

~~920918 JB~~

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September 18, 1992

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SEP 18 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
Washington, D.C. 20554

Re: Station WMBR(FM)
Cambridge, Massachusetts
File No. BPED-920326IA
Ref. 1800B3TT

Dear Ms. Searcy:

On behalf of Technology Broadcasting Corporation, licensee of noncommercial educational Station WMBR(FM), Cambridge, Massachusetts and applicant in the above-referenced file for authority to modify technical facilities, we are filing here-

wmbr

88.1fm

3 Ames Street
Cambridge
Massachusetts
02142

Telephone
617-253-4000

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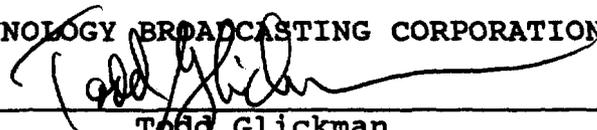
SEP 18 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

AMENDMENT

The application of Technology Broadcasting Corporation for authority to modify the facilities of noncommercial educational station WMBR(FM), Cambridge, Massachusetts (File No. BPED-920326IA) is hereby amended to provide the attached technical information in response to the Commission's letter of July 23, 1992 (Ref. 1800B3-TT).

TECHNOLOGY BROADCASTING CORPORATION

By: 

Todd Glickman
President

Date: 17 Sep 92

wmbr

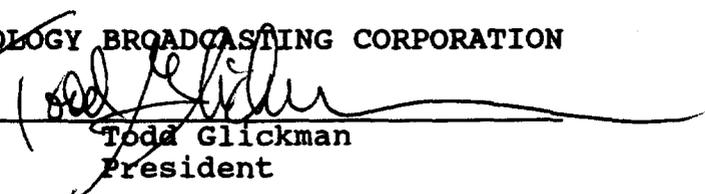
88.1fm

3 Ames Street
Cambridge
Massachusetts
02142

Telephone
617-253-4000

The Technology Broadcasting Corporation, licensee of WMBR(FM), hereby certifies that an agreement will be in effect that all stations will reduce power or cease operations as necessary to assure worker safety with respect to radiofrequency radiation when construction or maintenance is to be performed at the site of our antenna tower. This agreement is with the WGBH Educational Foundation, Inc., licensee of co-located W242AA(FX).

TECHNOLOGY BROADCASTING CORPORATION

By: 

Todd Glickman
President

Date: 17 Sep 92

TECHNOLOGY BROADCASTING CORPORATION

WMBR(FM)

CAMBRIDGE, MASSACHUSETTS

AMENDMENT TO APPLICATION FOR CONSTRUCTION PERMIT

BPED-920326IA

ENGINEERING EXHIBIT

SEPTEMBER 1992

William Culpepper & Associates, Inc.
900 Jefferson Drive
Charlotte, NC 28270

TECHNOLOGY BROADCASTING CORPORATION

WMBR(FM)

CAMBRIDGE, MASSACHUSETTS

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Tower Elevations

The tower height above ground is changed to 109 meters, and the tower height above mean sea level is changed to 112 meters. A new Page 2 of FCC 340V-B and a new Figure 2 are included in this exhibit to reflect these changes.

Declaration

I declare, under penalty of perjury, that I prepared this exhibit, and that the facts herein are true to the best of my knowledge and belief; and that I am a registered professional engineer in the States of Alabama, Georgia and North Carolina.

Executed on September 12, 1992.



William A. Culpepper
William Culpepper & Associates, Incorporated
900 Jefferson Drive
Charlotte, North Carolina 28270

Predicted Signal Contours:

42 21 42 - TECHNOLOGY BROADCASTING CORPORATION - WMBR
 71 05 03 - CAMBRIDGE, MASSACHUSETTS

ERP = .72 kW, -1.427 dBk		FM - 2-6 Tables		48 dBu.1	54 dBu.1	
Radial	HAAT	kW	dBk	Field		
0 Degs.	81.2M	0.478	-3.204	0.815	28.8	20.3
10 Degs.	89.7M	0.449	-3.474	0.790	29.9	21.1
20 Degs.	88.3M	0.455	-3.419	0.795	29.7	21.0
30 Degs.	90.9M	0.484	-3.150	0.820	30.7	21.7
40 Degs.	99.4M	0.533	-2.737	0.860	33.2	23.3
50 Degs.	102.7M	0.629	-2.010	0.935	35.4	24.8
60 Degs.	104.1M	0.720	-1.427	1.000	37.0	25.8
70 Degs.	107.1M	0.720	-1.427	1.000	37.5	26.2
80 Degs.	107.9M	0.720	-1.427	1.000	37.6	26.3
90 Degs.	107.9M	0.720	-1.427	1.000	37.6	26.3
100 Degs.	107.7M	0.720	-1.427	1.000	37.6	26.3
110 Degs.	108.0M	0.684	-1.647	0.975	37.2	26.0
120 Degs.	107.2M	0.551	-2.587	0.875	35.0	24.5
130 Degs.	105.9M	0.405	-3.925	0.750	31.9	22.5
140 Degs.	107.0M	0.338	-4.713	0.685	30.6	21.6
150 Degs.	105.3M	0.333	-4.776	0.680	30.2	21.4
160 Degs.	95.8M	0.318	-4.970	0.665	28.4	20.0
170 Degs.	80.7M	0.314	-5.036	0.660	25.8	18.0
180 Degs.	81.9M	0.318	-4.970	0.665	26.1	18.3
190 Degs.	81.3M	0.348	-4.587	0.695	26.6	18.6
200 Degs.	86.8M	0.405	-3.925	0.750	28.6	20.2
210 Degs.	72.7M	0.496	-3.045	0.830	27.4	19.3
220 Degs.	70.1M	0.670	-1.736	0.965	29.1	20.6
230 Degs.	66.1M	0.720	-1.427	1.000	28.7	20.3
240 Degs.	67.1M	0.720	-1.427	1.000	29.0	20.5
250 Degs.	72.5M	0.720	-1.427	1.000	30.1	21.3
260 Degs.	83.7M	0.720	-1.427	1.000	32.7	23.0
270 Degs.	95.1M	0.720	-1.427	1.000	35.2	24.6
280 Degs.	84.8M	0.720	-1.427	1.000	33.0	23.1
290 Degs.	68.7M	0.720	-1.427	1.000	29.3	20.7
300 Degs.	63.6M	0.720	-1.427	1.000	28.2	20.0
310 Degs.	69.0M	0.720	-1.427	1.000	29.4	20.8
320 Degs.	70.3M	0.720	-1.427	1.000	29.6	21.0
330 Degs.	89.3M	0.713	-1.470	0.995	33.9	23.7
340 Degs.	83.8M	0.629	-2.010	0.935	31.5	22.2
350 Degs.	81.7M	0.539	-2.686	0.865	29.8	21.0

Ant. COR= 108.0M AMSL

Predicted Signal Contours:

41 35 48 - WMBR CAMBRIDGE, MASSACHUSETTS
71 11 24 - CONTOURS OF WLNE-TV NEW BEDFORD

ERP = 100 kW, 20 dBk		FM - 2-6 Tables				
Radial	HAAT	kW	dBk	Field	68 dBu.5	47 dBu.5
300 Degr.	317.6M	100.000	20.000	1.000	55.4	104.9
305 Degr.	319.1M	100.000	20.000	1.000	55.5	105.0

Predicted Signal Contours:

42 18 40 - WMBR CAMBRIDGE, MASSACHUSETTS
 71 13 00 - CONTOURS OF WNEV-TV BOSTON

ERP = 316 kW, 24.997 dBk			CH. 7-13	Tables	
Radial	HAAT	kW	dBk	Field	77 dBu.5
115 Degr.	284.7M	316.000	24.997	1.000	51.2
120 Degr.	278.1M	316.000	24.997	1.000	50.8
125 Degr.	275.4M	316.000	24.997	1.000	50.6
130 Degr.	276.4M	316.000	24.997	1.000	50.7
135 Degr.	271.7M	316.000	24.997	1.000	50.4
140 Degr.	272.3M	316.000	24.997	1.000	50.4
145 Degr.	278.9M	316.000	24.997	1.000	50.9
150 Degr.	285.5M	316.000	24.997	1.000	51.3
155 Degr.	284.8M	316.000	24.997	1.000	51.3
160 Degr.	281.0M	316.000	24.997	1.000	51.0
165 Degr.	279.6M	316.000	24.997	1.000	50.9
170 Degr.	271.1M	316.000	24.997	1.000	50.3
175 Degr.	259.8M	316.000	24.997	1.000	49.6
180 Degr.	255.7M	316.000	24.997	1.000	49.3
185 Degr.	260.7M	316.000	24.997	1.000	49.6
190 Degr.	254.8M	316.000	24.997	1.000	49.2
195 Degr.	247.1M	316.000	24.997	1.000	48.7
200 Degr.	250.2M	316.000	24.997	1.000	48.9
205 Degr.	247.5M	316.000	24.997	1.000	48.7
210 Degr.	253.8M	316.000	24.997	1.000	49.2
215 Degr.	260.4M	316.000	24.997	1.000	49.6
220 Degr.	263.0M	316.000	24.997	1.000	49.8
225 Degr.	260.2M	316.000	24.997	1.000	49.6
230 Degr.	263.1M	316.000	24.997	1.000	49.8
235 Degr.	265.4M	316.000	24.997	1.000	49.9
240 Degr.	264.3M	316.000	24.997	1.000	49.9
245 Degr.	258.4M	316.000	24.997	1.000	49.5
250 Degr.	258.2M	316.000	24.997	1.000	49.5

Ant. COR= 311.0M AMSL

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 2)

4. Does the application propose to correct previous site coordinates?
If Yes, list old coordinates.

Yes No

Latitude ° ' "	Longitude ° ' "
---	--

5. Has the FAA been notified of the proposed construction?

Yes No

If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No.

No change in tower or antenna elevations

Date _____ Office where filed _____

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	_____	_____	_____
(b)	_____	_____	_____

7. (a) Elevation: *(to the nearest meter)*

(1) of site above mean sea level; 3 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 109 meters

(3) of the top of supporting structure above mean sea level [(aX1) + (aX2)] 112 meters

(b) Height of radiation center: *(to the nearest meter)* H = Horizontal; V = Vertical

(1) above ground 105 meters (H)

105 meters (V)

(2) above mean sea level [(aX1) + (bX1)] 108 meters (H)

108 meters (V)

(3) above average terrain 90 meters (H)

90 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(bX3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No.
Fig. 2

9. Effective Radiated Power:

(a) ERP in the horizontal plane 0.72 kw (HM) 0.72 kw (VM)

(b) Is beam tilt proposed?

Yes No

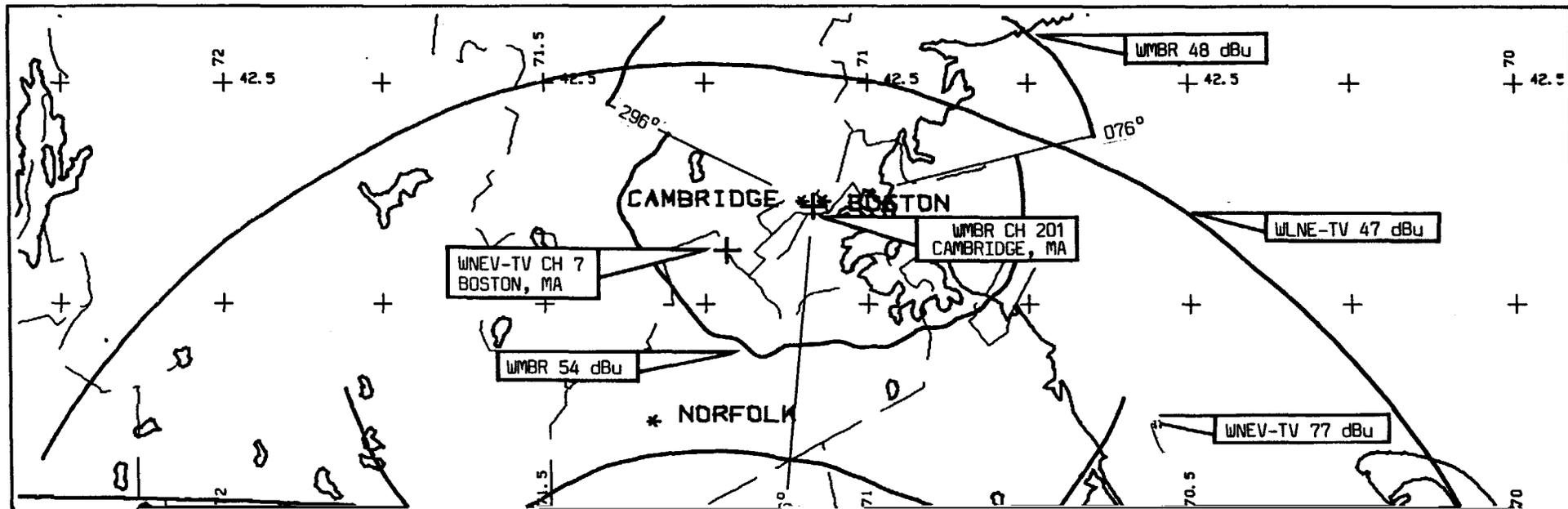
If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field.

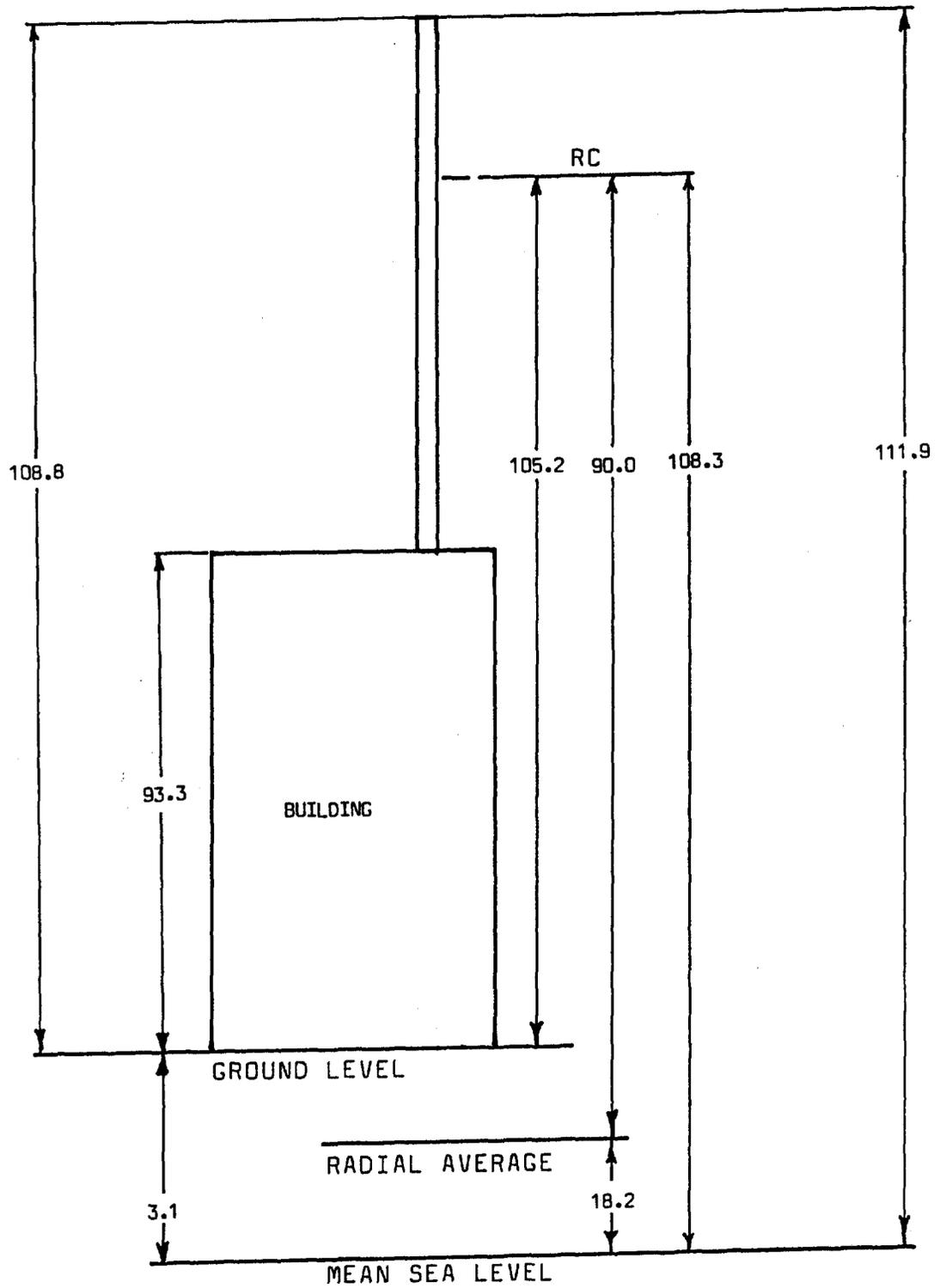
Exhibit No.

_____ kw (HM) _____ kw (VM)

*Polarization

September 1992 Amendment





WILLIAM CULPEPPER & ASSOCIATES, Inc.
Applied Scientists in Broadcast and Communications
 227 Farr's Bridge Road • Greenville, SC 29611
 803-246-3401

September 1992 Amendment

FIGURE 2
ANTENNA, TOWER AND BUILDING ELEVATIONS
 TECHNOLOGY BROADCASTING CORPORATION
 CAMBRIDGE, MASSACHUSETTS