

JOB 113140

VER 1

COMMUNITY OF LICENSE Syracuse, NY

APPLICANT Syracuse Community Radio, Inc.

# **CONSOLIDATED ENGINEERING EXHIBIT**

FCC Form 318 - Section VI - LPFM Engineering, Tech Box

**ENGINEERING STATEMENT**  
**PROPOSED NEW LPFM STATION AT SYRACUSE, NY**  
**Syracuse Community Radio, Inc.**

**SUMMARY:**

The applicant seeks a new LPFM station. This proposal is fully spaced to all co-channel and first-adjacent stations. It is short-spaced to one or more second-adjacent stations. Contour protection is provided by the D/U method, in compliance with 73.807(e)(1). **See Exhibit 11.** A waiver of second-adjacent spacing is hereby requested.

**PERTINENT SPECIFICATIONS NOT INCLUDED IN SECTION VI - TECH BOX:**

HAAT:	58 meters
ERP:	26 watts
DATA SOURCE:	V-Soft FMCommander with HAAT Method 0(zero); FCC 30- Second Terrain
SUPPORT STRUCTURE:	Tower

**BROWN BROADCAST SERVICES**  
INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

# EXHIBIT 11 INTERFERENCE

REFERENCE		DISPLAY DATES
43 00 25.0 N.	CLASS = L1 Int = L1	DATA 11-13-13
76 05 38.0 W.	Current Spacings to 2nd Adj.	SEARCH 11-13-13
----- Channel 223 - 92.5 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
WSEN-FM LIC	221B1	Baldwinsville NY	314.1	27.64	45.5	-17.9
Specially Negotiated Short-Spaced Allocation with respect to Canada						
WXUR LIC	224B1	Herkimer NY	78.1	76.14	73.5	2.6
WBEE-FM LIC	223B	Rochester NY	280.0	114.22	111.5	2.7
Grandfathered at 50KW @ 152 Meters HAAT						
W222AH LIC-D	222D	Cortland NY	192.8	43.50	14.5	29.0
WKGB-FM LIC	223A	Conklin NY	168.7	101.22	66.5	34.7
W222AT LIC	222D	Hamilton NY	115.3	50.75	14.5	36.3
629635 APP	222D	Dryden NY	194.8	55.37	14.5	40.9
1571154 APP	224D	Dryden NY	194.8	55.37	14.5	40.9
W221CW CP -D	221D	Groton NY	210.3	49.75	7.5	42.3
W222BU CP -D	222D	Rome NY	67.9	59.71	14.5	45.2

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Reference station has protected zone issue:  
All separation margins include rounding

## **PROTECTED ZONES REPORT:**

Protected zones report for NEW on channel 223L1 11-13-2013  
Lat. 43 00 25.0 Lng. 76 05 38.0, ERP= 0.026 kw, HAAT= 57.9M

\*\*\* Station must coordinate with Canada. Distance to border = 90.3 km.

Closest AM Facility is WSKO, SYRACUSE, NY, L, DAN at 48.3° at a distance of 3.1 km  
Facility is okay with respect to FCC monitoring stations.

Closest FCC Monitoring Station is 96.2 km= Canandaigua, NY  
Facility is okay toward West Virginia Quiet Zone. Distance to center = 589.5 km  
Facility is okay toward Table Mountain. Distance to Center = 2451.8 km, Azimuth =  
272.4 Degrees True

## **CONTOUR PROTECTION TO 2<sup>ND</sup>-ADJACENT STATIONS:**

Contour protection to 2nd-adjacent station WSEN-FM is provided using the ratio method. The F(50/50) contour of WSEN-FM is 66.7dBu at the proposed site. Using the appropriate U/D ratio of 40dB vs. WSEN-FM, the corresponding “worst-case” interfering contour of the proposed LPFM is

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106.7dBu and the Distance to Contour is 165 meters. As shown by the **Exhibit 11a** map, the nearest populated area is over 200 meters from the tower.

Therefore, there are no populated areas within the interference zone.

EXHIBIT 11a  
106.7dBu F(50,10) Interfering Contour - vs WSEN-FM  
Showing Lack of Populated Areas



Google earth



No populated areas or major roads are located within this contour

## **EXHIBIT 14**

### **ENVIRONMENTAL PROTECTION ACT / NIER ANALYSIS**

The applicant proposes mounting a new antenna on a 117 meter registered tower. The proposed center of radiation is 80m AGL. A 1 bay SWR FMEC/1 antenna is anticipated. This antenna is the functional equivalent of the Jampro "Double-V" series. Calculations were made using FM Model for Windows, version 2.10, using the "Jampro "Double-V"" setting. FM Model predicted a peak exposure of  $0.079\mu\text{W}/\text{cm}^2$ , at 80.4 meters from the tower. This represents 0.04% 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, anti-climb devices, or other appropriate measures. The site will be 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.