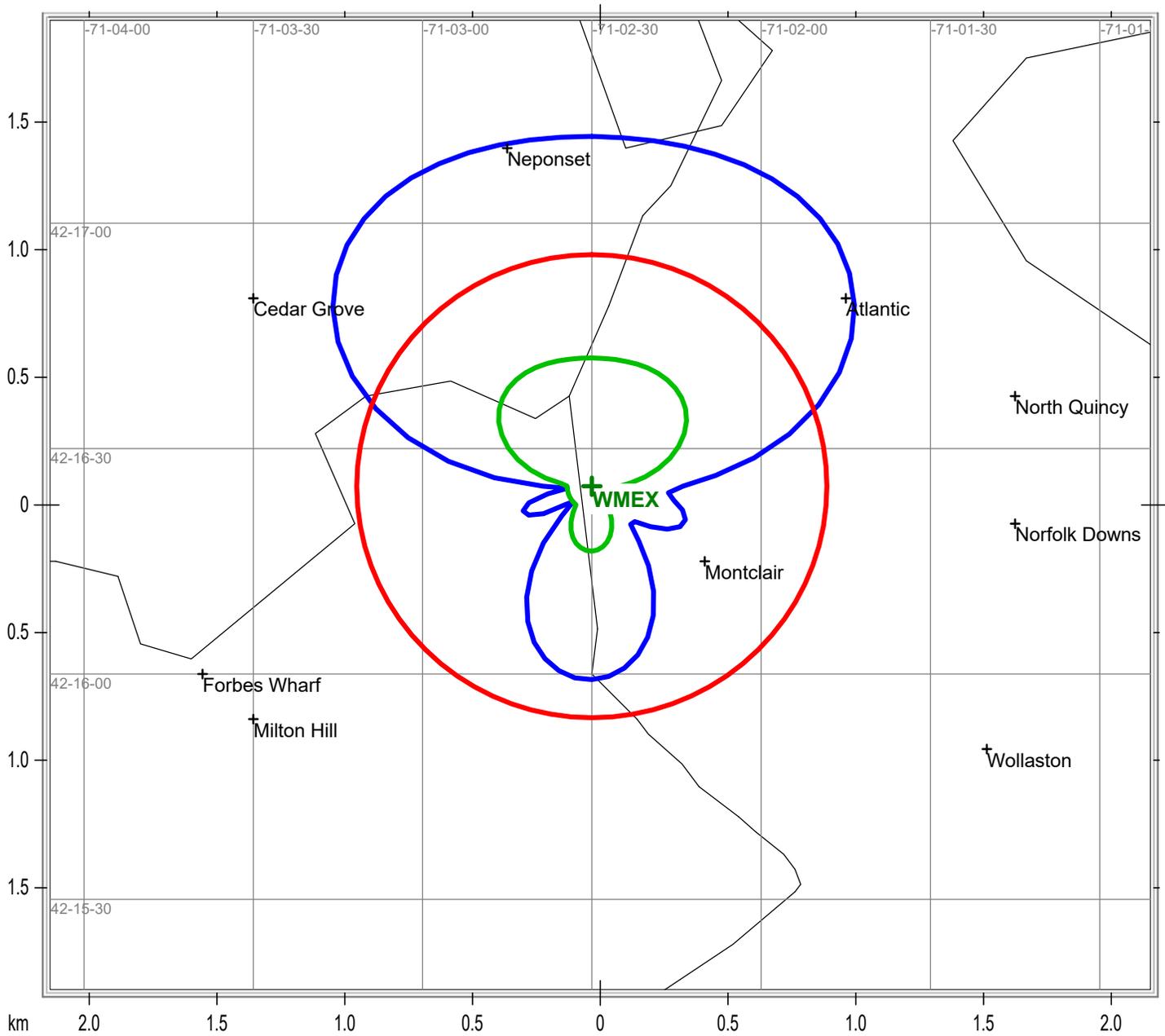


WMEX 1510 KILOHERTZ 25 KW ND-D, 25 KW DA-CH AND 1.8 KW-DA-N QUINCY, MASSACHUSETTS

State Borders
 City Borders
 Lat/Lon Grid

FIGURE 8 - 1000 MV/M CONTOUR MAP

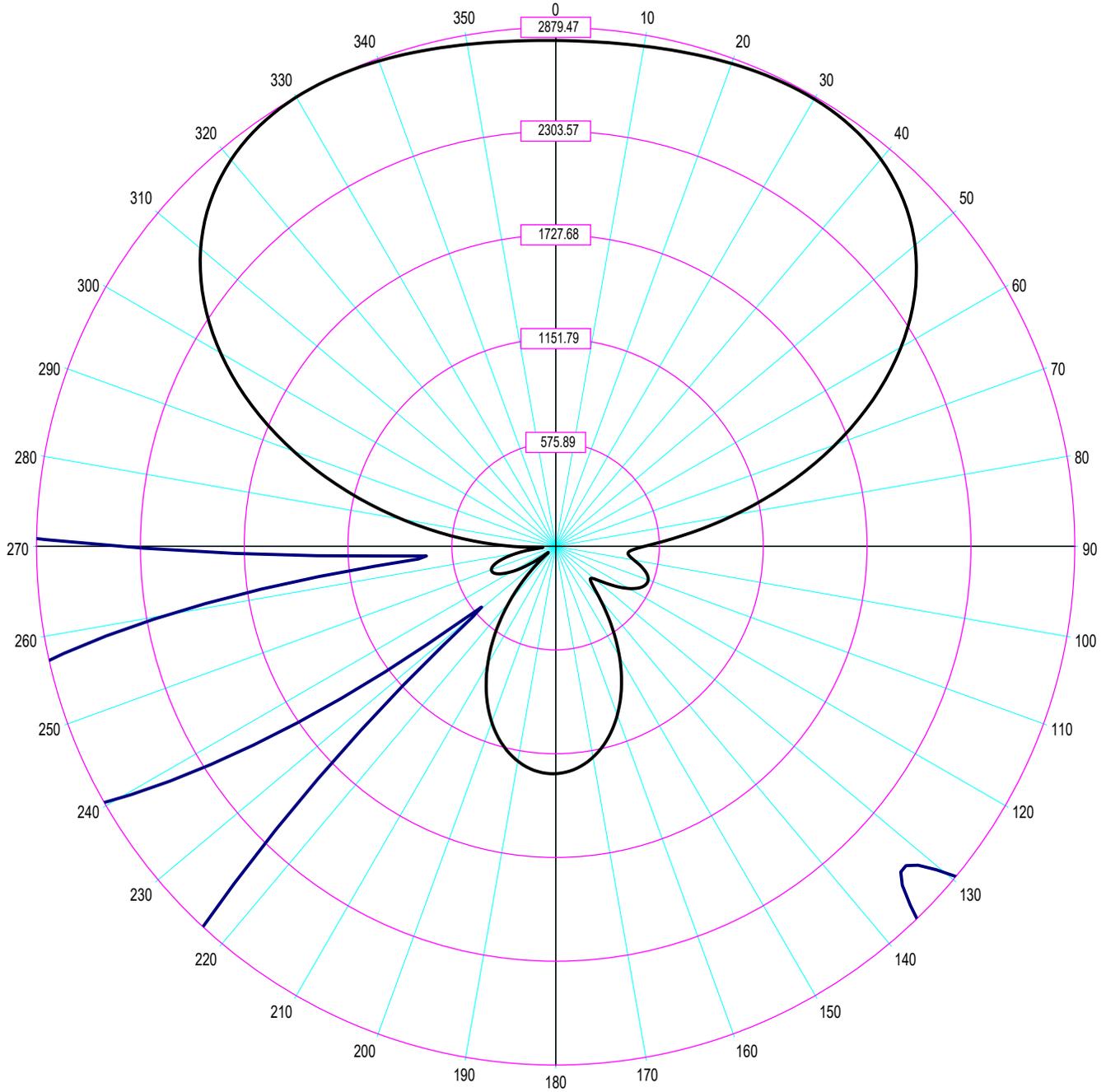
SHOWING DAY, CH AND NIGHT 1000 MV/M CONTOURS, DAY IN RED, CH IN BLUE AND NIGHT IN GREEN



WMEX 1510 KILOHERTZ 25 KW ND-D, 25 KW DA-CH AND 1.8 KW-DA-N QUINCY, MASSACHUSETTS

State Borders
 City Borders
 Lat/Lon Grid

FIGURE 9

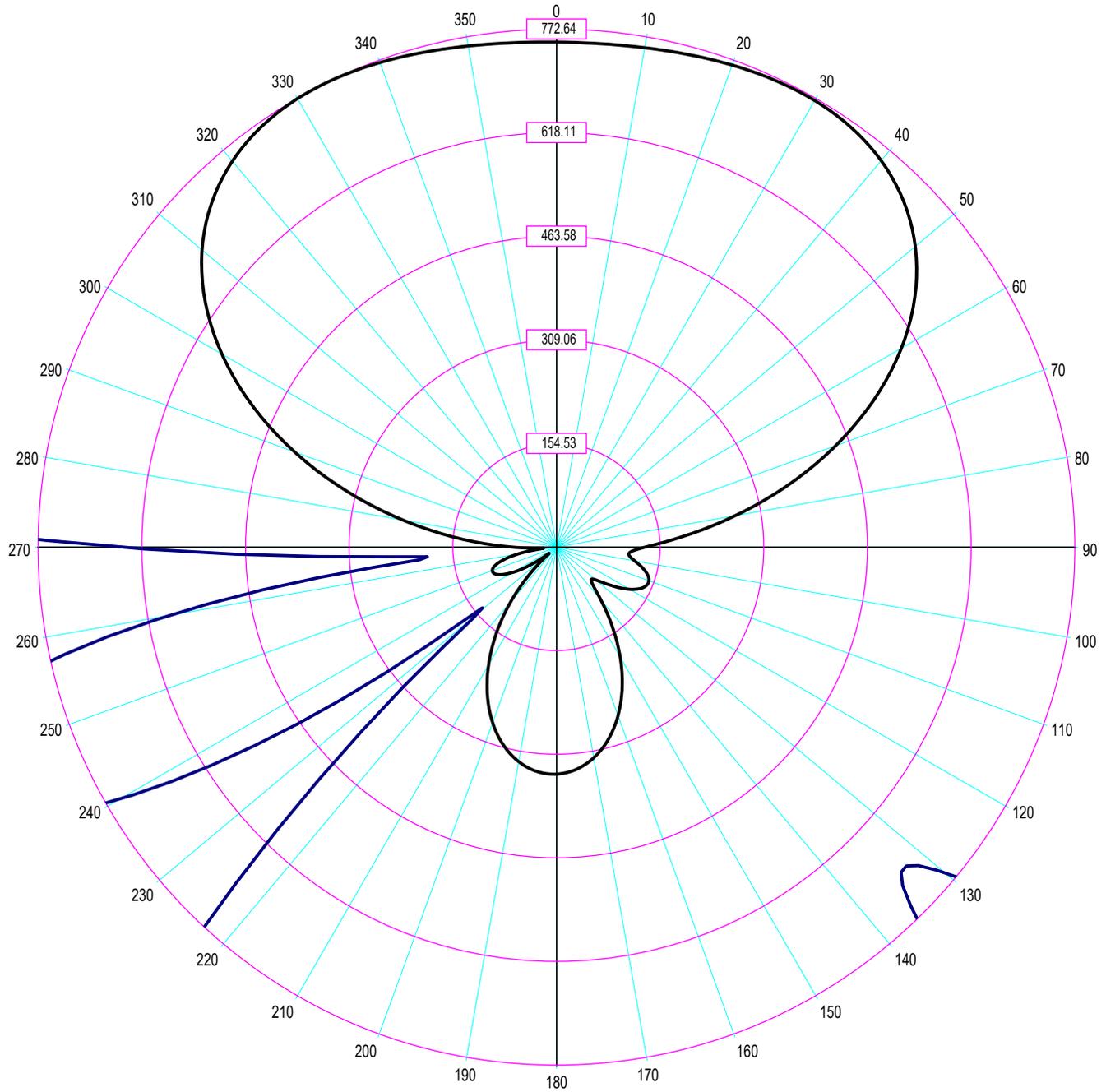


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Callsign	: WMEX CH	T#	Field	Phase	Spacing	Orientation	Height	Top Load	Tower Ref
Frequency	: 1510 kHz	1	0.680	241.1	143.8	4.0	110.5	0.0	0
Power	: 25.000 kw	2	1.000	0.0	0.0	0.0	110.5	0.0	0
ERSS	: 1622 mV/m/km	3	0.621	135.1	143.8	177.5	110.5	0.0	0
Theoret. Pattern RMS	: 1675 mV/m/km								
Standard Pattern RMS	: 1759 mV/m/km								
Modified Pattern RMS	:								
Latitude	: 42-16-25.0 N								
Longitude	: 71-02-30.0 W								
Number Augmentations	: 0								

Azim	Field [mV/m]	Azim	Field [mV/m]
0.0	2807.582	200.0	1037.933
5.0	2809.298	205.0	908.906
10.0	2819.073	210.0	755.099
15.0	2834.558	215.0	581.452
20.0	2851.696	220.0	395.249
25.0	2864.817	225.0	207.293
30.0	2866.861	230.0	55.438
35.0	2849.740	235.0	155.687
40.0	2804.917	240.0	280.010
45.0	2724.200	245.0	359.323
50.0	2600.729	250.0	379.876
55.0	2430.087	255.0	333.478
60.0	2211.399	260.0	218.614
65.0	1948.269	265.0	72.733
70.0	1649.439	270.0	242.323
75.0	1329.165	275.0	535.723
80.0	1007.741	280.0	865.302
85.0	713.771	285.0	1209.235
90.0	491.916	290.0	1548.149
95.0	403.382	295.0	1864.967
100.0	441.550	300.0	2146.150
105.0	509.593	305.0	2382.589
110.0	545.447	310.0	2569.901
115.0	530.681	315.0	2708.139
120.0	467.367	320.0	2801.060
125.0	371.481	325.0	2855.116
130.0	281.479	330.0	2878.367
135.0	275.199	335.0	2879.467
140.0	382.691	340.0	2866.810
145.0	540.895	345.0	2847.901
150.0	706.915	350.0	2828.930
155.0	862.178	355.0	2814.516
160.0	997.318		
165.0	1107.102		
170.0	1188.597		
175.0	1240.235		
180.0	1261.252		
185.0	1251.337		
190.0	1210.491		
195.0	1139.058		

FIGURE 10



AUGUST 2022

Callsign	: WMEX N	T#	Field	Phase	Spacing	Orientation	Height	Top Load	Tower Ref
Frequency	: 1510 kHz	1	0.680	241.1	143.8	4.0	110.5	0.0	0
Power	: 1.800 kw	2	1.000	0.0	0.0	0.0	110.5	0.0	0
ERSS	: 435.2 mV/m/km	3	0.621	135.1	143.8	177.5	110.5	0.0	0
Theoret. Pattern RMS	: 449.4 mV/m/km								
Standard Pattern RMS	: 472.1 mV/m/km								
Modified Pattern RMS	:								
Latitude	: 42-16-25.0 N								
Longitude	: 71-02-30.0 W								
Number Augmentations	: 0								

Azim	Field [mV/m]	Azim	Field [mV/m]
0.0	753.353	200.0	278.507
5.0	753.813	205.0	243.885
10.0	756.436	210.0	202.614
15.0	760.591	215.0	156.020
20.0	765.190	220.0	106.056
25.0	768.711	225.0	55.623
30.0	769.259	230.0	14.876
35.0	764.665	235.0	41.775
40.0	752.638	240.0	75.134
45.0	730.979	245.0	96.416
50.0	697.848	250.0	101.931
55.0	652.060	255.0	89.481
60.0	593.380	260.0	58.660
65.0	522.775	265.0	19.516
70.0	442.591	270.0	65.022
75.0	356.652	275.0	143.749
80.0	270.405	280.0	232.185
85.0	191.525	285.0	324.472
90.0	131.995	290.0	415.412
95.0	108.239	295.0	500.423
100.0	118.480	300.0	575.872
105.0	136.738	305.0	639.315
110.0	146.359	310.0	689.576
115.0	142.396	315.0	726.670
120.0	125.408	320.0	751.603
125.0	99.679	325.0	766.108
130.0	75.529	330.0	772.347
135.0	73.843	335.0	772.641
140.0	102.687	340.0	769.245
145.0	145.137	345.0	764.172
150.0	189.685	350.0	759.081
155.0	231.346	355.0	755.213
160.0	267.608		
165.0	297.067		
170.0	318.934		
175.0	332.790		
180.0	338.429		
185.0	335.769		
190.0	324.809		
195.0	305.641		

TABLE 1

WLAC CRITICAL HOURS ALLOCATION STUDY
FOR PROPOSED WMEX 25 KILOWATT DIRECTIONAL PATTERN
WMEX 1510 KILOHERTZ
QUINCY, MASSACHUSETTS

<u>Point</u>	<u>North Latitude</u>	<u>West Longitude</u>	<u>Distance Kilometers</u>	<u>Bearing Degrees T</u>	<u>Permissible mV/m</u>	<u>Proposed mV/m</u>
A	37 50 39	87 14 48	1462	255.7	523.0	321.8
B	37 40 43	86 00 08	1371	253.2	474.8	358.6
C	36 59 59	85 05 15	1336	248.7	464.4	381.1
D	36 24 43	84 53 07	1355	245.9	481.5	369.0
E	35 27 31	85 13 05	1440	242.9	546.4	334.1
F	34 54 06	85 59 23	1533	242.6	617.2	328.2