

**Goldman Engineering Management
Auburn, CA**

WKVB (FM)

APPLICATION FOR NEW ON-CHANNEL BOOSTER

This technical statement and attached exhibits have been prepared on behalf of Educational Media Foundation (“EMF”), assignee of station WKVB (FM), Channel 297B, Westborough, MA, Facility identifier 74467 for an on-channel FM booster. It is requested that this application be granted contingent upon approval and consummation of the assignment of WVKB from Entercom License LLC to EMF. EMF has obtained consent from Entercom to file this application in anticipation of the pending ownership transfer.

FACILITIES REQUESTED

The requested facility will operate within the 54dBu contour of WKVB. A map showing the coverage of this booster in relationship to the WKVB signal is shown in Exhibit A. The antenna being used is a Shively dual element, single level log-periodic antenna rotated 45 degrees from vertical to achieve slant H+V polarization. The Azimuth Pattern is attached as Exhibit C. NOTE- THE PROPOSED BOOSTER WILL BE DIPLEXED WITH THE CURRENTLY LICENSED WXLO-FM3 BOOSTER. NO PHYSICAL CHANGES WILL BE MADE TO THE ANTENNAS ALREADY ON THE TOWER.

Filed simultaneously with this application is an application for two other boosters to serve different areas within the WKVB 54dBu contour.

Requested Call Letters	WXLO-FM3
Booster Location:	Waltham, MA
ASR	ASR 1009251
Geographic Coordinates (NAD83):	42°22'42.4” N, 71°16'03.1” W
Channel:	297 (107.3 MHz)
Effective Radiated Power:	265 W
Antenna Type, Pattern:	Shively 6025-1-2-Slant Log Periodic (Exhibit C)
Antenna Orientation:	115° True
Site Height AMSL	85m
Tower OAGL	114m
Antenna Height :	
Above ground:	77m
Above mean sea level:	142m

As shown in Exhibit A, the 54dBu contour of the booster will fall inside the 54dBu contour of WKVB-FM and is thus compliant with 74.1232(f). As shown in Exhibit B, the proposed booster will provide interference protection to all first adjacent channel stations because the first adjacent interfering contours are within the WKVB-FM (primary station) interfering contours. The proposed booster is not short-spaced as a class A facility to any IF related stations.

ENVIRONMENTAL CONSIDERATIONS

The Booster antenna will be diplexed with the existing antenna for WXLO-FM3 at the 77m height on an existing 114m tower (ASR 1009251). Because there will be no modifications to this tower it is exempt from environmental processing under CFR Section 1.1306.

The proposed WKVB booster antenna was evaluated for RF energy at ground level. RF fields were calculated using the FCC "FM Model" calculator¹ using a worst-case EPA Type 1 antenna. The RF field was calculated at $1.9\mu\text{W}/\text{cm}^2$ which is 1% of the maximum allowable $200\mu\text{W}/\text{cm}^2$ allowable limit for public exposure. Because the calculated emission from the proposed booster antenna is expected to be less than 5% of the permitted $200\mu\text{W}/\text{cm}^2$ at 2m above ground level, the facility is categorically exempt from further environmental assessment under 47CFR 1.1306 and 1.1307.

The applicant agrees to reduce power or cease operations when it becomes necessary if workers are near the antenna in order to ensure that they will not be exposed to levels of radio frequency electromagnetic radiation that exceed FCC guidelines.

CERTIFICATION

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direct supervision, and that they are true and correct to the best of his knowledge and belief.



Bertram S. Goldman
Goldman Engineering Management

WKVB PROP FM3, 265w

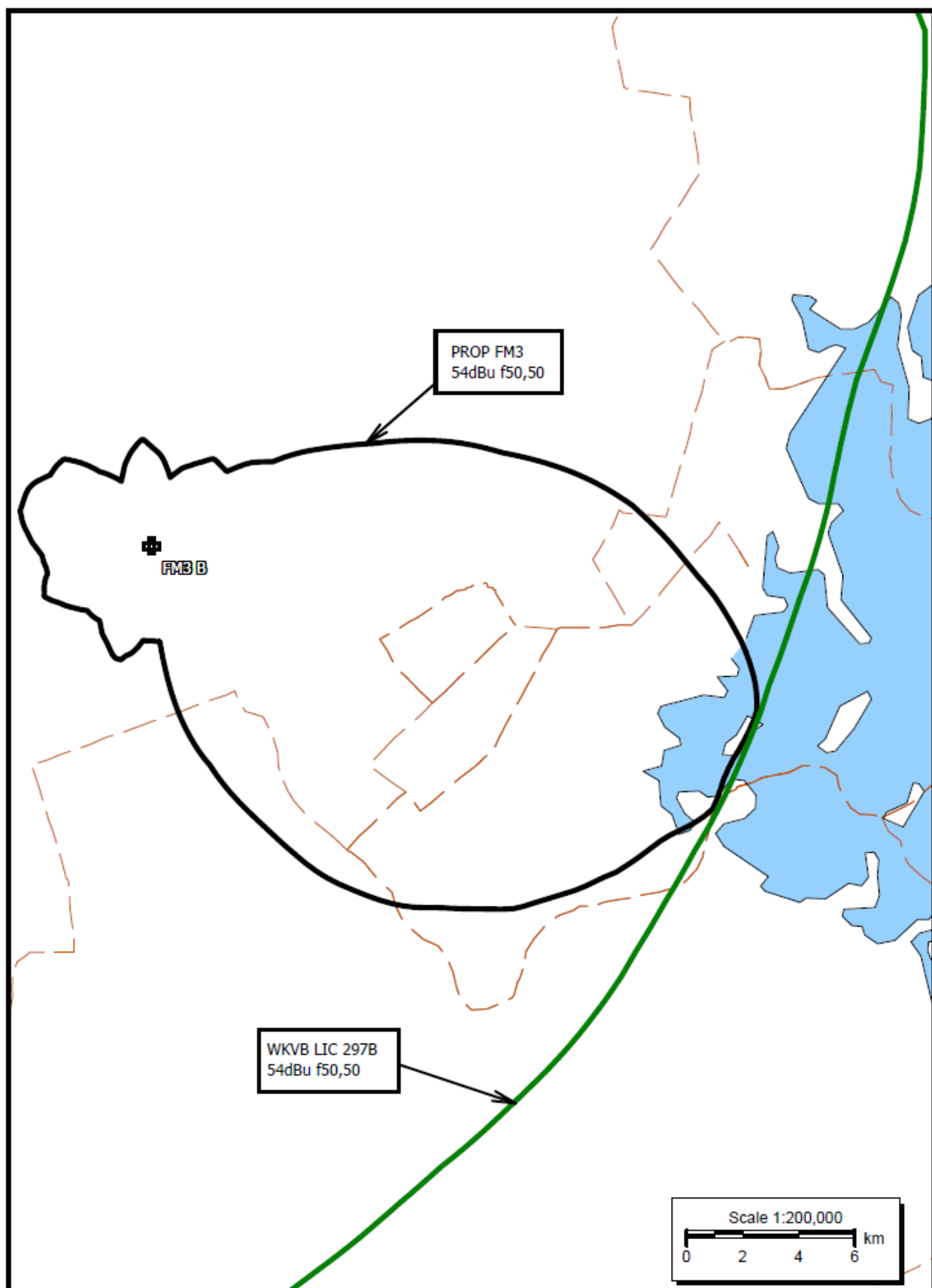


EXHIBIT B- First- Adjacent Protection

WKVB PROP FM3, 265w, 1st Adjacent

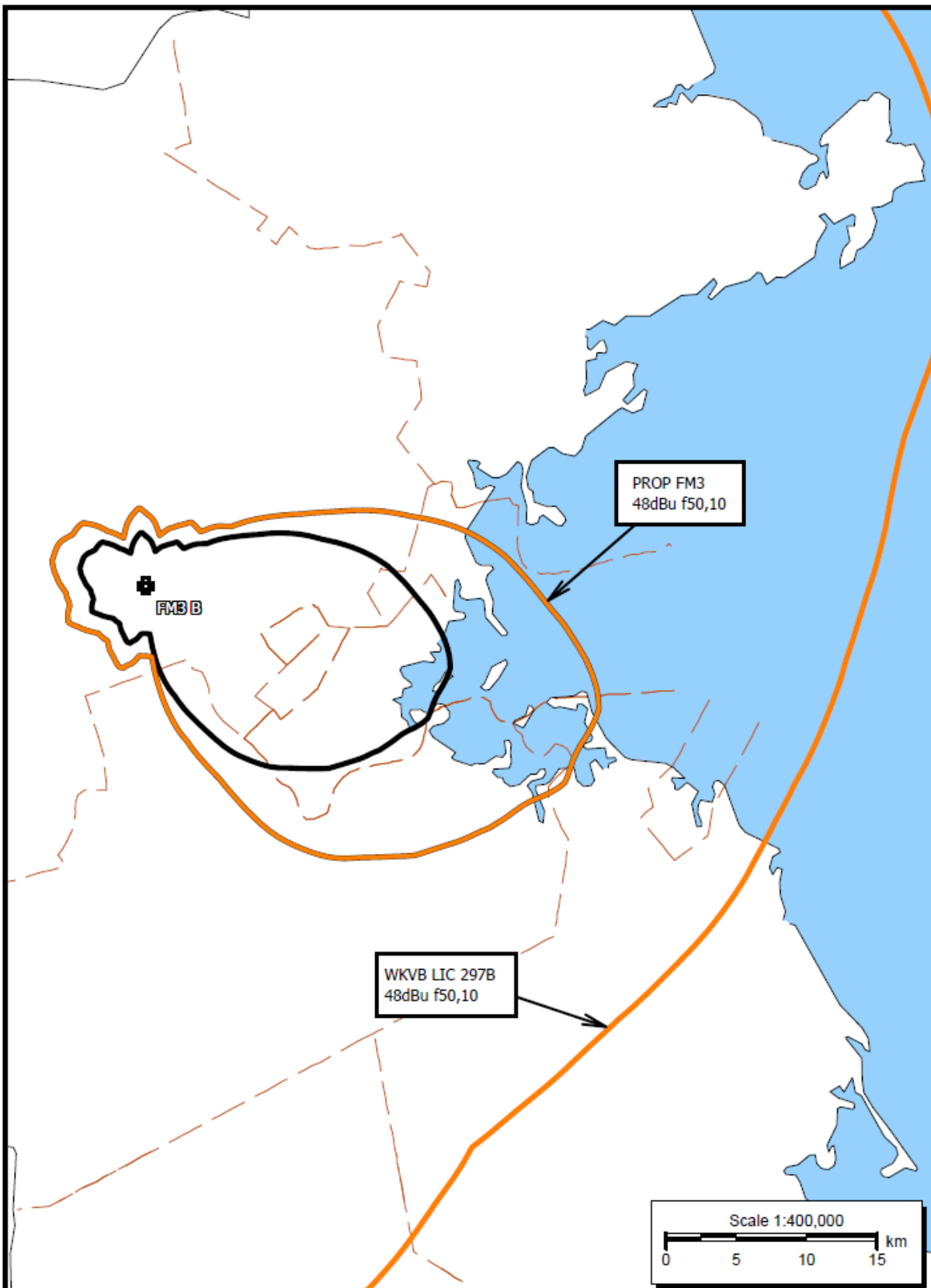
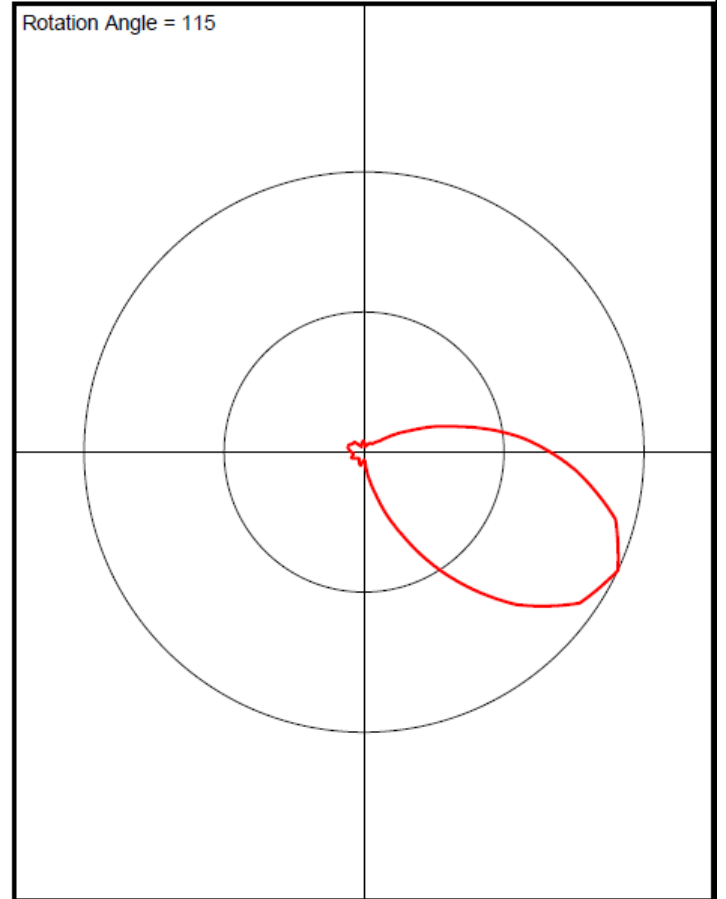


EXHIBIT C- Antenna Pattern (Post Rotation)

WKVB-FM3 Antenna Pattern

Post-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	0.035
5.0	0.03
10.0	0.025
15.0	0.02
20.0	0.025
25.0	0.03
30.0	0.035
35.0	0.04
40.0	0.04
45.0	0.04
50.0	0.055
55.0	0.07
60.0	0.125
65.0	0.18
70.0	0.265
75.0	0.35
80.0	0.46
85.0	0.57
90.0	0.665
95.0	0.76
100.0	0.845
105.0	0.93
110.0	0.965
115.0	1.0
120.0	0.97
125.0	0.94
130.0	0.855
135.0	0.77
140.0	0.66
145.0	0.55
150.0	0.44
155.0	0.33
160.0	0.24
165.0	0.15
170.0	0.09
175.0	0.03
180.0	0.03
185.0	0.03
190.0	0.04
195.0	0.05
200.0	0.045
205.0	0.04
210.0	0.035
215.0	0.03
220.0	0.03
225.0	0.03
230.0	0.035
235.0	0.04
240.0	0.045
245.0	0.05
250.0	0.045
255.0	0.04
260.0	0.04
265.0	0.04
270.0	0.045
275.0	0.05
280.0	0.055
285.0	0.06
290.0	0.06
295.0	0.06
300.0	0.055
305.0	0.05
310.0	0.05
315.0	0.05



320.0	0.04
325.0	0.03
330.0	0.025
335.0	0.02
340.0	0.025
345.0	0.03
350.0	0.035
355.0	0.04