

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of BOSTON BROADCASTING CORPORATION, licensee of digital Class A LPTV station WFXZ-CD, Channel 25 in Boston, Massachusetts, in support of this Application for Construction Permit to specify an operation on Channel 24. This proposal is being submitted in response to the Commission's assignment of Channel 25 to WNNE-DT in Hartford, Vermont. The WNNE-DT transmitter site is located 161 kilometers from that of WFXZ-CD, thereby placing this Class A station in a displacement situation. No change in site location, antenna height or antenna orientation is proposed herein.

It is proposed to utilize an MCI directional antenna, which will be mounted at the 263-meter level of an existing 382-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the newly proposed 51 dBu contour encompasses a significant portion of that which obtains from the licensed WFXZ-CD facility. Operating parameters for the proposed facility are tabulated in Exhibit C. An interference study is provided in Exhibit D, and it is important to note that it utilized a cell size of 1.0 kilometer and an increment spacing of 0.1 kilometer. A power density calculation follows as Exhibit E.

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1004623 to this tower.

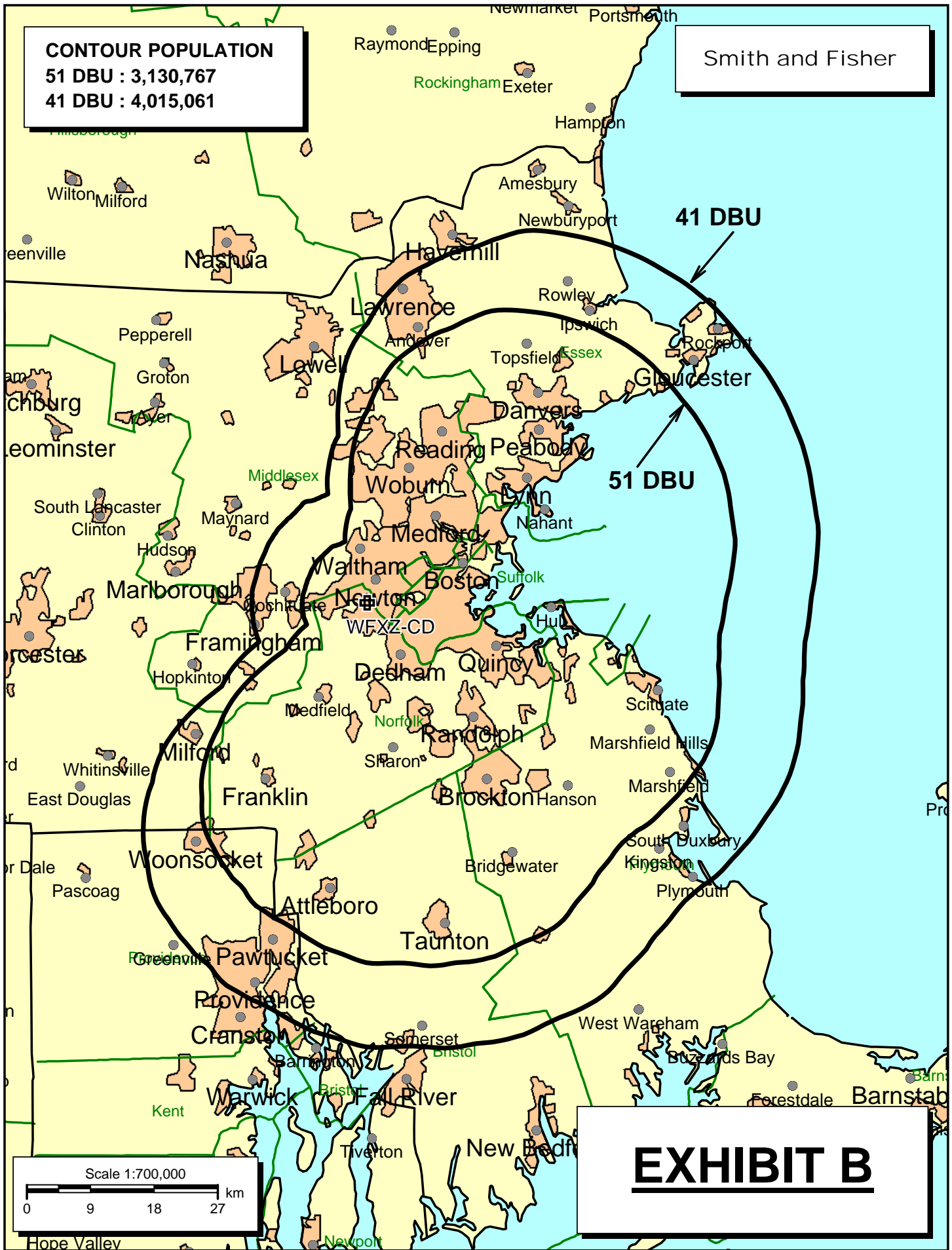
EXHIBIT A

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.



KEVIN T. FISHER

March 11, 2010



PROPOSED OPERATING PARAMETERS

PROPOSED WFXZ-CD
CHANNEL 24 – BOSTON, MASSACHUSETTS

Transmitter Power Output:	1.3 kw
Transmission Line Efficiency:	28.7%
Antenna Power Gain – Main Lobe:	40.0
Effective Radiated Power – Main Lobe:	15.0 kw
Transmitter Make and Model:	Type-accepted
Transmission Line Make and Model:	Andrew LDF7-50A
Size and Type:	1-5/8" foam heliax
Length:	955 feet
Antenna Make and Model:	MCI 955316
Orientation	70° T
Beam Tilt	none
Radiation Center Above Ground:	263 meters
Radiation Center Above Mean Sea Level:	292 meters

LONGLEY-RICE INTERFERENCE STUDY
PROPOSED WFXZ-CD
CHANNEL 24 – BOSTON, MASSACHUSETTS

We conducted a detailed interference study using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to all facilities of concern. The software utilizes a 1-square kilometer cell size, calculates signal strength at 0.1 kilometer increments along each radial studied, and employs the 2000 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within the protected contour of the station under study where interference from another source (other than proposed WFXZ-CD) already is predicted to exist (also known as "masking"). The results of this study are provided in Exhibit D-2. It concludes that the facility proposed herein causes no significant new interference to any of the potentially affected stations, except for the allotment facility of WVTA-DT, Channel 24 in Windsor, Vermont.

While the proposed WFXA-CD facility fully protects the licensed facility of WVTA-DT (BLEDT-20070307AAW), the allotment facility of WVTA-DT receives predicted interference to 0.8% of its service population. However, the only difference between the presently licensed WVTA-DT facility and the allotment facility is in the coordinates of the transmitter site. According to the FCC's Antenna Structure Registration record for the WVTA-DT tower (ASR Number 1060721), the coordinates in

EXHIBIT D-1

the WVTB-DT license are correct and those of the allotment facility are not. Exhibit D-3 is a printout of the ASR record for the WVTB-DT transmitter site. Therefore, the allotment facility of WVTB-DT can never be constructed and the interference to that hypothetical facility from proposed WFXZ-CD on Channel 24 can be ignored.

Accordingly, a waiver of Section 73.6013 of the FCC Rules with respect to interference to the WVTB-DT allotment facility is respectfully requested and believed to be justified.

As a result, it is believed that the proposed WFXZ-CD facility complies with the requirements of Sections 73.6016, 73.6017, 73.6018, 73.6019, 73.6020, 73.6027 and 74.794(b) of the Commission's Rules.

wfxz_dt24_summary.txt
Summary Study

Census data selected: 2000

Post DTV Transition Database Selected

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 05-05-2010 Time: 14:22:23

Record Selected for Analysis

WFXZ-CD2 USERRECORD-01 BOSTON MA US
Channel 24 ERP 15. kw HAAT 249. m RCAMSL 00292 m STRINGENT MASK
Latitude 042-18-27 Longitude 0071-13-27
Status APP Zone 1 Border
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 70.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 0.10 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kw)	HAAT (m)	51.0 dBu F(50,90) (km)
0.0	0.133	240.6	27.4
45.0	9.612	274.0	51.6
90.0	9.433	257.5	50.6
135.0	8.998	252.5	50.1
180.0	11.406	243.4	50.8
225.0	0.365	238.2	32.5
270.0	0.002	240.8	9.1
315.0	0.002	241.8	9.2

Contour Overlap to Proposed Station

WVTA Station 24 WINDSOR VT BLEDT20070307AAW causes

Contour overlap to Digital LPTV station
WFXZ-CD2 24 BOSTON MA USERRECORD01
Required D/U ratio: 15.0

Station
WFXZ-CD 25 BOSTON MA BLDTA20100324ACN

Station inside contour of Digital LPTV station
WFXZ-CD2 24 BOSTON MA USERRECORD01
Page 1

wfxz_dt24_summary.txt

Contour Overlap Evaluation to Proposed Station Complete

LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is within the Canadian coordination distance
Distance to border = 302.3km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station	ARN
24	Call City/State WFXZ-CD2 BOSTON MA	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
23	WNGN-LP	TROY NY	203.9	CP	BDISDTL	-20090824ALE
24	WRGB	KINGSTON NY	234.2	CP	BDRTCDT	-20100408AAA
24	WNYE-TV	NEW YORK NY	287.3	LIC	BLEDT	-20071228ABM
24	WNYE-TV	NEW YORK NY	287.3	PLN	DTVPLN	-DTVP0879
24	WNYE-TV	NEW YORK NY	287.3	CP MOD	BMPEDT	-20070124AAX
24	WSTM-TV	SYRACUSE NY	406.5	CP	BPCDT	-20080320ACI
24	WSTM-TV	SYRACUSE NY	406.4	PLN	DTVPLN	-DTVP0880
24	W24DB	CLARKS SUMMIT PA	385.2	LIC	BLTTA	-20041202ADB
24	W24BB	EAST STROUDSBURG PA	382.8	LIC	BLTTL	-19911219JM
24	WVTA	WINDSOR VT	160.6	LIC	BLEDT	-20070307AAW
24	WVTA	WINDSOR VT	160.6	PLN	DTVPLN	-DTVP0894
25	WFXZ-CD	BOSTON MA	0.0	LIC	BLDTA	-20100324ACN
25	W25EB-D	NANTUCKET ISLAND MA	151.1	CP	BNPDTL	-20090825AZD
25	W26CE	NEW YORK NY	206.3	APP	BDISDTL	-20100120ABI
25	WNNE	HARTFORD VT	160.6	LIC	BLCDT	-20050801BFZ
25	WNNE	HARTFORD VT	160.6	PLN	DTVPLN	-DTVP0924
26	W26CE	NEW YORK NY	206.3	APP	BSTA	-20061003ABI
26	W26CE	NEW YORK NY	206.3	APP	BSTA	-20070821AEJ
26	W26CE	NEW YORK NY	206.3	LIC	BLTTL	-20080306ABU
26	WNGN-LP	TROY NY	204.0	APP	BPTTL	-20030513AAE
27	W27CP	WHITE RIVER JUNCTION VT	169.4	LIC	BLTT	-20041021ABZ
28	W28CM	MANCHESTER NH	50.1	LIC	BLTTL	-20050418AAQ
32	WTMU-LP	BOSTON MA	12.4	LIC	BLTTL	-19950414IE
32	W32CA	PORTLAND ME	175.2	LIC	BLTT	-20020429AAV

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study of this proposal found the following interference problem(s):

wfxz_dt24_summary.txt

The following station failed the de minimis interference criteria.

24D MA BOSTON USERRECORD01
 ERP 15.00 kW HAAT 249.0 m RCAMSL 292.0 m
 Antenna usr USRPAT01

Due to interference to the following station and scenario: 1

24D VT WINDSOR DTVPLN DTVP0894
 ERP 55.70 kW HAAT 692.0 m RCAMSL 993.0 m
 Antenna CDB 9999999999999999

Percent Service lost without proposal:	0.0	to DTVPLN	DTVP0894
Percent Service lost with proposal:	0.8	to DTVPLN	DTVP0894

Tower ID: 1060721

Coordinates (NAD27): 43-26-14.74 N, 072-27-07.67 W

Coordinates (NAD83): 43-26-15 N, 072-27-06 W

Status: Constructed

Structure Type: TOWER

Action Date: 05/01/2010

Construction Date: 01/01/1998

Location: MOUNT ASCUTNEY, WINDSOR, VT

Height (AG): 129.10 m, Elevation: 872.00 m, Structure Height: 116.00 m

Circular Number:

FAA Number: 98-ANE-0145-OE FAA Chapter: 1, 3, 12, 21

Owner: VERMONT ETV INC

Address:

 WAYNE ROSBERG

 88 ETHAN ALLEN AVE

 COLCHESTER, VT 05446

Phone: (802) 655-5276

Internet Address: WROSBERG@VPT.ORG

EXHIBIT E

POWER DENSITY CALCULATION
PROPOSED WFXZ-CD
CHANNEL 24 – BOSTON, MASSACHUSETTS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Boston facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kw, an antenna radiation center 263 meters above ground, and assuming a vertical relative field value of 20 percent at the steeper elevation angles for the MCI antenna, maximum power density two meters above ground of 0.00029 mw/cm^2 is calculated to occur east of the base of the tower. Since this is less than 0.1 percent of the 0.35 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 24 (530-536 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.