

Section 74.1204 - Statement of Compliance
W270CV-CP (formerly W235CJ), Miami, FL
FCC File No. BPFT-20160129AXI
FM Translator Facility ID. 150271
March, 2017

The Applicant proposes a minor modification to the above-referenced, non-reserved band, FM translator authorization. Specifically, the applicant proposes herein to slightly increase power and utilize a different antenna at a lower height on the currently authorized tower structure. No further changes are proposed herein.

Section 74.1204(a) Contour Overlap Protection Criteria

Attached are two maps which demonstrate that proposed technical facility complies with the contour overlap provisions of Section 74.1204(a) of the FCC Rules with respect to all pertinent cochannel (See Exhibit 1) and first-adjacent channel (See Exhibit 2) assignments, authorizations and applications. As shown on Exhibit 2, the minor contour overlap predicted to occur with first-adjacent channel station WKLG(FM) is permitted because the overlap area occurs entirely over water. The instant proposal is well clear of all other relevant co-channel and first-adjacent channel protection considerations not represented herein.

Section 74.1204(d) Second/Third-Adjacent Channel Protection

The required protection to second-adjacent channel stations WLYF(FM), Miami, FL (Channel 268C1) and W272DS-CP (Channel 272D; formerly W267BW) is discussed below. The instant proposal is well clear of all other relevant second and third-adjacent channel protection considerations not represented herein.

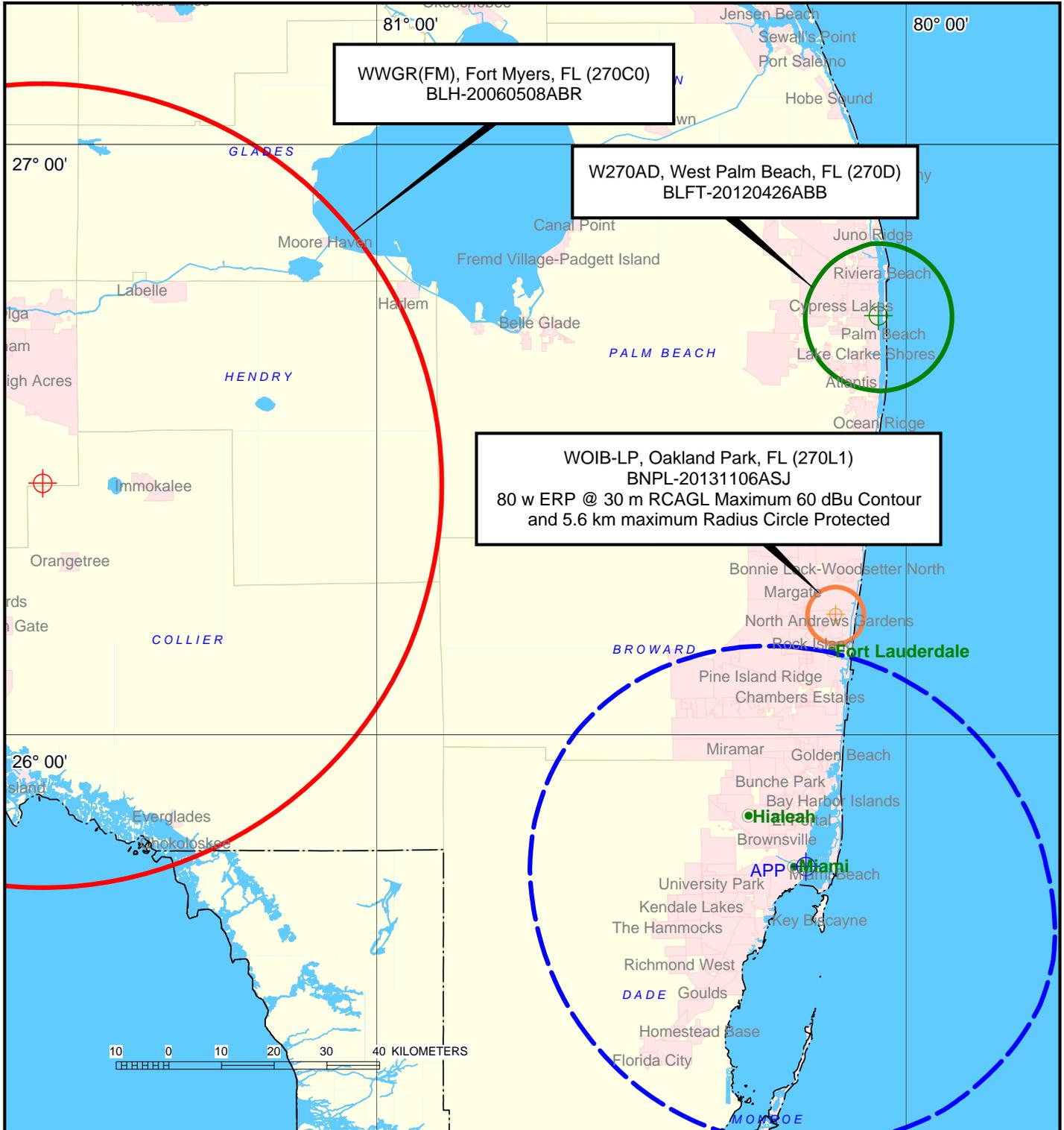
The proposed transmitting antenna will remain on the same tower as specified in the outstanding construction permit for FM translator station W272DS-CP (Facility ID 90508). The W272DS-CP facility is authorized to operate with an ERP of 170 watts (DA-MAX). The W270CV modified facility proposed herein will operate with an ERP of 250 watts (DA-MAX) which is 1.7 dB above the maximum W272DS-CP operating power. Because the stations will operate on a second-adjacent channel basis, with an operating difference of less than the required 40 dB protection ratio from a shared antenna site, no interference is predicted to any population within the W272DS-CP protected service area.

In addition, the proposed transmitting antenna will be located within the protected contour of the second-adjacent channel station WLYF(FM) causing contour overlap as defined in Section 74.1204 of the FCC Rules. However, at the translator's proposed transmitter site, WLYF(FM) is predicted to produce an F(50,50)

signal strength of 85 dBu. Therefore, in the vicinity of the second-adjacent channel translator station, the translator's relevant interfering contour is the 125 dBu contour relative to WLYF(FM).

According to free space calculations, the translator's predicted interfering contour will extend only 60 meters from the proposed transmit antenna. Because the proposed transmit antenna will be located 159 meters above ground level, the predicted interference area will not reach ground level nor will the predicted interference area reach any buildings within a 60 meter horizontal distance from the proposed antenna location (See Exhibit 3).

Accordingly, the proposed facility satisfies Section 74.1204(d) of the FCC Rules because it has been "demonstrated that no actual interference will occur due to lack of population or such other factors as may be applicable".



**CO-CHANNEL SECTION 74.1204
 CONTOUR OVERLAP STUDY**

LIC: W235CJ, ORLANDO, FL (FAC ID 150271)

W270CV-CP: MIAMI, FL, CH. 270D, 160 watts (DA-MAX), 185 m RCAMSL

W270CV-CP-MOD: MIAMI, FL, CH. 270D, 250 watts (DA-MAX), 163 m RCAMSL

MARCH, 2017

W270CV.MOD
Miami, FL (Facility ID 150271)

ERP 250.00 WATTS

Maximum ERP *Interfering contour value ----->* **125** dBu
 0.25 kW *RCAGL (m)----->* **159** meters
 Antenna Type -----> **7**

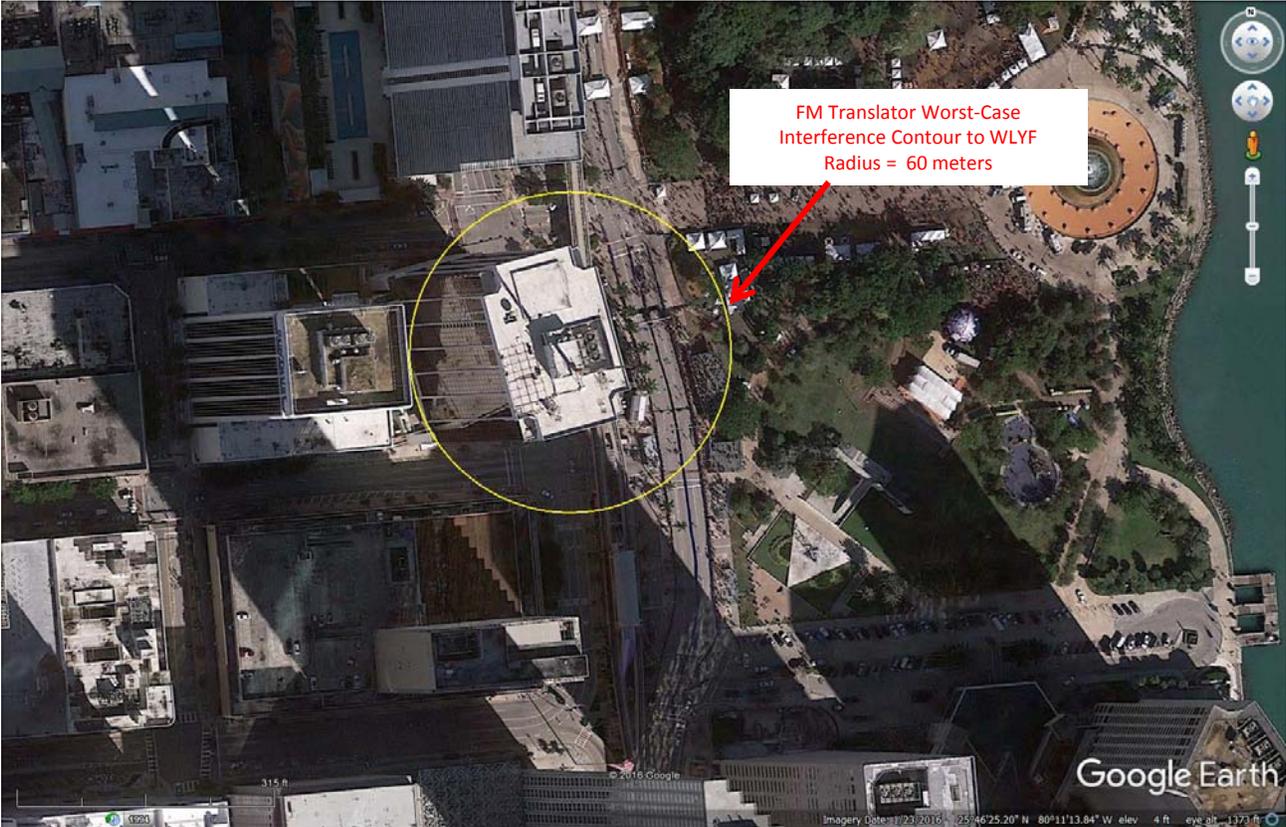
Antenna Type 7 = **Nicom, BKG77, one bay**

Angle Below Horizontal (degrees)	Vertical Pattern (REL. FIELD)	W270CV.MOD ERP (kW)	W270CV.MOD ERP (dBk)	W270CV.MOD Free-Space Distance to interfering contour (meters)	Slant Distance (meters) *	Height of interfering contour above ground (feet)**	Proposed Interference within 30 ' of ground level?	Horizontal Distance (meters) ***	Horizontal Distance (feet) ***
0	1.000	0.2500	-6.021	62.2	N/A	521.7			204.2
5	0.999	0.2495	-6.029	62.2	1,719.9	503.9	No	61.9	203.2
10	0.982	0.2411	-6.178	61.1	863.2	486.8	No	60.2	197.4
15	0.954	0.2275	-6.430	59.4	579.2	471.2	No	57.3	188.1
20	0.918	0.2107	-6.764	57.1	438.3	457.6	No	53.7	176.1
25	0.872	0.1901	-7.210	54.3	354.7	446.4	No	49.2	161.3
30	0.818	0.1673	-7.766	50.9	299.8	438.2	No	44.1	144.6
35	0.758	0.1436	-8.427	47.2	261.3	432.9	No	38.6	126.8
40	0.691	0.1194	-9.231	43.0	233.2	431.0	No	32.9	108.1
45	0.616	0.0949	-10.229	38.3	212.0	432.7	No	27.1	88.9
50	0.538	0.0724	-11.405	33.5	195.7	437.5	No	21.5	70.6
55	0.465	0.0541	-12.672	28.9	183.0	443.9	No	16.6	54.5
60	0.391	0.0382	-14.177	24.3	173.1	452.5	No	12.2	39.9
65	0.313	0.0245	-16.110	19.5	165.4	463.7	No	8.2	27.0
70	0.239	0.0143	-18.453	14.9	159.5	475.8	No	5.1	16.7
75	0.176	0.0077	-21.110	11.0	155.2	486.9	No	2.8	9.3
80	0.129	0.0042	-23.809	8.0	152.2	495.7	No	1.4	4.6
85	0.103	0.0027	-25.764	6.4	150.5	500.7	No	0.6	1.8
90	0.105	0.0028	-25.597	6.5	149.9	500.2	No	0.0	0.0

* Slant distance from antenna center of radiation to location 30 feet (9.1 meters) above ground level at angle below horizontal.

** A negative number indicates that the interfering contour is predicted to reach ground level. If a negative number is present, the interfering contour reaches ground level at the "Horizontal Distance" described below.

*** Horizontal distance from tower base to interfering contour at the indicated height above ground level. If a negative height above ground level is indicated, this horizontal distance is the distance from the tower base to the interfering contour. This horizontal distance is only relevant if the proposed interference is predicted to occur within 30 feet of ground level.



WLYF, Miami, FL
Ch. 268C1, 100 kW ERP, 248 m HAAT
FCC File No. BLH-20090828ADS

Worst-Case Channel 270 Interfering Contour
to Second-Adjacent Channel Station WLYF
AM Fill-in FM Translator Station Facility ID 150271
W270CV-CP Proposed Modification
ERP: 250 watts (DA-MAX) , 159 m RCAGL
March, 2017

