

TECHNICAL REPORT

Minor Modification to WOYO-FM

This technical report has been developed in support of an application for a one-step upgrade to WOYO-FM 224A to 224C3 at Norway, Maine, FCC file no. BLH-5644.

The following exhibits are provided in support of the form 301 application:

- E-1 Spacing Study
- E-2 70 dBu Contour Plot Coverage to Norway, ME

WOYO-FM allocation study:

Exhibit E-1 demonstrates that the WOYO-FM 224C3 facility will be fully spaced, including Canadian spacing requirements. Its site also serves as the fully spaced allocation site. The facility also meets the community coverage requirements of Section 73.315. Exhibit E-2 shows the modification will continue to place a 70 dBu F(50-50) city-grade contour to the Norway, ME community of license.

The maximum class 224C3 facility at 224 meters HAAT was calculated to be 5.2 kW resulting in a 60 dBu contour of 39.46 km.

WOYO-FM Antenna System:

The facility will be relocated to an existing tower, ASR 1023995 at coordinates:

44-17-47N 70-37-05W NAD27

The facility will employ a three bay full-wavelength nondirectional antenna at a COR AGL of 113 meters, and operate at an ERP of 5.2 kW.

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RF Exposure Calculation:

The RF contribution of the 5.2 kW facility was calculated using the Commission's FMMODEL program. The maximum RF produced at a height of 2 meters above ground, was calculated to be 2.96 $\mu\text{Watts}/\text{cm}^2$ at a distance of 56 meters from the tower, which is well below 5% of the 200 $\mu\text{Watts}/\text{cm}^2$ permissible for general public exposure, allowing exclusion from consideration..

Conclusion:

It is concluded that the one-step upgrade of WOXO-FM from 224A to 224C3 complies with all Commission policies and rules.



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E-1 WOYO-FM Spacing Study

REFERENCE		DISPLAY DATES
44 17 47.0 N.	CLASS = C3 Int = B1	DATA 11-19-08
70 37 05.0 W.	Current Spacings to 3rd Adj.	SEARCH 11-20-08
----- Channel 224 - 92.7 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
WOYO-FM	LIC 224A	Norway	ME 153.3	11.2	141.5	-130.3
WEZF	LIC 225C	Burlington	VT 279.2	177.0	175.5	1.5
WMGX	LIC-N 226B	Portland	ME 156.8	73.5	70.5	3.0
WMME-FM	LIC 222B	Augusta	ME 86.3	74.7	70.5	4.2
WEZQ	LIC 225B	Bangor	ME 71.7	171.1	144.5	26.6
WXRV	LIC 223B	Andover	MA 193.1	173.7	144.5	29.2
AL1875	RSV 223B	Andover	MA 193.1	173.7	144.5	29.2
CBF-FM-12	OP 224A1	Victoriaville	QC 333.0	218.2	163.5	54.7
WPHX-FM	LIC-N 221A	Sanford	ME 188.7	98.5	41.5	57.0
COATICOOK	AL 227A	Coaticook	QC 314.9	120.2	54.5	65.7
CJSQ-FM	OP -D 224B	Québec	QC 346.7	289.0	222.5	66.5

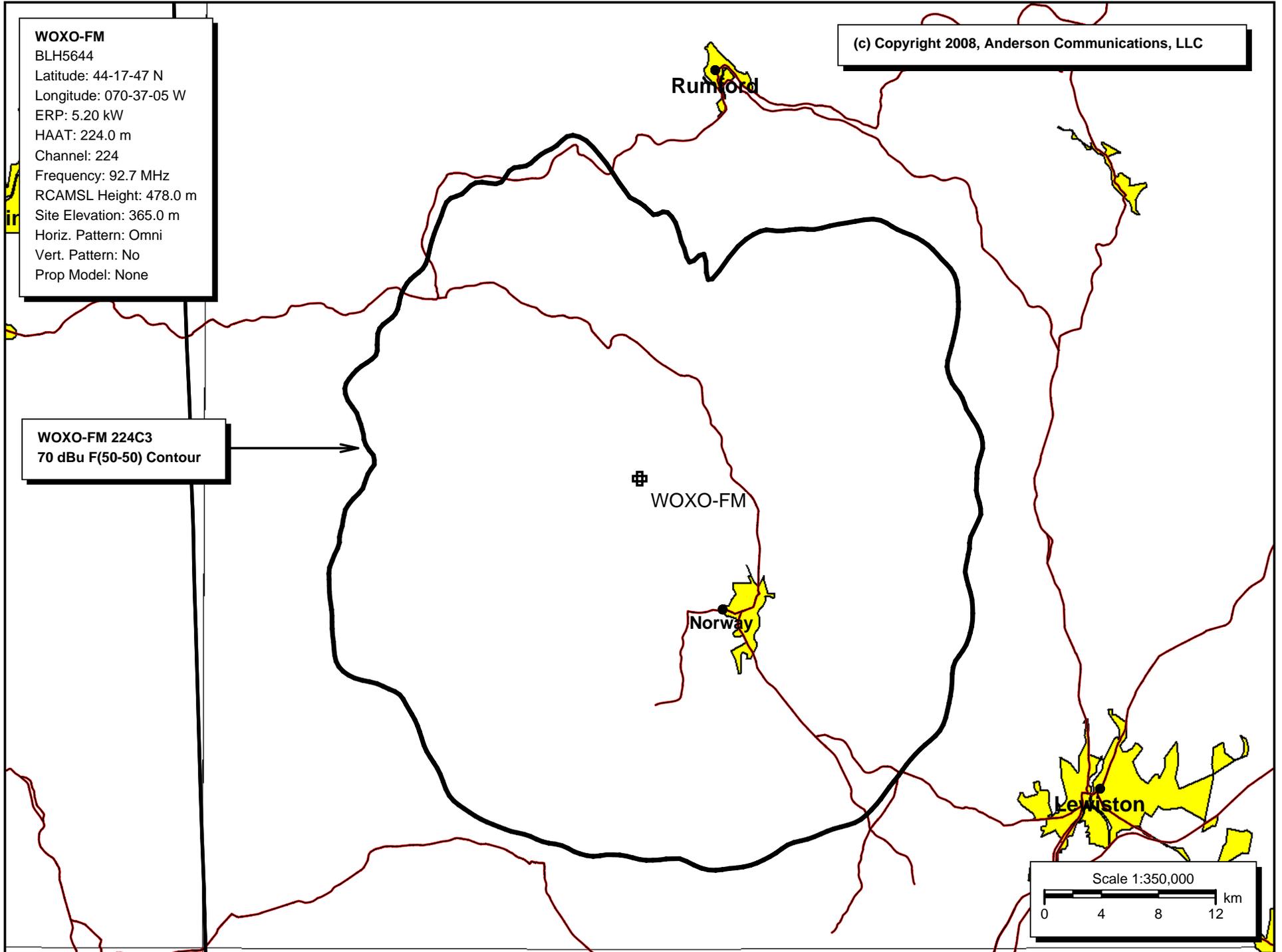
Reference station has protected zone issue: Canada

E-2 WOXO-FM 70 dBu Contour Plot

WOXO-FM
BLH5644
Latitude: 44-17-47 N
Longitude: 070-37-05 W
ERP: 5.20 kW
HAAT: 224.0 m
Channel: 224
Frequency: 92.7 MHz
RCAMSL Height: 478.0 m
Site Elevation: 365.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

WOXO-FM 224C3
70 dBu F(50-50) Contour

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Registration 1023995[Map Registration](#)**Registration Detail**

Reg Number	1023995	Status	Constructed
File Number	A0519495	Constructed	07/29/1962
FAA Study	96-ANE-0197-OE	EMI	No
FAA Issue Date	06/18/1997	NEPA	No

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Communications Purposes

Location (in NAD83 Coordinates)

Lat/Long 44-17-47.0 N 070-37-03.0 W OFF ROUTE 219 - SHAWS LEDGE

City, State WEST PARIS , ME

Center of AM Array

Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
364.5	116.7
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
481.2	106.7

Painting and Lighting Specifications

FCC Paragraphs A2, H, 3, 12, 23

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Owner & Contact Information

FRN	0015584253	Licensee ID	L01199964
Assignor FRN	0007007982	Assignor ID	L00549920

OwnerTommila , Peter J
P.O. Box 660485
Sacramento , CA 95566P: (916)799-0513
E: diamondledge@yahoo.com**Contact**P:
E:

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Last Action Status

Status	Constructed	Received	10/06/2006
Purpose	Change Owner	Entered	10/06/2006
Mode	Interactive		

Related Applications

10/06/2006	A0519495 - Change Owner (OC)
07/25/2002	A0276061 - Change Owner (OC)
04/30/2002	A0262412 - Duplicate (DU)
	Related applications (8)

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Comments**Comments**

None

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Automated Letters

10/10/2006	Ownership Change, Reference 527992
10/10/2006	Authorization, Reference 528104
07/26/2002	Authorization, Reference 230937
All letters (11)	

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