

TECHNICAL EXHIBIT  
APPLICATION FOR FM CONSTRUCTION PERMIT  
FACILITY ID 56985  
STATION WWGR  
FORT MYERS, FLORIDA  
CH 270C0 100 KW 341 M

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application for construction permit to modify the facilities of FM station WWGR at Fort Myers, Florida (Facility ID 56985). Currently, WWGR is licensed (BLH-19870601KA) to operate on channel 270C0 (101.9 MHz) at Fort Myers with a nondirectional antenna maximum effective radiated power (ERP) of 100 kilowatts (kW) and an antenna radiation center height above average terrain (HAAT) of 302 meters. By means of this instant application, it is proposed to relocate transmitter site and operate on channel 270C0 with a nondirectional ERP of 100 kW and an HAAT of 341 meters. It is also proposed to utilize the contour protection provisions of Section 73.215 with respect to the short-spacing with WJHM on channel 270C at Daytona Beach, Florida. No other changes are proposed. Therefore, the instant application is considered a "minor" change in facilities in accordance with Section 73.3573(a)(1).

Response to Paragraph 5 - Antenna Registration

It is proposed to utilize an existing Shively panel antenna mounted on ASR 1027588 and no change in the overall height or location of the existing tower is proposed.

Response to Paragraph 14 - Community Coverage

Figure 1 is a map which demonstrates that WWGR's proposed operation complies with the provisions of Section 73.315. Specifically, it has been determined that the proposed 70 dBu contour will encompass 100% of the area within the Fort Myers limits (2000 Census).

Response to Paragraph 16

Figure 2, attached, is an FM separation study from WWGR's proposed antenna location for the channel 270C0 operation based on the Commission's CDBS database. As shown, the proposed antenna location complies with the minimum distance separation requirements of Section 73.207 for Class C0 operation on channel 270 towards all existing, authorized and proposed stations and allotments with the exceptions of the licensed operations of WKLK on channel 271C1 at Rock Harbor, Florida (BLH-20050527AAS) and WJHM on channel 270C at Daytona Beach, Florida (BLH-19970407KB). Each short-spacing is addressed below.

The proposed WWGR operation is short-spaced by 6.46 kilometers to the licensed operation of WKLK on channel 271C1 at Rock Harbor. The licensed WKLK operation short-spaced WWGR's licensed operation (BLH-19870601KA) under Section 73.215 (7.17 kilometer short-spacing). As the distance to WKLK's licensed operation is increased (i.e. the short-spacing is decreased), WWGR is permitted to operate with maximum Class C0 facilities (ERP 100 kW/HAAT 450 m) towards WKLK's licensed operation.

It is proposed to utilize the contour protection provisions of Section 73.215 with respect to the short-spacing with the licensed operation of WJHM on channel 270C at Daytona Beach.<sup>1</sup> Figure 3 demonstrates that the proposed WWGR operation complies with the contour protection provisions of Section 73.215 with respect to the WJHM channel 270C operation. Actual Class C facilities (ERP 61 kW/HAAT 483 meters) have been presumed for WJHM as specified in Section 73.215.

Environmental Considerations

The proposed WWGR facilities were evaluated in terms of potential radiofrequency radiation exposure at 2 meters above ground level in accordance with OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation". This Bulletin provides assistance in determining whether FCC-regulated

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<sup>1</sup> The distance between WWGR's proposed transmitter location and WJHM's transmitter location (278.54 km) complies with the minimum distance separation requirement of Section 73.215(e) (270 km).

transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency (RF) electromagnetic fields.

The calculated power density at 2 meters above ground level at the base of the tower was calculated using the appropriate equation contained in the Bulletin. Figure 4 is the graph of the vertical plane relative field pattern for the proposed Shively model 6014-8/3, 8-bay nondirectional antenna. As shown on Figure 4, the maximum vertical relative field value towards the tower base ( $-60^{\circ}$  to  $-90^{\circ}$  elevation) is less than 0.35. Therefore, using a vertical relative field value of 0.35, the total ERP of 200 kW (H+V) and an antenna center of radiation height above ground level of 335 meters, the calculated power density at 2 meters above ground level at the base of the tower is 0.0074 milliwatt per square centimeter ( $\text{mW}/\text{cm}^2$ ), or 3.7% of the Commission's recommended limit applicable to general population/uncontrolled exposure areas ( $0.2 \text{ mW}/\text{cm}^2$  for FM frequencies). Therefore, the proposal will comply with the RF emission rules.

Access to the tower site will be restricted and appropriately marked with warning signs. Furthermore, as this is a multi-user site, procedures will be in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such procedures include reducing the average exposure by spreading out the work over a

longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the station is at reduced power or shut down.

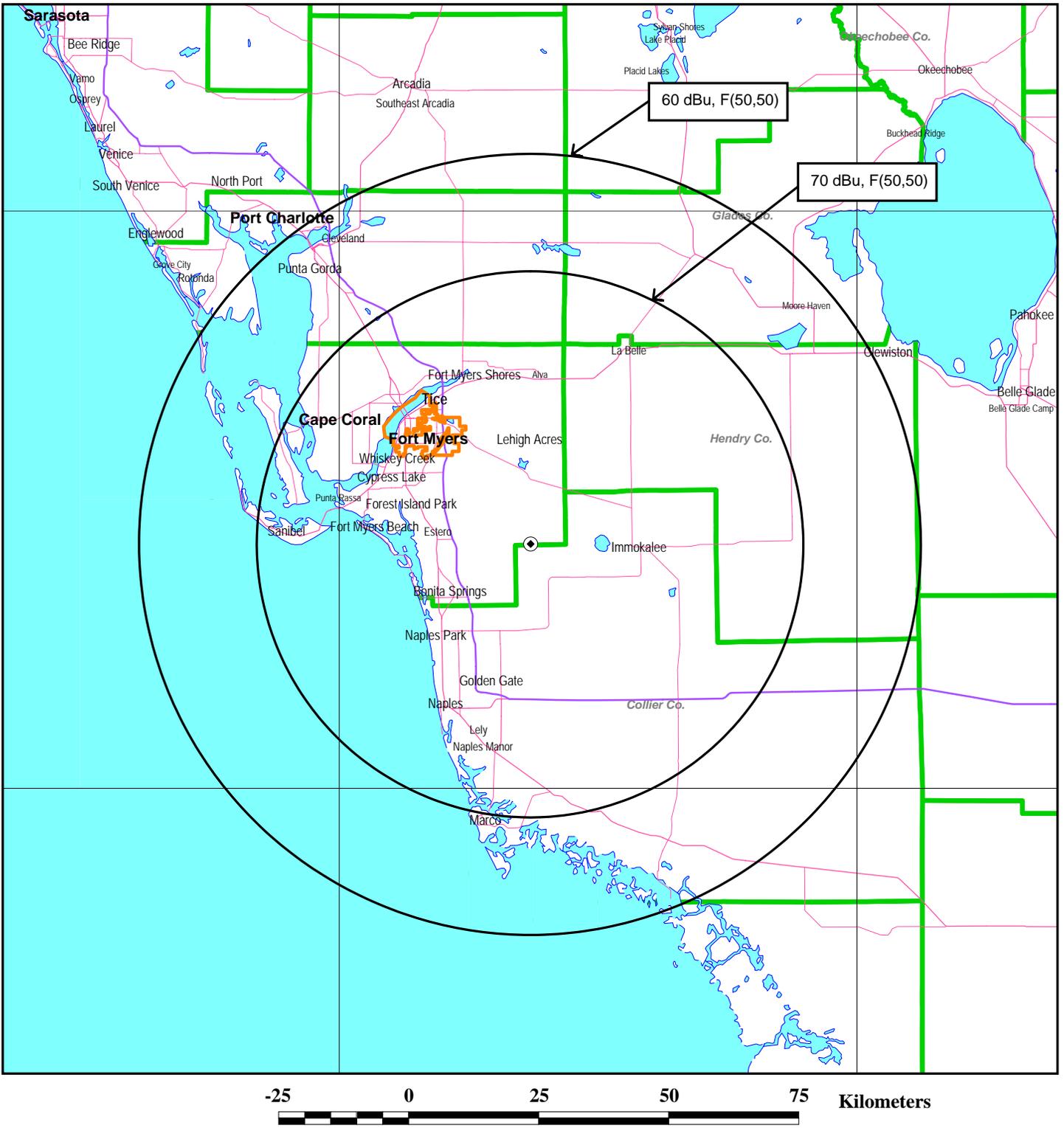


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Figure 1



COMPLIANCE WITH SECTION 73.315

STATION WWGR  
FORT MYERS, FLORIDA  
CH 270C0 100 KW 341 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

CDBS FM SEPARATION STUDY

Job Title: Proposed WWGR, Fort Myers, FL  
 Channel: 270 C0

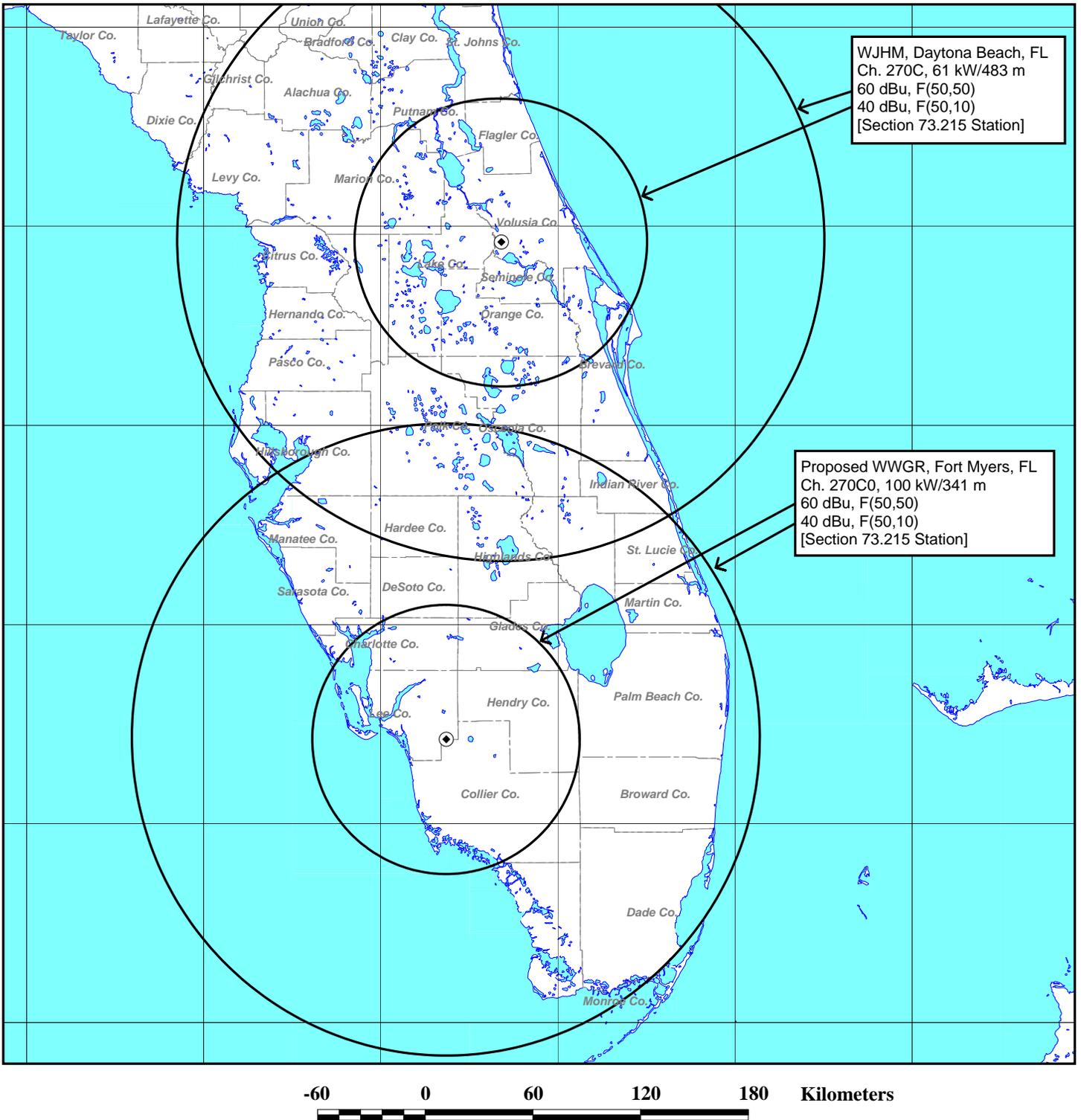
Separation Buffer: 32 km  
 Coordinates: 26-25-22 081-37-49

Call Id	City St	File Status	Channel Num	ERP Freq	HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km) 215	207
WKYZ 73170	KEY COLONY FL CP	BPH C 20040406ABY	269 C1	100.000 101.7	84	N	24-41-30 081-06-31	Y	164.7	198.80 2.80	176.0 Close	196.0
WKYZ 73170	KEY COLONY FL RSV	C	269 C1	0.000 101.7			24-39-02 081-18-36		170.7	198.94 2.94	176.0 Close	196.0
WKYZ 73170	KEY COLONY FL RSV	C	269 C1	0.000 101.7			24-39-02 081-18-36		170.7	198.94 2.94	176.0 Close	196.0
WKYZ 73170	KEY COLONY FL RSV	C	269 C1	0.000 101.7			24-39-02 081-18-36		170.7	198.94 2.94	176.0 Close	196.0
WKYZ 73170	KEY COLONY FL RSV	C	269 C1	0.000 101.7			24-39-02 081-18-36		170.7	198.94 2.94	176.0 Close	196.0
WKYZ 73170	KEY COLONY FL RSV	C	269 C1	0.000 101.7			24-39-02 081-18-36		170.7	198.94 2.94	176.0 Close	196.0
WWGR 56985	FORT MYERS FL LIC	BLH C 19870601KA	270 C0	100.000 101.9	302	N	26-25-23 081-37-07	N	88.5	1.16		
WJHM 73137	DAYTONA FL LIC	BEA C 19970407KB	270 C	61.000 101.9	483	N	28-55-16 081-19-09	Y	6.2	278.54 -2.46	270.0 <b>Short</b> <sup>1</sup>	281.0
WKLG 73177	ROCK HARBOR FL LIC	BLH C 20050527AAS	271 C1	100.000 102.1	131	N	25-05-29 080-26-37	Y	141.0	189.54 -6.46	176.0 <b>Short</b> <sup>2</sup>	196.0
WHPT 51986	SARASOTA FL LIC	BLH C 19890126KE	273 C	100.000 102.5	503	N	27-24-30 082-15-00	N	330.9	125.35 20.35	99.0 Clear	105.0

<sup>1</sup> The proposed WWGR operation is short-spaced by 6.46 kilometers to the licensed operation of WKLG on channel 271C1 at Rock Harbor. The licensed WKLG operation short-spaced WWGR's licensed operation (BLH-19870601KA) under Section 73.215 (7.17 kilometer short-spacing). As the distance to WKLG's licensed operation is increased (i.e. the short-spacing is decreased), WWGR is permitted to operate with maximum Class C0 facilities (ERP 100 kW/HAAT 450 m) towards WKLG's licensed operation.

<sup>2</sup> It is proposed to utilize the contour protection provisions of Section 73.215 with respect to the short-spacing with the licensed operation of WJHM on channel 270C at Daytona Beach. Furthermore, the actual distance separation (278.54 km) exceeds the minimum distance separation set forth in Section 73.215(e) (270 km). See Technical Narrative and Figure 3.

Figure 3



**COMPLIANCE WITH SECTION 73.215**

**STATION WWGR  
FORT MYERS, FLORIDA  
CH 270C0 100 KW 341 M**

Antenna Mfg.: Shively Labs  
Antenna Type: 6014-8/3  
Station: WWGR  
Frequency: 101.9  
Channel #: 270  
Figure: SO 20645

Date: 2/24/2006

Beam Tilt	0	
Gain (Max)	4.326	6.361 dB
Gain (Horizon)	4.326	6.361 dB

