

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.

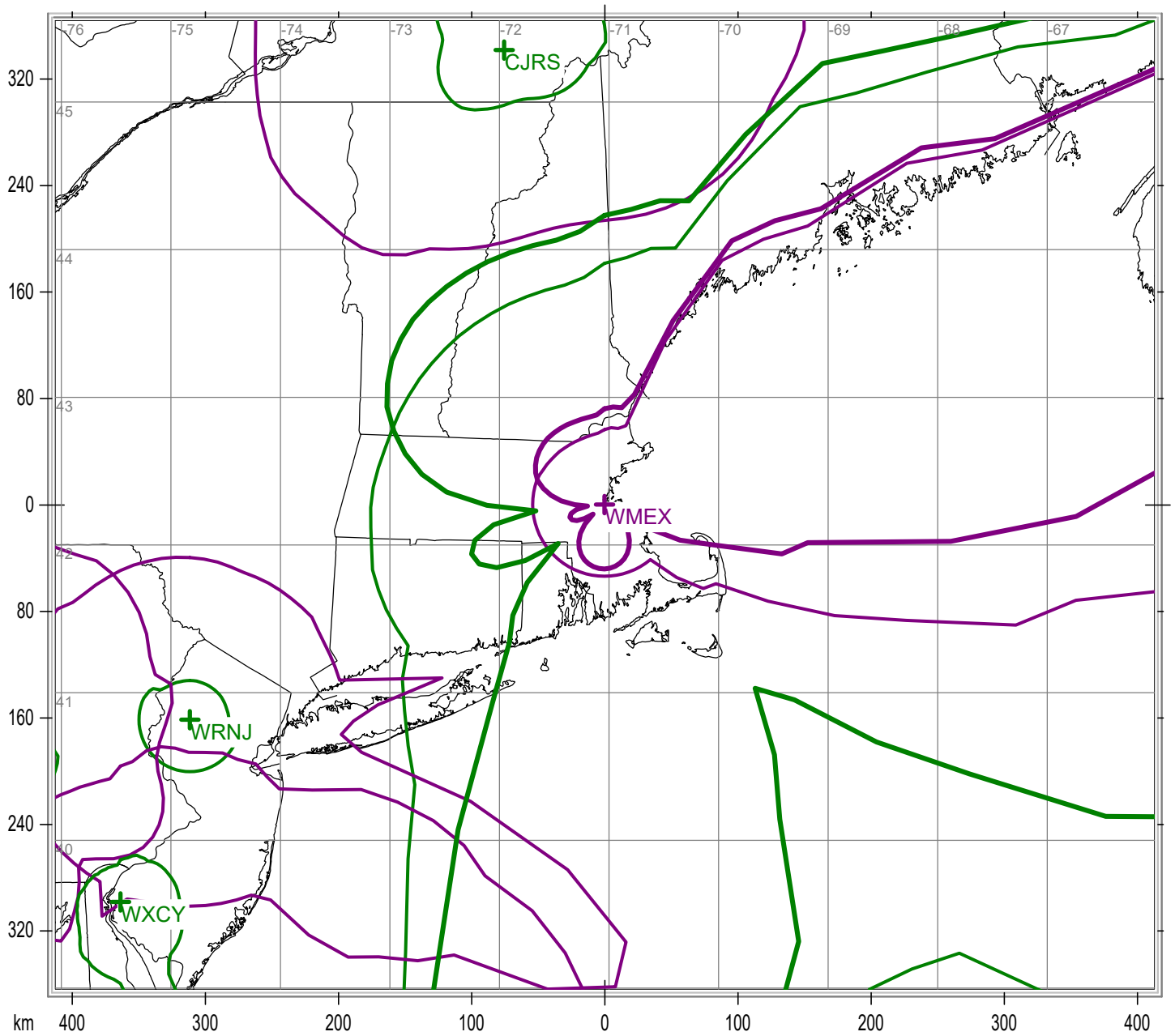
Respectfully submitted,

Charles A. Hecht

Charles A. Hecht
Charles A. Hecht & Associates, Inc.
19 Mackenzie Court
Freehold, New Jersey 07728
732 577-0711
August 8, 2022

FIGURE 1 - DAY/CH CO-CHANNEL ALLOCATION STUDY

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

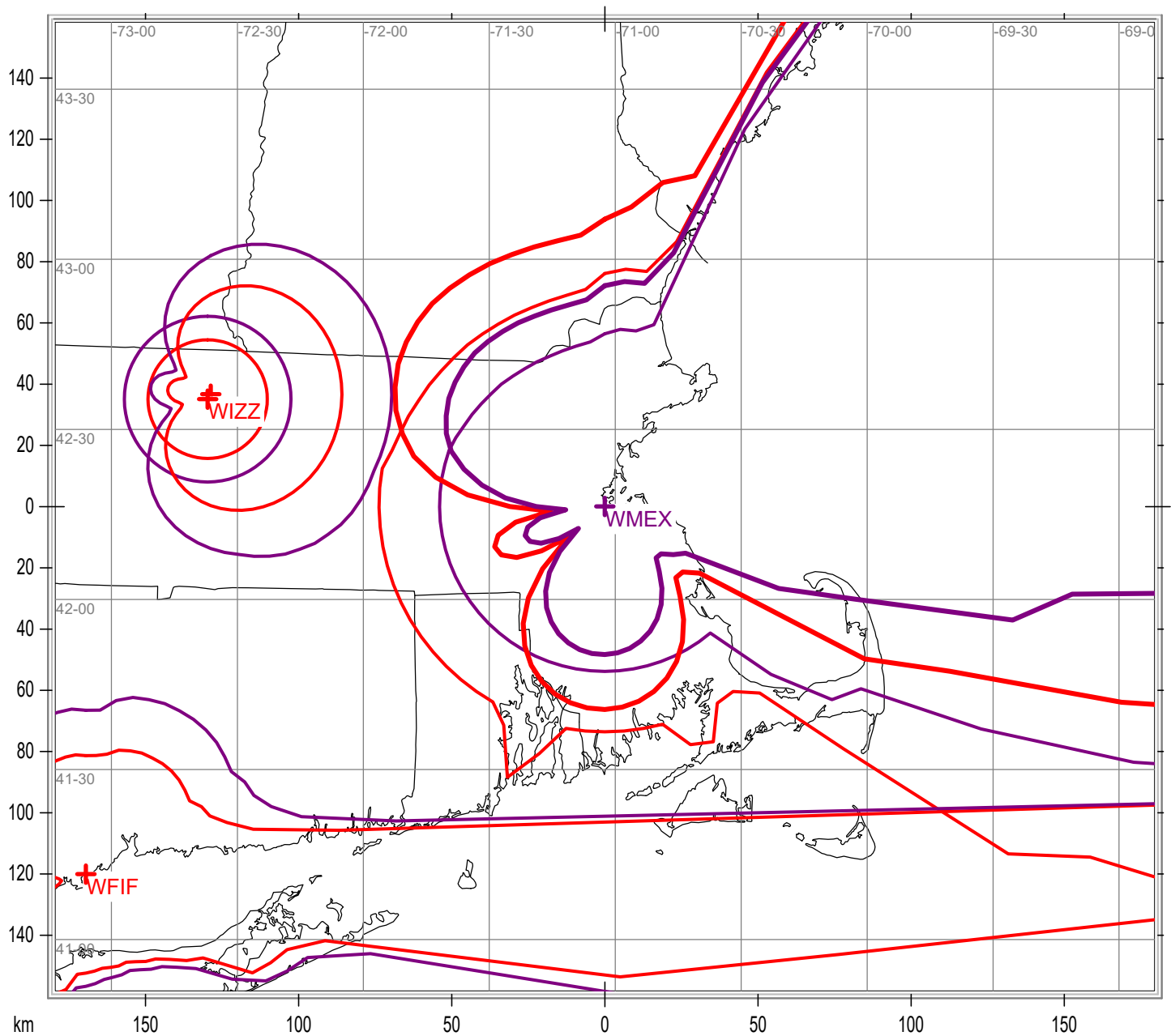


WMEX 1510 KILOHERTZ 25 KW ND AND 25 KW DA-CH QUINCY, MASSACHUSETTS

State Borders Lat/Lon Grid

FIGURE 2 - DAY/CH ADJ CHANNEL ALLOCATION STUDY

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

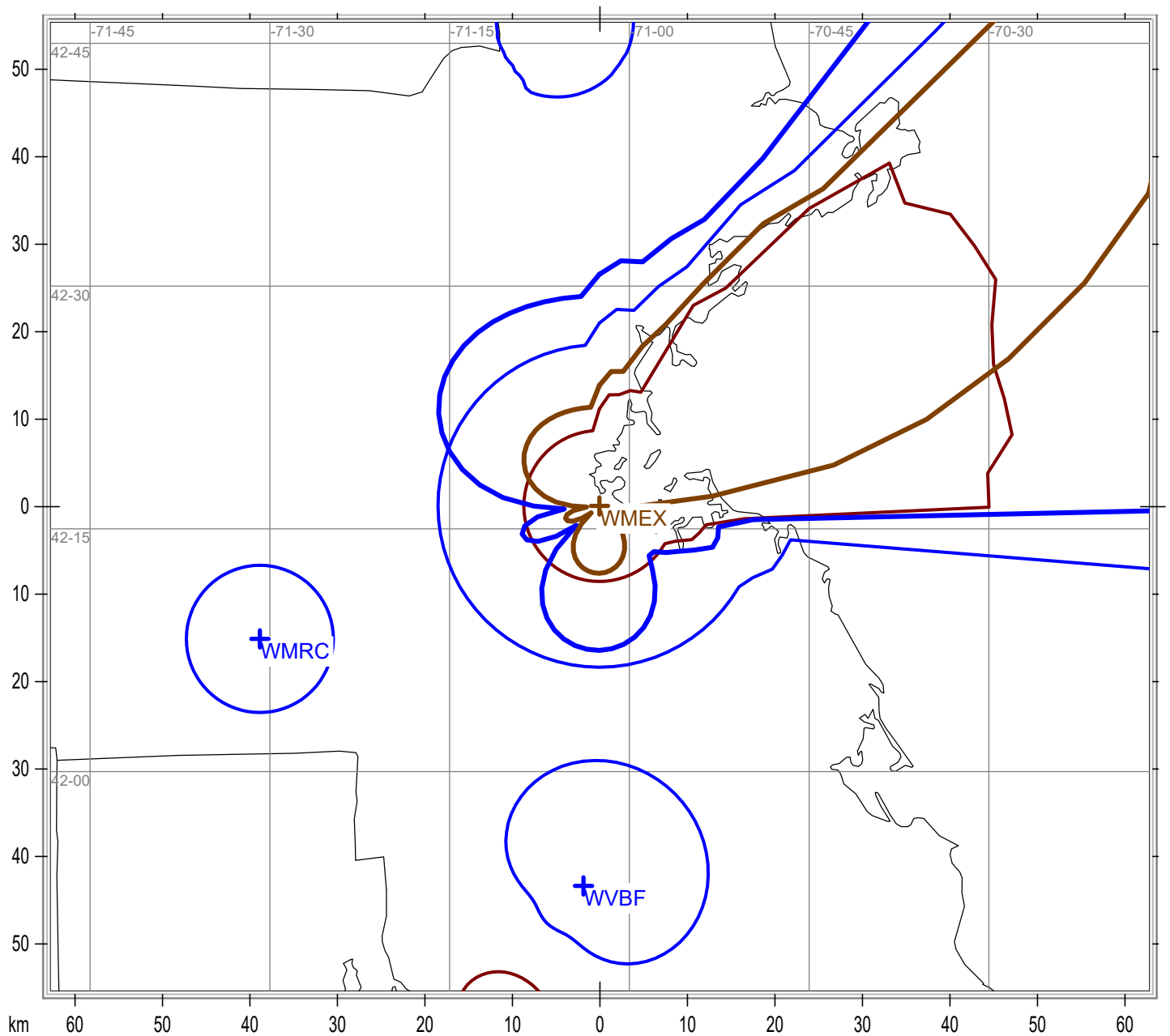


WMEX 1510 KILOHERTZ 25 KW ND AND 25 KW DA-CH QUINCY, MASSACHUSETTS

State Borders Lat/Lon Grid

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

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

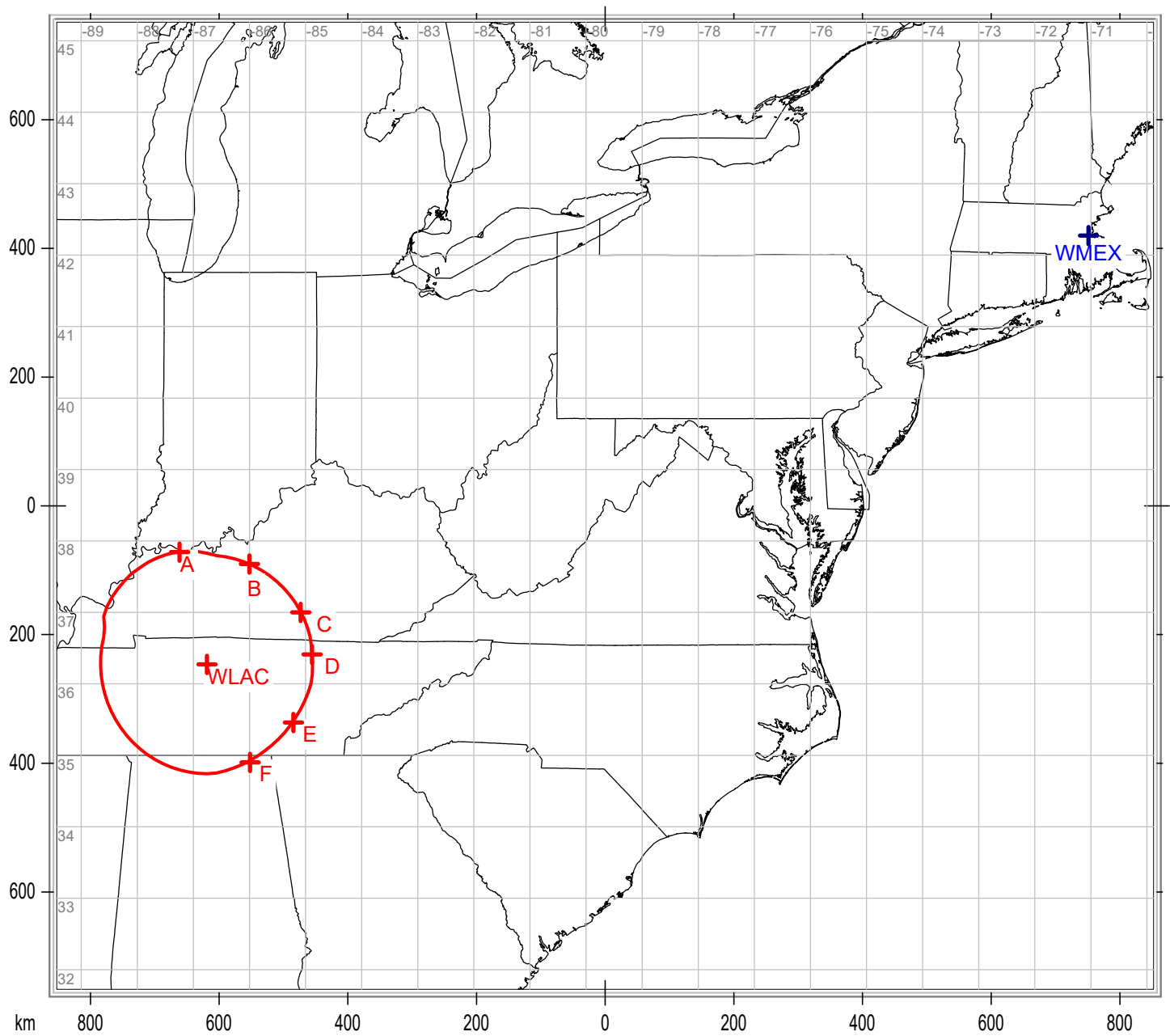


WMEX 1510 KILOHERTZ 25 KW ND AND 25 KW DA-CH QUINCY, MASSACHUSETTS

State Borders Lat/Lon Grid

FIGURE 4 - CRITICAL HOURS ALLOCATION MAP

SHOWING WLAC 0.1 MV/M CONTOUR AND WMEX STUDY POINTS

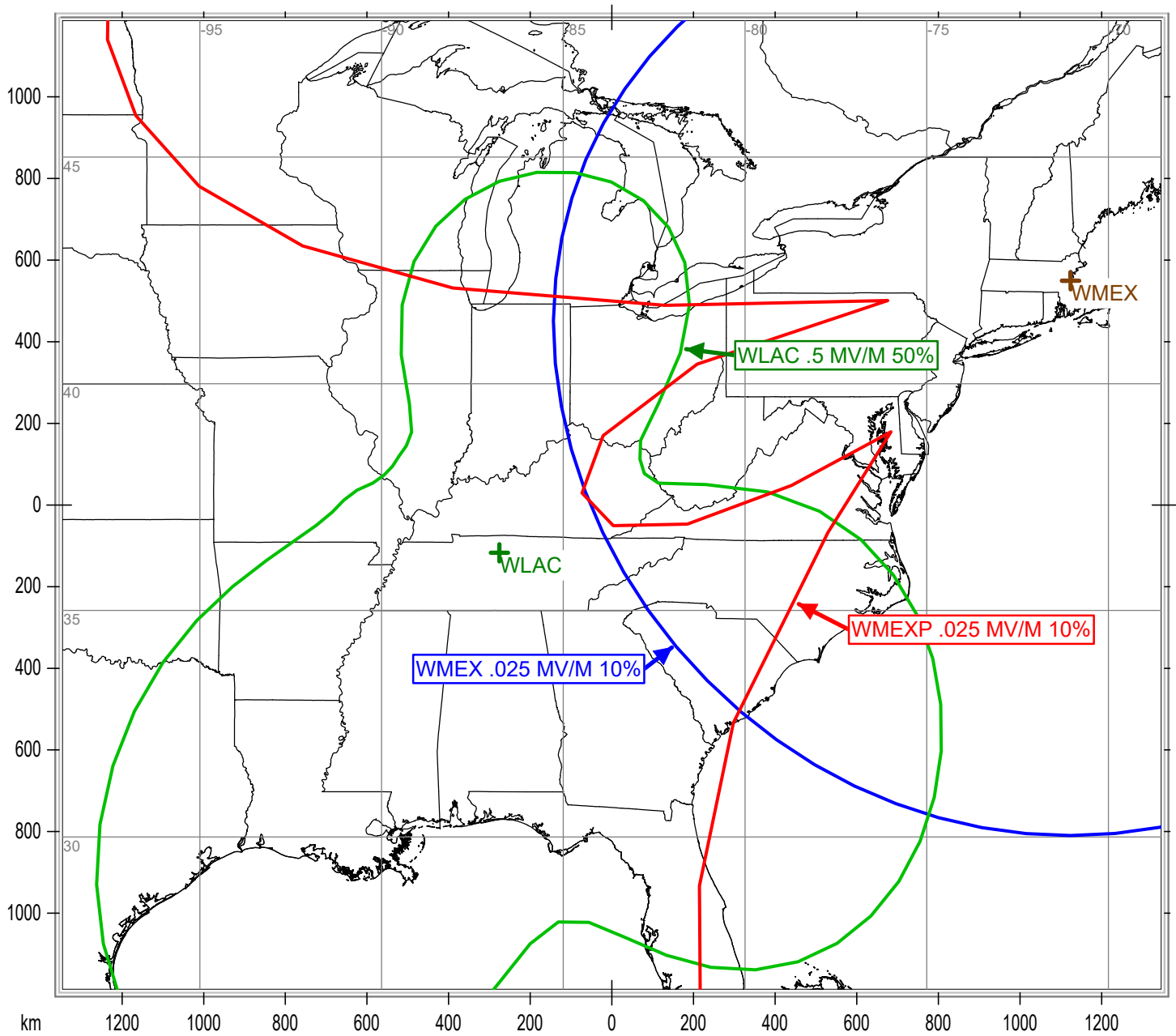


WMEX 1510 KILOHERTZ 25 KW DA QUINCY, MASSACHUSETTS

State Borders Lat/Lon Grid

FIG 5 -CLASS A CO-CHANNEL NIGHT ALLOCATION MAP

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

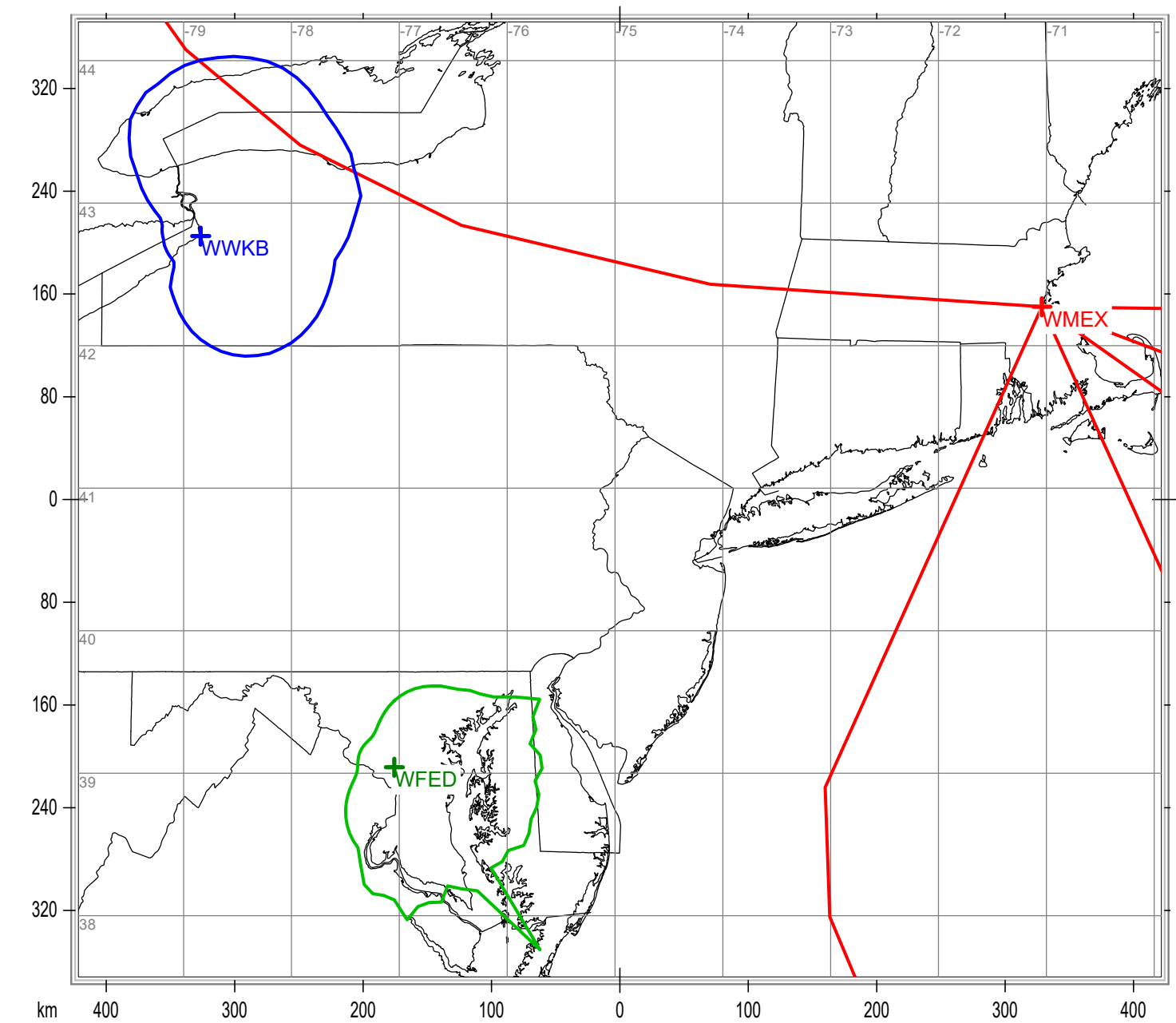


WMEX 1510 KILOHERTZ 1.8 KW DA QUINCY, MASSACHUSETTS

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

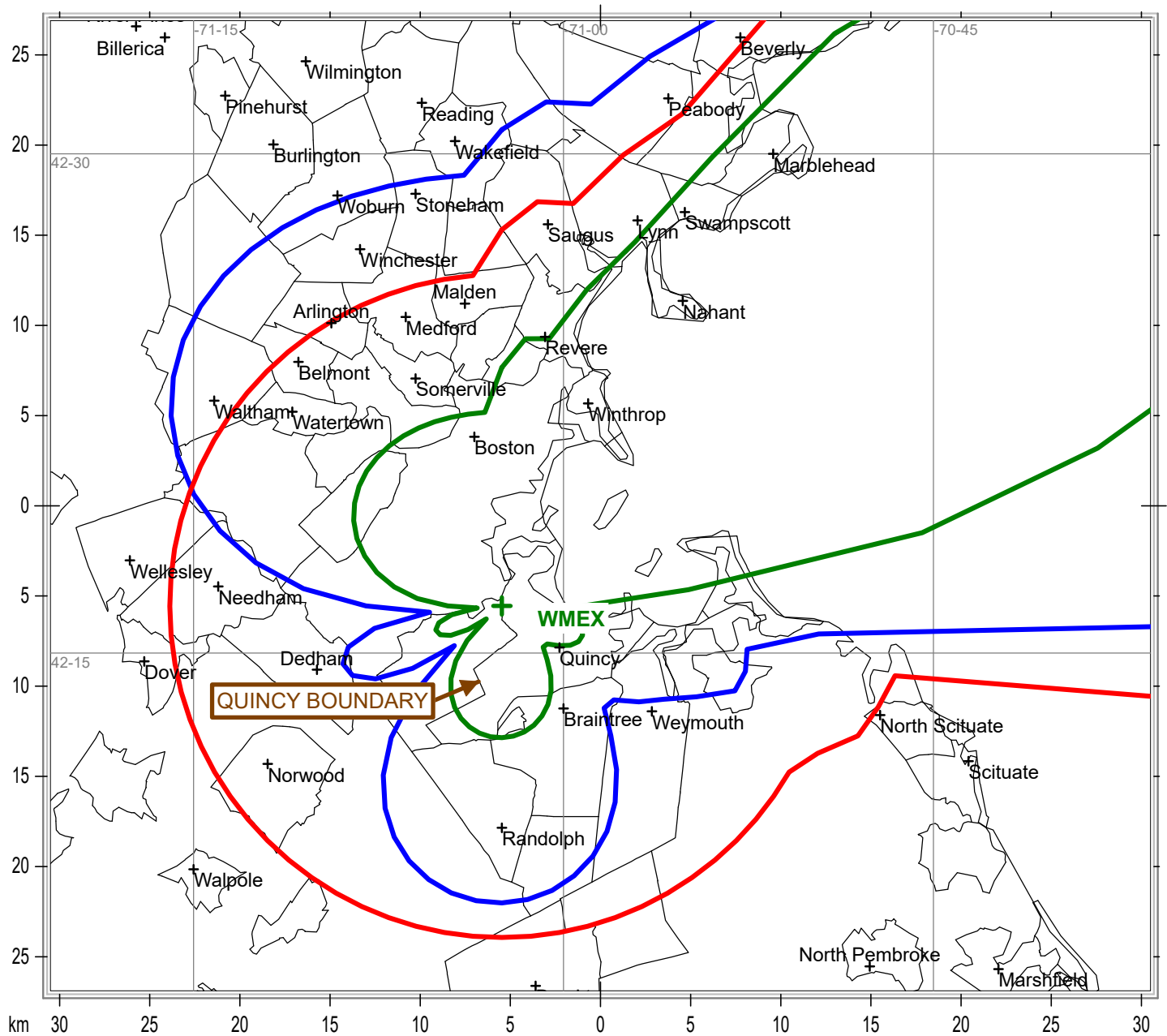


WMEX 1510 KILOHERTZ 1.8 KW DA QUINCY, MASSACHUSETTS

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

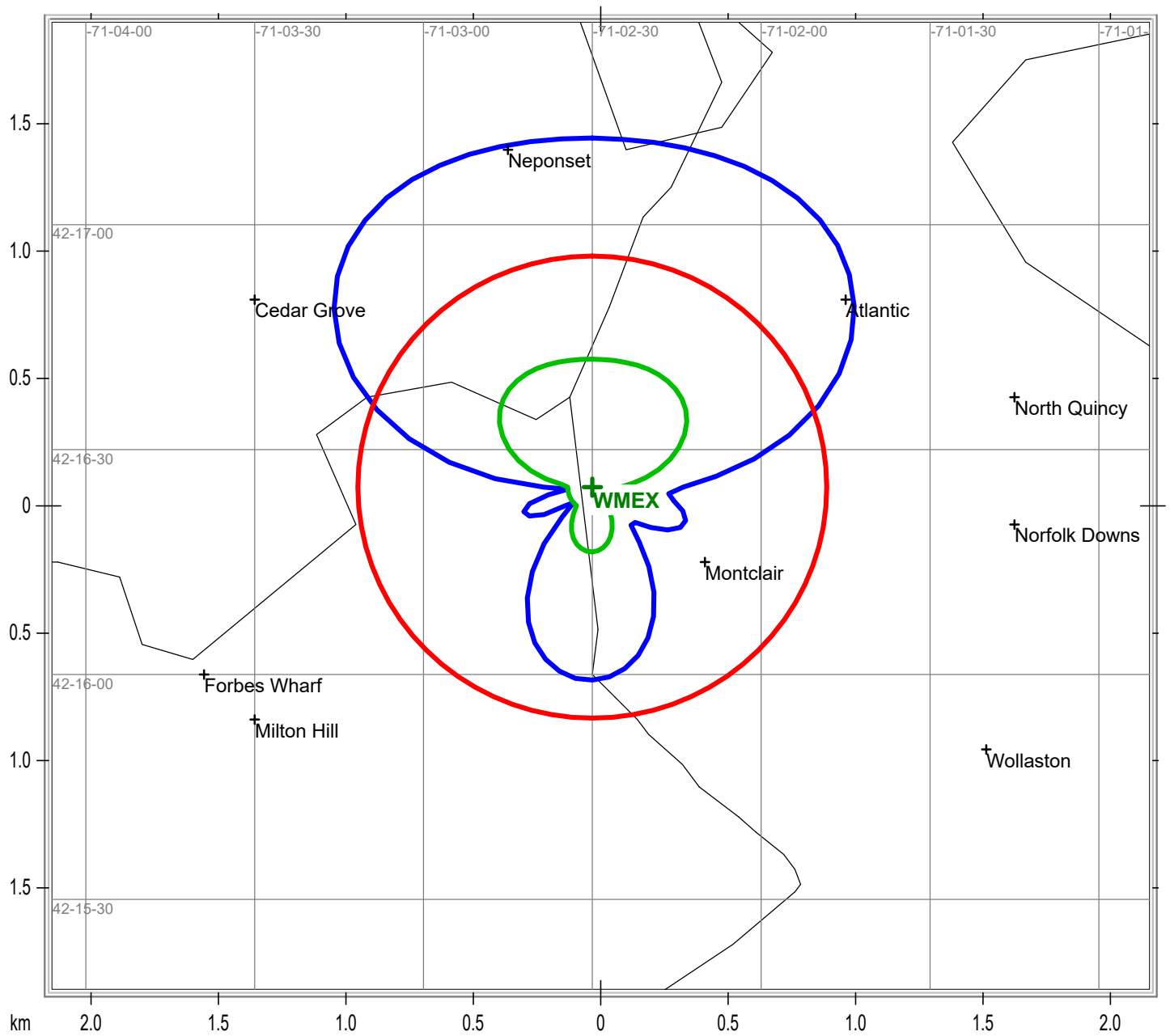


WMEX 1510 KILOHERTZ 25 KW ND-D, 25 KW DA-CH AND 1.8 KW-DA-N QUINCY, MASSACHUSETTS

State Borders City Borders Lat/Lon Grid

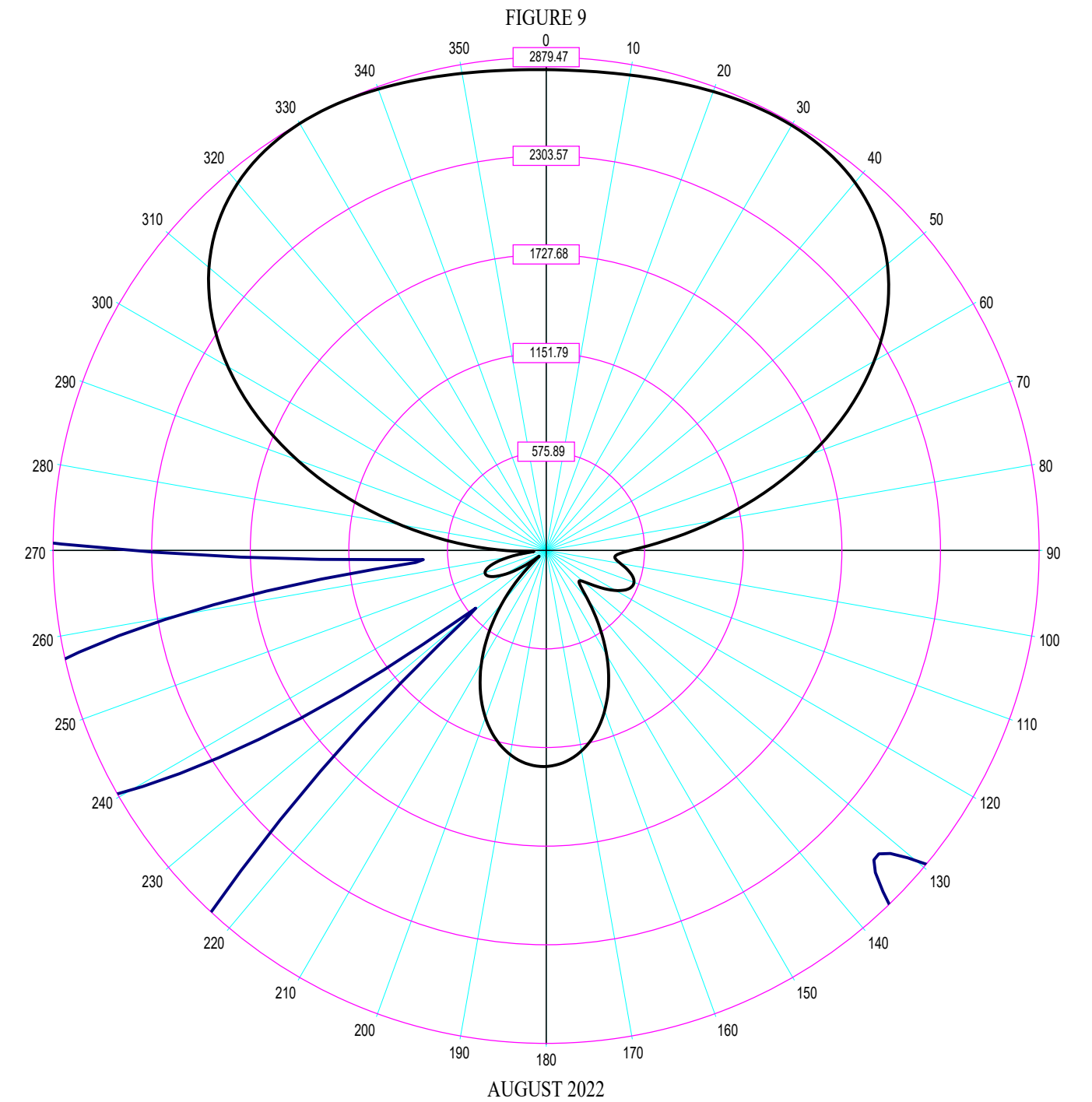
FIGURE 8 - 1000 MV/M CONTOUR MAP

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

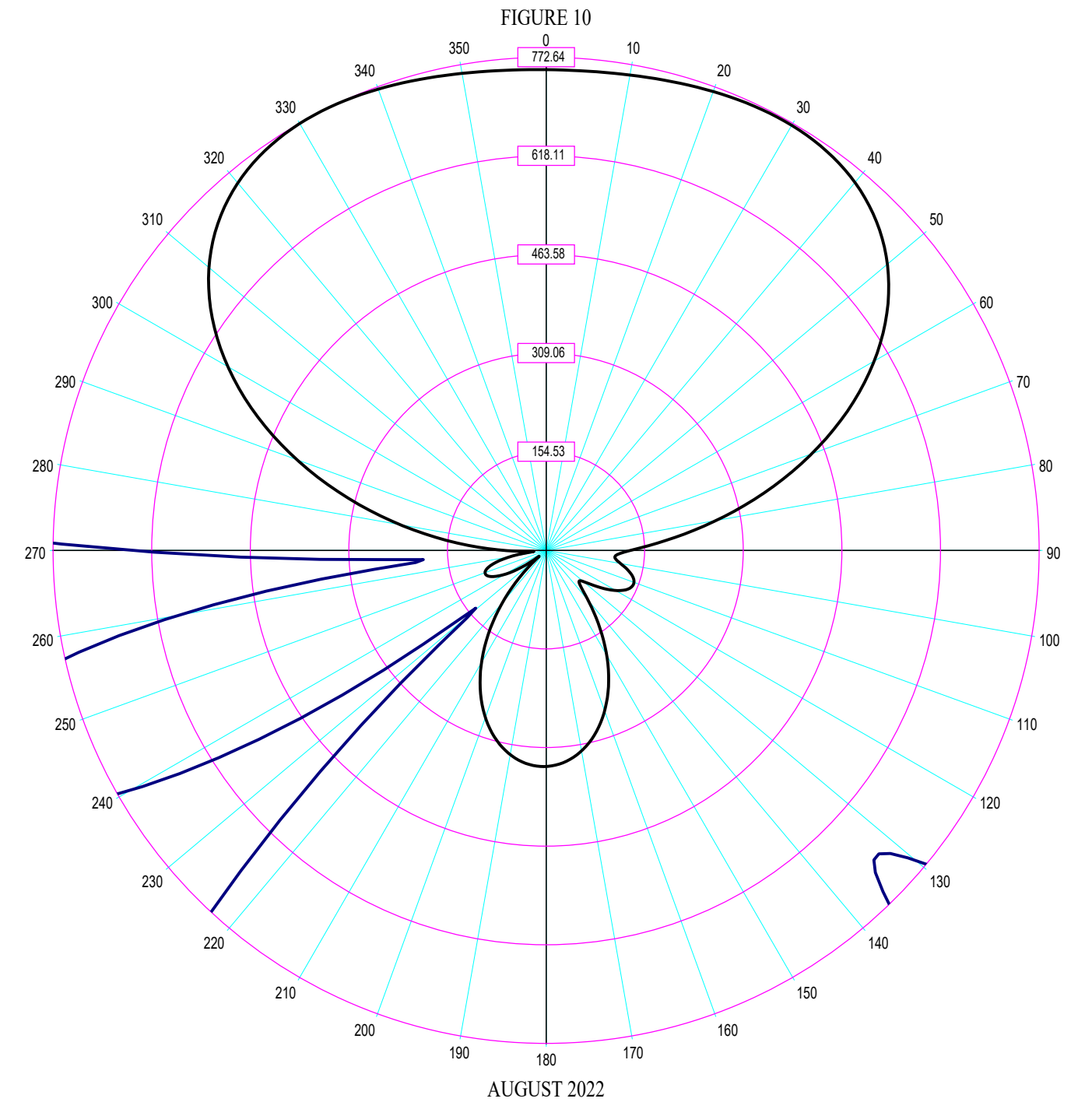
State Borders City Borders Lat/Lon Grid



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]
0.0	2807.582
5.0	2809.298
10.0	2819.073
15.0	2834.558
20.0	2851.696
25.0	2864.817
30.0	2866.861
35.0	2849.740
40.0	2804.917
45.0	2724.200
50.0	2600.729
55.0	2430.087
60.0	2211.399
65.0	1948.269
70.0	1649.439
75.0	1329.165
80.0	1007.741
85.0	713.771
90.0	491.916
95.0	403.382
100.0	441.550
105.0	509.593
110.0	545.447
115.0	530.681
120.0	467.367
125.0	371.481
130.0	281.479
135.0	275.199
140.0	382.691
145.0	540.895
150.0	706.915
155.0	862.178
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

Azim	Field [mV/m]
200.0	1037.933
205.0	908.906
210.0	755.099
215.0	581.452
220.0	395.249
225.0	207.293
230.0	55.438
235.0	155.687
240.0	280.010
245.0	359.323
250.0	379.876
255.0	333.478
260.0	218.614
265.0	72.733
270.0	242.323
275.0	535.723
280.0	865.302
285.0	1209.235
290.0	1548.149
295.0	1864.967
300.0	2146.150
305.0	2382.589
310.0	2569.901
315.0	2708.139
320.0	2801.060
325.0	2855.116
330.0	2878.367
335.0	2879.467
340.0	2866.810
345.0	2847.901
350.0	2828.930
355.0	2814.516



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]
0.0	753.353
5.0	753.813
10.0	756.436
15.0	760.591
20.0	765.190
25.0	768.711
30.0	769.259
35.0	764.665
40.0	752.638
45.0	730.979
50.0	697.848
55.0	652.060
60.0	593.380
65.0	522.775
70.0	442.591
75.0	356.652
80.0	270.405
85.0	191.525
90.0	131.995
95.0	108.239
100.0	118.480
105.0	136.738
110.0	146.359
115.0	142.396
120.0	125.408
125.0	99.679
130.0	75.529
135.0	73.843
140.0	102.687
145.0	145.137
150.0	189.685
155.0	231.346
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

Azim	Field [mV/m]
200.0	278.507
205.0	243.885
210.0	202.614
215.0	156.020
220.0	106.056
225.0	55.623
230.0	14.876
235.0	41.775
240.0	75.134
245.0	96.416
250.0	101.931
255.0	89.481
260.0	58.660
265.0	19.516
270.0	65.022
275.0	143.749
280.0	232.185
285.0	324.472
290.0	415.412
295.0	500.423
300.0	575.872
305.0	639.315
310.0	689.576
315.0	726.670
320.0	751.603
325.0	766.108
330.0	772.347
335.0	772.641
340.0	769.245
345.0	764.172
350.0	759.081
355.0	755.213

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