

Channel Study

REFERENCE		CH# 263D - 100.5 MHz, Pwr= 0.01 kW, HAAT= 130.2 M, COR= 202 M								DISPLAY DATES	
44 20 06.8 N.		Average Protected F(50-50)= 6.6 km								DATA 11-03-14	
69 41 00.8 W.		Omni-directional								SEARCH 11-04-14	
CH CITY	CALL	TYPE STATE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
260B Auburn	WTHH	LIC	CN ME	229.1 48.7	64.93 BLH19980825KD	43 57 07.0 70 17 46.0	28.500 196	6.1 288	66.9 Wbin Media Co., Inc.	51.9	-2.4*<
262B Brewer	WKIT-FM	LIC	C ME	62.4 243.0	83.12 BMLH20140625AEJ	44 40 39.0 68 45 15.0	16.000 269	78.2 334	66.5 The Zone Corporation	-1.5<	4.2
265D Vassalboro	W265CO	LIC	C ME	267.1 87.0	7.33 BLFT20130419AAI	44 19 54.5 69 46 31.3	0.019 74	0.3 149	5.9 Educational Media Foundati	0.2	1.2
264L1 Waterville	WTNP-LP	CP	ME	7.5 187.5	27.71 BNPL20131114AFC	44 34 57.0 69 38 16.0	0.076 34	100	Sonlight Media Group	12.6	12.5
264C3 Mexico	WTBM	LIC	NCX ME	290.4 109.7	80.39 BLH20020611AAK	44 34 56.0 70 37 59.0	0.850 388	60.3 729	39.2 Mountain Valley Broadcasti	13.7	32.2
265B1 South Portland	WYNZ	LIC	ZCX ME	215.5 35.1	87.86 BLH20090916AAQ	43 41 26.0 70 19 05.0	25.000 93	4.0 126	44.0 Saga Communications Of New	76.9	43.6
263D Portland	W263BZ	LIC	C ME	218.7 38.2	82.02 BLFT20110118ABR	43 45 28.0 70 19 16.0	0.010 145	23.6 193	7.0 Light Of Life Ministries,	51.6	52.1
263B Lac-etchemin	AL0621	AL	QU	343.2 162.5	241.49	46 24 41.0 70 35 44.0	50.000 150	172.5 562	65.0	62.1	143.8

Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM

Contour distances are on direct line to and from reference station. Reference Zone= East Zone, Co to 3rd adjacent.

All separation margins (if shown) include rounding

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)

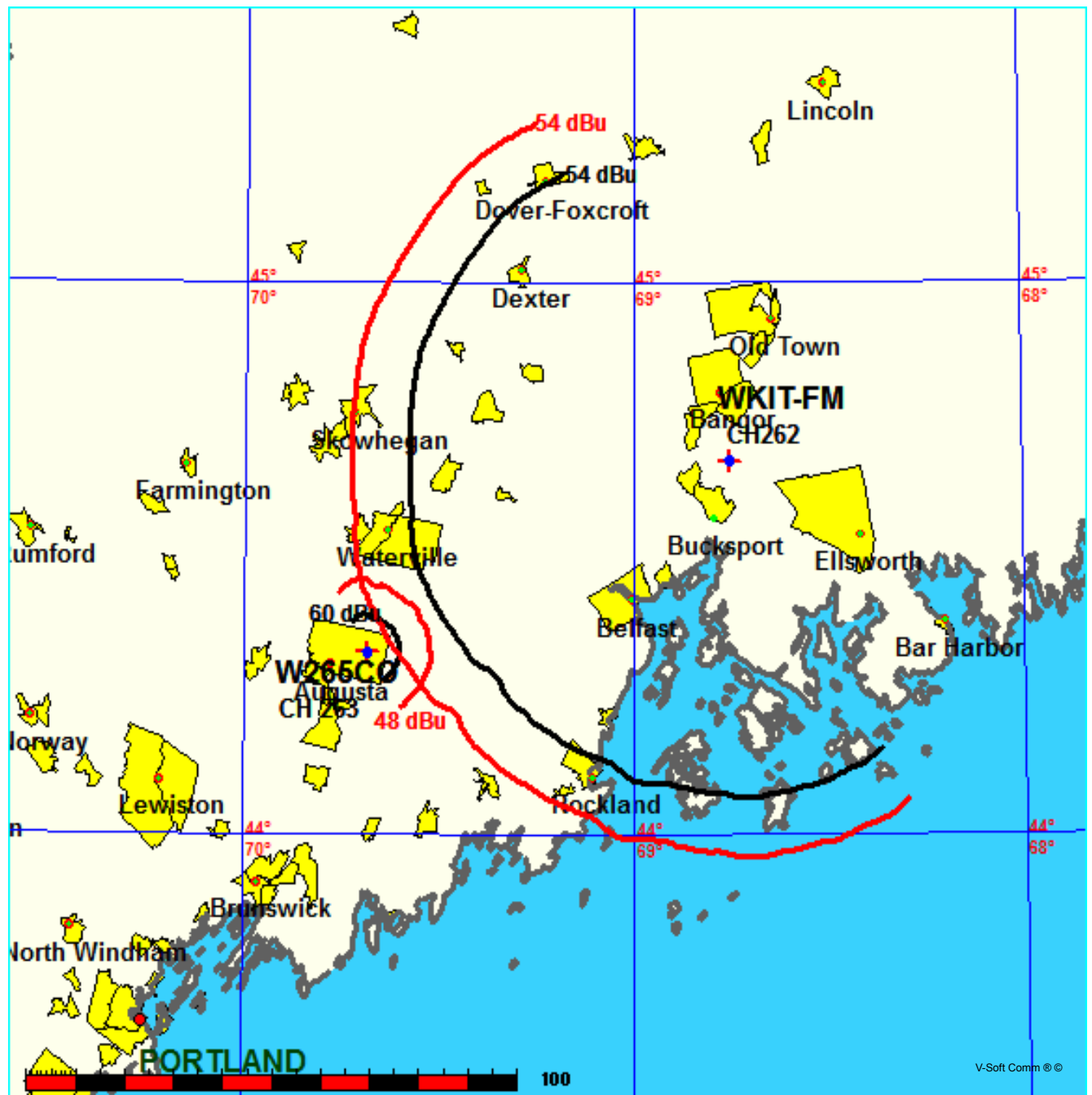
""affixed to 'IN' or 'OUT' values = site inside protected contour.

< = Contour Overlap

FMCommander Single Allocation Study - 11-04-2014 - NGDC 30 SEC
W265CO's Overlaps (In= -1.45 km, Out= 4.18 km)

W265CO CH 263 D
Lat= 44 20 06.8, Lng= 69 41 00.8
0.01 kW 130.2 M HAAT, 202 M COR
Prot.= 60 dBu, Intef.= 48 dBu

WKIT-FM CH 262 B BMLH20140625AEJ
Lat= 44 40 39.0, Lng= 68 45 15.0
16.0 kW 269 M HAAT, 334 M COR
Prot.= 54 dBu, Intef.= 54 dBu



Educational Media Foundation

5700 W Oaks Blvd
Rocklin, CA 95765

*Exhibit 13-A
Vassalboro, ME*

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 54dBu contour of third adjacent channel station WVHV-FM, channel 260B, Auburn, ME. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for W265CO.P:	10 watts
The proposed COR for W265CO.P:	80 meters
WTHT F(50/50) contour at proposed site:	54.9dBu
The F(50/10) contour of proposed W265CO.P:	94.9dBu

The predicted distance to the 94.9dbu interfering contour is 399 meters. Taking into account the vertical elevation pattern of the three bay .75 wave-spaced antenna and the height above ground of 80M, it has been determined that the interfering contour of 94.9dbu does not reach the ground. As seen in Exhibit 13-A1, the lowest elevation for this interfering contour is 19.982M above ground at a distance of 93.4m from the antenna.

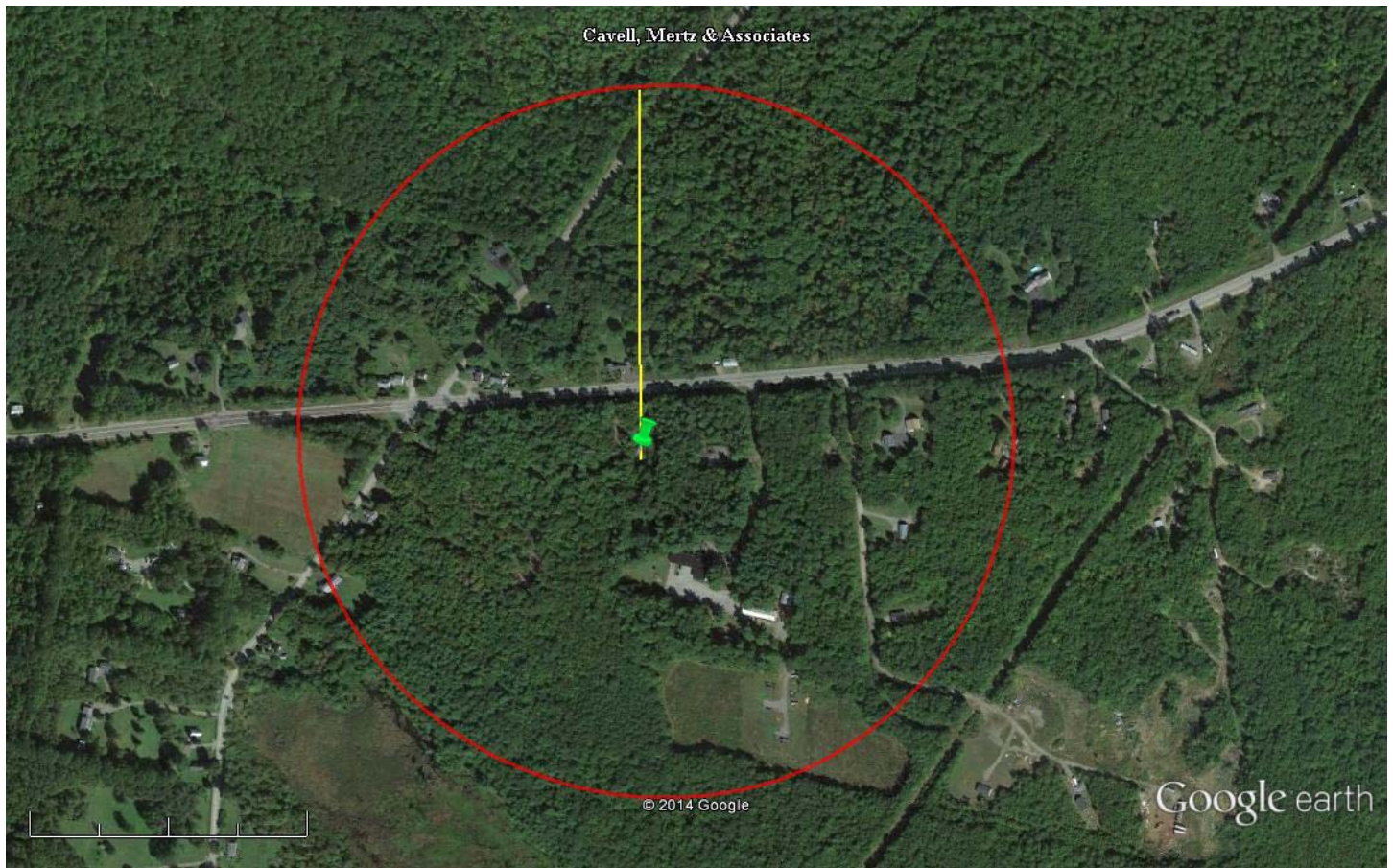
As can be seen in Exhibit 13–A2 there are no surrounding structures which are tall enough to enter the interfering contour within the 399m distance from the antenna.

Therefore, EMF respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

EXHIBIT 13 - A1
74.1204(d) Showing
W265CO
Vassalboro, ME

ERP (kw): 0.01
Height of Antenna above Ground (m): 80
Translator's IX Contour: 94.9
Antenna Type: JLCP-3BAY 0.75 wave spacing

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.0100	399.0249	80.000
5	0.939	0.0088	374.6844	47.344
10	0.769	0.0059	306.8501	26.716
15	0.529	0.0028	211.0842	25.367
20	0.279	0.0008	111.3279	41.924
25	0.054	0.0000	21.5473	70.894
30	0.116	0.0001	46.2869	56.857
35	0.208	0.0004	82.9972	32.395
40	0.234	0.0005	93.3718	19.982
45	0.209	0.0004	83.3962	21.030
50	0.157	0.0002	62.6469	32.010
55	0.088	0.0001	35.1142	51.236
60	0.027	0.0000	10.7737	70.670
65	0.018	0.0000	7.1824	73.490
70	0.047	0.0000	18.7542	62.377
75	0.057	0.0000	22.7444	58.031
80	0.051	0.0000	20.3503	59.959
85	0.045	0.0000	17.9561	62.112
90	0.033	0.0000	13.1678	66.832



Google earth

feet
meters

2000

800



Green Pin Marker:

NAD27

44 20' 06.8" N

69 41' 00.8" W

Yellow Marker: 399m at zero degrees true north

Red Circle Contour: 399m radius from proposed site