

CITY OF LICENSE	Monticello, ME
CALL LETTERS	W252DW
FACILITY ID	201363
PREPARED FOR	Allan H Weiner
VERSION	1.0
JOB	118047
DATE	10/17/2018

CONSOLIDATED

ENGINEERING EXHIBIT

FCC Form 349 - Section III-a - Engineering

BROWN BROADCAST SERVICES
INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

**ENGINEERING STATEMENT
PROPOSED MINOR-MODIFICATION OF
CONSTRUCTION PERMIT BNPFT-20171219AES
W252DW, MONTICELLO, ME
>change to Jampro Antenna<**

SUMMARY

Applicant Allan H Weiner hereby submits this 349 application to change to a Jampro JLCP-2 antenna, instead of the PSI antenna specified in the original Long Form application. The Long Form application resulted in the Construction Permit captioned above. No other changes of any kind, are proposed herein.

§74.1201(g) COMPLIANCE

Attached **Exhibit 10** shows that the entire proposed 60dBu translator contour is completely contained within a 25 mile radius centered at the AM transmitter site, and also within the WXME 2mv/m daytime contour.

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Exhibit 10

Prop. W252DW modification vs. WXME (AM) & 25mi Radius

Brown Broadcast Services, Inc.
Master Database: 2018_Oct_17.fmd
Lat: N46:20:30 Lon: W067:49:04 NAD-27
Scale: 1:500000
Channel: 252 Class: DX

rfInvestigator Version 3.8.16
by rfSoftware, Inc.
Date: 10/17/2018 6:14:01 PM

Red = Prop. Translator 60dBu
Blue = WXME (AM) 2mv/m Daytime
Green = 25mi/40km from WXME

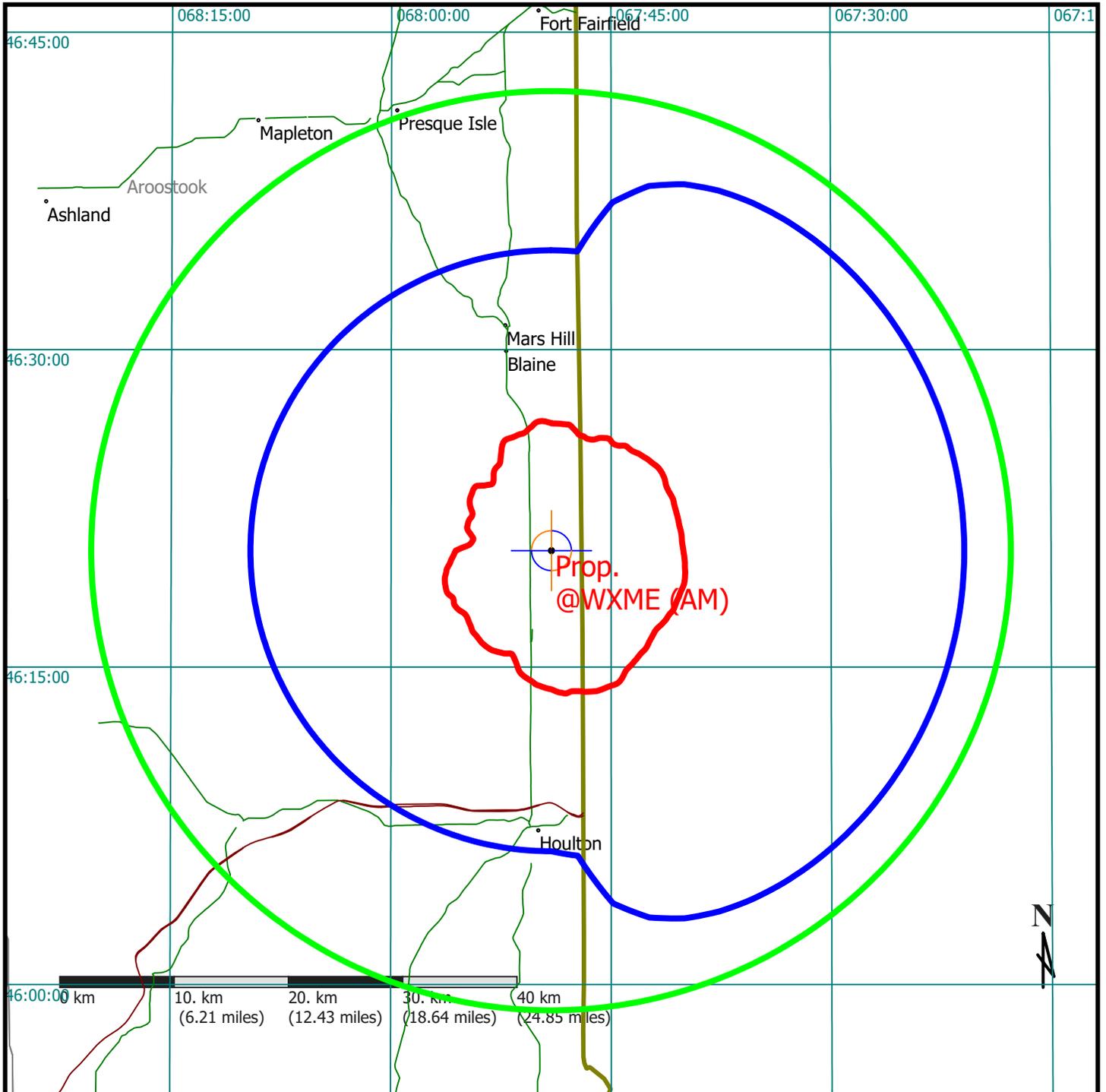


EXHIBIT 13 OVERLAP REQUIREMENTS

INTERFERENCE PROTECTION

REFERENCE		CH# 252D - 98.3 MHz, Pwr= 0.175 kW, HAAT= 0.0 M, COR= 233 M		W252DW Allan H Weiner		Average Protected F(50-50)= 6.5 km		Omni-directional		DISPLAY DATES	
46 20 30.0 N. 67 49 04.0 W.										DATA 09-28-18 SEARCH 10-17-18	
CH	CALL	TYPE	ANT	AZI	DIST	LAT.	Pwr(kW)	INT(km)	PRO(km)	*OUT*	
CITY		STATE		<--	FILE #	LNG.	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
252D	W252DW!	CP	C	0.0	0.00	46 20 30.0	0.175		---	Reference---	
Monticello		ME		0.0	BNPFT20171219AES	67 49 04.0		233	Allan H Weiner		
249C3	WCXU	LIC	NCN	351.3	50.49	46 47 26.0	20.000	3.2	31.1	18.3	
Cari bou		ME		171.2	BLH19951027KC	67 55 07.0	97	272	The Canxus Broadcasting Co		
251B	AL0494	VAC		161.7	133.50	45 12 00.0	50.000	73.0	65.0	42.7	
St Stephen		NB		342.1		67 17 00.0	150	216			

Terrain database is FCC NGDC 30 Sec, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
 In & Out distances between contours are shown at closest points. Reference Zone= East Zone, Co to 3rd adjacent.
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C, H, V, E), Beamtilt(Y, N, X)
 Incoming contour overlap is ignored.
 Reference station has protected zone issue: AM tower

This proposal meets all requirements of 47 CFR §74.1204 regarding interference protection to other stations, authorizations, and allotments. It clears the protected contours of all domestic and Canadian records by wide margins.

Exhibit 13a shows compliance with §74.1235(d)(3), and the latest revisions of the Working Agreement with Canada. Since the proposed 34dBu interfering contour extends into Canada, this contour is limited to 60km in all directions.

PROTECTED ZONES REPORT

Protected zones report for W252DW.C on channel 252D 10-17-2018
 Lat. 46 20 30.0 Lng. 67 49 04.0, ERP= 0.175 kw, HAAT= 0 m

Distance to border = 2.9 km.
 The translator's 34 dBu F(50-10) contour likely touches Canada.
 Closest AM Facility is WXME, MONTICELLO, ME, L, ND2 at 0.0° at a distance of 0.0 km
 Facility is okay with respect to FCC monitoring stations.

BROWN BROADCAST SERVICES INCORPORATED

Exhibit 13a
Prop. W252DW Modification
§74.1235(d)(3) Compliance

Brown Broadcast Services, Inc.
Master Database: 2018_Oct_17.fmd
Lat: N46:20:30 Lon: W067:49:04 NAD-27
Scale: 1:750000
Channel: 252 Class: DX

rfInvestigator Version 3.8.16
by rfSoftware, Inc.

Red = Prop. Translator 60dBu F(50,50)
Orange = Prop. Translator 34dBu F(50,10)
Green = 60km radius from Translator Site

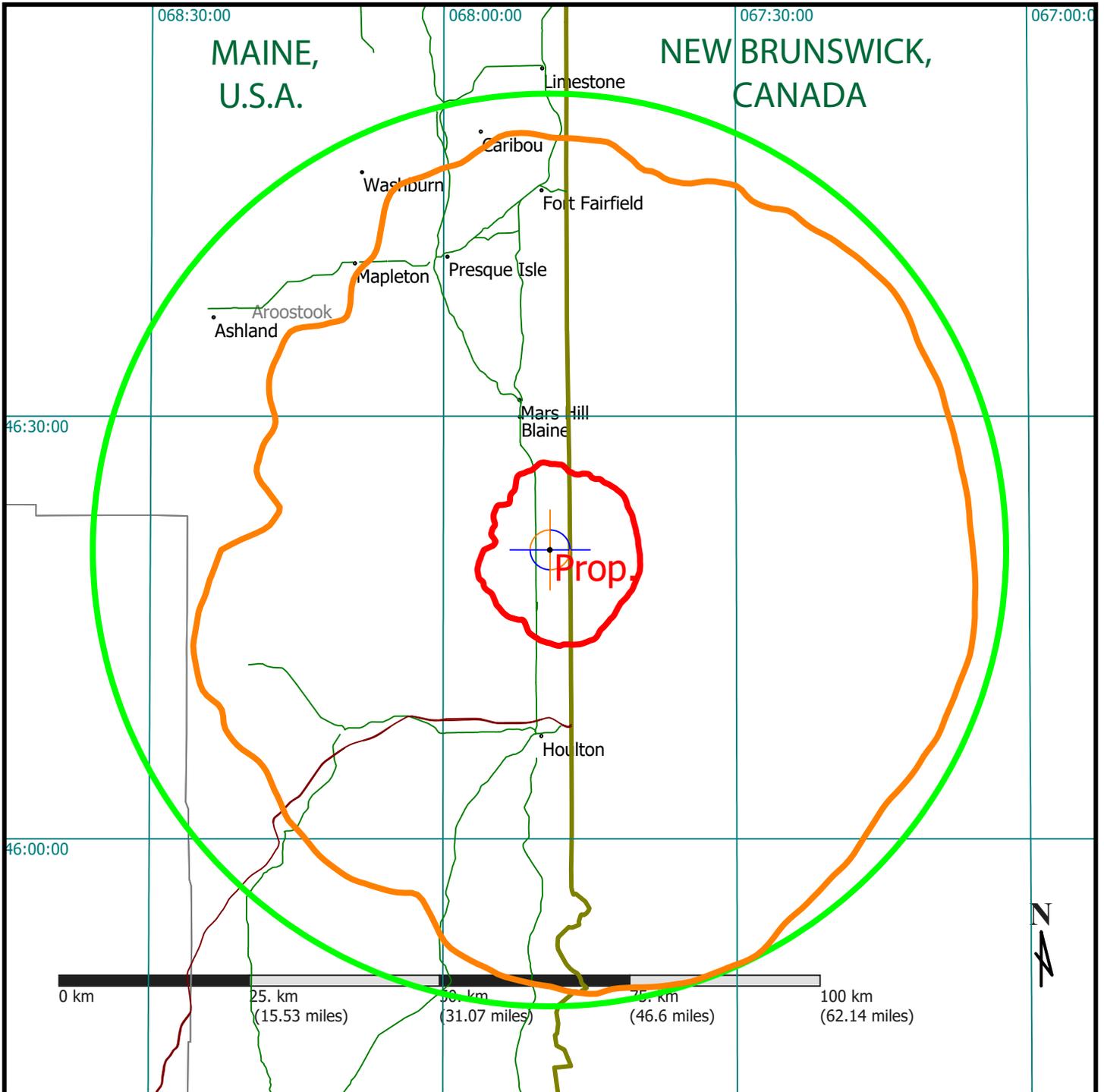


EXHIBIT 17

ENVIRONMENTAL PROTECTION ACT / NIER ANALYSIS

The applicant proposes mounting a new antenna on an existing 124m registered tower. The proposed center of radiation is 102m AGL, with 175 watts ERP.

A two-bay, Full wave-spaced Jampro JLCP-2 Double-V circularly polarized omnidirectional is proposed. Calculations were made using FM Model for Windows, using the appropriate "Type 2" setting. FM Model predicted a maximum RF exposure of $0.22\mu\text{W}/\text{cm}^2$, at 56.6 meters from the tower base. This represents 0.11% of the Maximum Permissible Exposure (MPE) of $200\mu\text{W}/\text{cm}^2$ for uncontrolled environments. 47 CFR §1.1307(b)(3) exempts applicants from preparing an Environmental Assessment when the predicted exposure levels would be less than 5% of the FCC limits.

The applicant will ensure that public access to the tower is restricted by fencing, and that the site is posted with appropriate RF exposure warning signs. If tower climbing by authorized personnel becomes necessary, transmitter power will be reduced or operation will cease, as necessary, so as to not exceed the RF exposure limits.