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Technical Statement
In Support of

Saranac Lake Radio, LLC

W290AT, FCC Facility ID 148182

Application for Minor Modification to Construction Permit

Reason for Amendment

Saranac Lake Radio holds a Construction Permit (BPFT-20090507ADL) for changes to its W290AT, Because of concerns about RF exposure, the applicant requests leave to amend its application to specify an antenna height one meter higher.

This technical statement is complete in all respects, and all changes refer to the currently licensed facility.

Introduction

Saranac Lake Radio proposes the following changes to its W290AT:

Transmitter location
Height above ground
Height above mean sea level
Effective radiated power
Directional antenna characteristics

W290AT is located within 320km of Canada, and will continue to be so located. The proposed 34dbu f(50,10) extends less than 60km and does not cross the Canadian border.

The proposed transmitter location and entire 60dbu f(50,50) contour of W290AT are located within the 60dbu f(50,50) contour of its primary station (WYZY, facility ID 73315) on the primary station's second adjacent channel. No interference will be caused to the primary station within the primary station's principal community. W290AT and WYZY are co-owned. W290AT therefore qualifies as a fill-in translator, and under 74.1235(a) is permitted an ERP of up to 250W.

No objectionable interference will be caused to any other station, allocation, or proposal.

No frequency change is proposed. The proposed 60dbu f(50,50) contour overlaps the existing 60dbu f(50,50) contour. Therefore, this proposal is for a minor change.

Detailed information is provided below.

Conflict List

The following chart lists all conflicts that would not be fully spaced to a Class A station operating at the proposed location:

adj	chan	status	call	cy	st	city	kw	da	haat	az	dkm	min	Δ	owner
1	289C1	OPER	CFGLFM	CA	QC	LAVAL	41	N	297	357	90.75	168	-77.3	
0	290L1	LIC	WOMM-LP	US	VT	BURLINGTON	0.1	N	15	133	34.83	67	-32.2	PEACE AND JUSTICE CENTER
0	290L1	CP MOD	WOMM-LP	US	VT	BURLINGTON	0.1	N	14	133	34.83	67	-32.2	PEACE AND JUSTICE CENTER
2	292C2	LIC	WYZY	US	NY	SARANAC	1.5	Y	706	271	27.77	55	-27.2	SARANAC LAKE RADIO, L.L.C.
0	290A	APP	NEW	US	VT	HARDWICK	6	Y	100	100	91.14	115	-23.9	NASSAU BROADCASTING HOLDINGS, INC.
0	290A	APP	NEW	US	VT	HARDWICK	6	N	100	102	94.35	115	-20.7	NASSAU BROADCASTING HOLDINGS, INC.
1	291B	OPER	CIMOFM	CA	QC	MAGOG	1.6	N	594	55	123	137	-14	

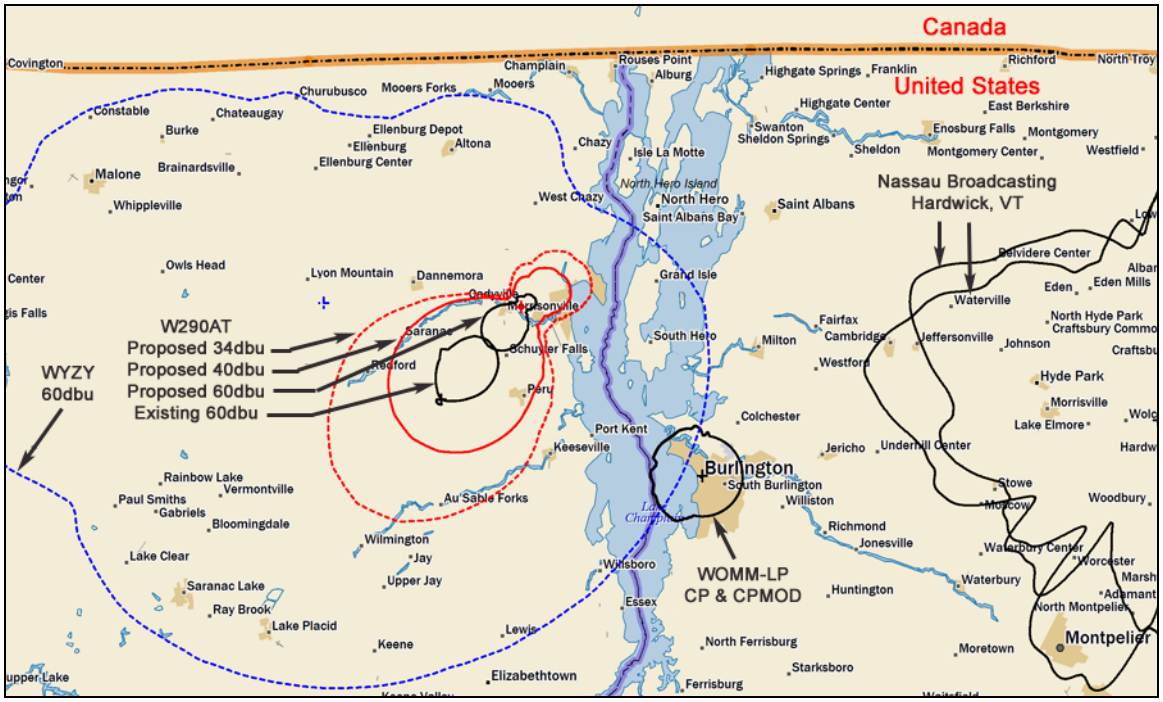
The first and last records refer to Canadian conflicts. The proposed 34dbu f(50,10) contour does not cross the border, and no interference will be caused to these conflicts on Canadian soil.

The second and third records refer to WOMM-LP in Burlington, VT. As will be demonstrated, no interference will be caused to this facility.

The fourth record is the primary station. Under 74.1203(d), second adjacent channel operation is permitted between a translator and its primary station, provided that interference is not caused to the primary station within its principal community. In order for interference to be present, an interfering signal of at least 110dbu would be required (70dbu + 40db). It will be demonstrated that no such interference will be caused.

The remaining records refer to an application by Nassau Broadcasting for Hardwick, VT. Again, it will be demonstrated that no prohibited overlap will occur.

Conflict Map



On the above map, red contours represent f(50,10) interfering signals, black contours represent 60dbu f(50,50) protected contours, and the blue dashed contour represents the 60dbu f(50,50) contour of WYZY, Saranac, NY, the primary station.

The map demonstrates the following:

1. The proposed 60dbu f(50,50) contour falls entirely within the 60dbu f(50,50) contour of the primary station.
2. The proposed 60dbu f(50,50) contour overlaps the existing 60dbu f(50,50) contour.
3. The proposed 40dbu interfering contour does not overlap the 60dbu f(50,50) protected contour of any other US record.
4. The proposed 34dbu f(50,10) contour does not cross the Canadian border. Its maximum extent is 35.9km, and that is in a direction away from the Canadian border.
5. The proposed f(50,10) signal at Saranac, NY is on the order of 40dbu.

Skywaves Consulting LLC
PO Box 4, Millbury, MA 01527

Washington: 202-370-6357
Providence: 401-354-2400
http://www.skywaves.com
Boston / Worcester: 508-425-7176
New York City / NJ: 201-847-0933
Email dave@skywaves.com

Antenna Location

The proposed location is atop an existing building at the Clinton County Fairgrounds. The building includes a slanted roof that has no ready access. The ridgepole is 5.5m Above Ground Level. The antenna will be mounted 4.6m above the roof on a pole, which corresponds to 10.1m AGL. The site elevation is 116m, so the antenna will be mounted at 126m Above Mean Sea Level. This installation falls under the 6.1m exclusion for TOWAIR, and FAA notification is not required.

Environmental Considerations

The addition of a short pole on an existing roof will cause no significant environmental effects. No grading or other heavy construction will be required.

FMMODEL produces a maximum ground level exposure of less than 40µW/cm², or only 25% of the permissible level for casual exposure, for the worst-case antenna with H-only polarization and 250W ERP mounted 10m AGL.

On the roof, the maximum exposure will be on the order of 340 µW/cm². While this is greater than the limit for casual exposure, the roof is inaccessible except by ladder or bucket truck. Appropriate warning signage will be provided on the building, and a kill switch will be provided below the antenna.

The applicant commits to turning off the carrier when workers are present on the roof.

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