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CONSTRUCTION PERMIT APPLICATION FOR A NEW LOW POWER FM (LPFM) BROADCAST STATION TO SERVE CAPE CORAL, FL



Prepared For:

- Get A Life! Foundation
- 1813 El Dorado Parkway West
Cape Coral, FL 33914-7614

Prepared By:

William T. Godfrey, Jr.
Engineering Associate
Kessler & Gehman Associates
507 NW 60th Street, Suite C
Gainesville, FL 32607-2055
352-332-3157 Extension 4
bill@kesslerandgehman.com
www.kesslerandgehman.com

Prepared On:

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Proposed Parameters:

Channel:	299 (107.7 MHz)
ERP:	67 W
HAAT:	37.3 m
Waiver:	No
Antenna:	Omni
Terrain:	3 Arc Second

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1.0 PURPOSE OF LPFM APPLICATION

Get A Life! Foundation, Inc. (GALF) is incorporated under the laws of the State of Florida as a non-profit corporation. The specific objectives and purposes of GALF are to refer church members of all faiths, church leaders of any denomination, and the community to resources related to Biblical principals and issues with respect to physical, emotional and spiritual health. GALF sponsors seminars and workshops open to church members of all faiths, church leaders of any denomination, and the public, where ideas about physical, emotional and spiritual health according to Biblical principals and related issues are expressed and shared with others. GALF also sponsors seminars and workshops open to church leaders of any denomination, and any other interested persons, wherein leaders are trained in principles of church growth and discipleship.

GALF shall use the proposed Low Power FM (LPFM) station to provide the community with many educational programs such as spiritual topics of prayer, the Cross of Jesus, the power of the Holy Spirit, the person and ministry of Jesus Christ and subjects related to how Bible studies are conducted. The proposed LPFM station will broadcast educational programming that will promote physical, emotional and spiritual well-being according to Biblical principals as well as issues relating to churches and to the community. In addition to religious programming, health education programming, music programming and children's stories, GALF also plans to use the LPFM station to provide outreach programs to encourage members to get involved with the needs of the community. GALF pledges to operate the proposed LPFM station a minimum of 12 hours a day, utilizing a minimum of 8 hours a day for local programming.

2.0 STATION TRANSMITTER AND STUDIO LOCATION

The proposed transmitter site shall be located on the church property (Seventh-day Adventist Church of Cape Coral) in walking distance of the studio, which shall be located inside the church. The antenna shall be mounted at the top level of a new 120 ft above ground level (AGL) tower. The studio's physical address and the transmitter site's geographical coordinates are:

2.1 **Studio Site Physical Address**

The studio and transmitter shall be located at the following physical address:

1813 El Dorado Parkway West
Cape Coral, FL 33914-7614

2.2 **Transmitter Site Geographic Coordinates (NAD27)**

The following North American Datum 27 (NAD 27) coordinates identify the location of the proposed LPFM antenna site:

N. Latitude 26° 33' 00.6"
W. Longitude 082° 00' 45.2"

See Appendix A (NAD83 to NAD27 Conversion)

2.3 **Antenna Structure Registration (ASR) – NOT REQUIRED**

The antenna support structure that will mount the proposed LPFM antenna shall be a 120 ft AGL tower which will be located less than 500 feet from the studio site. GALF has reasonable assurance that it can build the tower at the proposed site. An Antenna Structure Registration (ASR) is not required since there are no airports within 8 kilometers (5 miles) of the proposed site as demonstrated from the FCC's TOWAIR program depicted in **Appendix B** of this report.

3.0 **ANTENNA AND SITE ELEVATIONS (Rounded on 318 Form)**

3.1 **Height of Site AMSL**

6.6 ft / 2.0 m

3.2 **Overall Height of Structure AGL**

120.0 ft / 36.6 m

3.3 **Overall Height of Structure AMSL**

126.6 ft / 38.6 m

3.4 **Antenna Height Radiation Center AGL**

120.0 ft / 36.6 m

3.5 **Antenna Height Radiation Center AMSL**

126.6 ft / 38.6 m

3.6 **Antenna Height Above Average Terrain (HAAT) – 3 Second Terrain**

122.2 ft / 37.3 m (Refer to **Appendix C** for HAAT Calculations)

4.0 **LPFM EFFECTIVE RADIATED POWER**

Pursuant to 47 C.F.R. Section 73.811(a) – Maximum Facilities: LPFM stations will be authorized to operate with maximum facilities of 100 watts Effective Radiated Power (ERP) at an antenna Height Above Average Terrain (HAAT) of 30 meters. An LPFM station with an antenna HAAT that exceeds 30 meters will not be permitted to operate with an ERP greater than that which would result in an F(50,50) 60 dBuV/m contour of 5.6 km. In no event will an ERP less than one watt be authorized. No facility will be authorized in excess of one watt ERP at 450 meters HAAT.

Since the calculated antenna HAAT is 37.3 m (7.3 m greater than 30.0 m AAT) as demonstrated in **Appendix C** of this document, **the applicant proposes to operate with an ERP of 67 W**, as calculated in **Appendix D**, in order to meet the LPFM maximum power and antenna height requirements pursuant to 47 C.F.R. Section 73.811(a) of the FCC Rules. The proposed antenna HAAT of 37.3 m and ERP of 67 W produces an F(50,50) 60 dBuV/m service contour of 5.6 km. Therefore, the proposed power and height combination meets the FCC's LPFM power and antenna height requirements pursuant to Section 73.811(a) and Section 73.811(b) of the FCC rules.

5.0 **FREQUENCY SEARCH PRESELECTION OVERVIEW**

5.1 **Channels Found With No Spacing Violations**

Pursuant to 47 C.F.R. Section 73.807 (Minimum Distance Separation between Stations) of the FCC Rules, the following table depicts a channel which is available for the assignment of an LPFM station at the proposed location:

ERP	Channel	Comments
67 W	299	Channel 299 (107.7 MHz) at the proposed location meets the minimum spacing requirements pursuant to 47 C.F.R. Section 73.807 of the FCC Rules.

5.2 **Channels Found Requiring a Second Adjacent Channel Waiver**

Not applicable – the proposed Channel 299 LPFM facility is fully-spaced with all stations; therefore, the table below is not applicable.

The following table displays the channels that are short spaced with existing second adjacent channel facilities but not with any co-channel or first adjacent channel facilities:

Channel	2 nd Adjacent Stations	Overlap (too close by)
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

6.0 **ALLOCATION ANALYSIS & 2nd ADJACENT CHANNEL WAIVER REQUEST**

Not Applicable - As indicated in Section 5, the channel available for an LPFM facility at the proposed site will not require a waiver of the second adjacent channel separations as allowable pursuant to Section 73.807(e)(1) of the FCC Rules.

6.1 **LPFM Spacing Study - 3 Second Terrain Data Used**

An LPFM station will not be authorized initially unless the minimum distance separations pursuant to Section 73.807 of the FCC Rules are met. **Appendix E** in this report depicts the results of a channel spacing study which demonstrates that the proposed LPFM facility complies with the distance separation requirements pursuant to Section 73.807 of the FCC Rules.

6.2 **Second Adjacent Channel Short Spacing - Waiver Not Required**

Not required – proposed station is fully spaced pursuant to Section 73.807 of the FCC Rules. Second adjacent waiver calculations are not included in **Appendix F** since the proposed channel is fully spaced.

7.0 INTERFERENCE TO TRANSLATOR OR BOOSTER INPUT SIGNALS

Pursuant to the requirements of 47 C.F.R. Section 73.827(a), **Appendix G** lists the following FM Boosters and FM Translator stations which are located within 10 km of the proposed Channel 299 LPFM site and are subject to potential third adjacent-channel interference to the reception of the FM Booster and FM Translator station's input channel from their parent station from the proposed LPFM facility:

FM Boosters

- NONE

FM Translators

- NONE

There are no FM Boosters or FM translators with third-adjacent (CH 296) input channels to the proposed LPFM facility (CH 299); therefore, the proposed LPFM facility will not cause interference to the input signals of surrounding FM translator and/or FM booster stations.

8.0 TELEVISION CHANNEL 6 (TV6) STATIONS

Channel 6 interference is not a factor for LPFM stations operating on channels 221 - 300 and therefore is not applicable to the application for further analysis.

9.0 AM STATION PROXIMITY

This rule part protects the operations of AM broadcast stations from nearby tower construction that may distort the AM antenna patterns. All parties holding or applying for Commission authorizations that propose to construct or make a significant modification to an antenna tower or support structure in the immediate vicinity of an AM antenna, or propose to install an antenna on an AM tower, are responsible for completing the analysis and notice process described in the FCC Rules, and for taking any measures necessary to correct disturbances of the AM radiation pattern, if such disturbances occur as a result of the tower construction or modification or as a result of the installation of an antenna on an AM tower. In

the event these processes are not completed before an antenna structure is constructed, any holder of or applicant for a Commission authorization is responsible for completing these processes before locating or proposing to locate an antenna on the structure, as described in the FCC Rules.

There are no AM stations within 3.2 km of the proposed coordinates as demonstrated in the FCC's AM Query Study below:

Search Parameters	
Search radius:	3.20 km
Center lat / lon:	N 26 33 0.60 W 82 0 45.20
Lower Frequency	530
Upper Frequency	1700
*** 0 AM Records within 3.20 km distance of 26° 33' 0.60 " N, 82° 0' 45.20" W ***	

10.0 INTERNATIONAL COORDINATION

The proposed LPFM facility is not within 320 km of an International border and therefore, does not require international coordination.

11.0 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

11.1 General Environmental Requirements

The proposed support structure and antenna will not:

- Require high intensity white lighting.
- Is not located in an official designated wilderness area or wildlife preserve.
- Does not threaten the existence or habitat of endangered species.
- Does not affect districts, sites, buildings, structures or objects significant in American history, architecture, archaeology, engineering

or culture that are listed in the National Register of Historic Places or are eligible for listing.

- Does not affect Indian religious sites.
- Is not located in a floodplain
- Does not require construction that involves significant changes in surface features (e.g., wetland fill, deforestation or water diversion).

11.2 Radio Frequency Radiation (RFR) Compliance

The proposed Channel 299 LPFM facility will not have a significant environmental impact and complies with the maximum permissible radio frequency electromagnetic exposure limits for controlled and uncontrolled environments pursuant to §1.1307 of the FCC Rules and the FCC's Office of Engineering and Technology Bulletin 65, Edition 97-01 (OET-65).

The LPFM transmitter, transmission line and antenna system shall produce an ERP of 67 W (circular polarization). Assuming the maximum lobe of radiation were oriented directly toward the ground, the proposed LPFM facility's power density six feet above the ground would be 0.004 mW/cm². A power density of 0.004 mW/cm² equates to 0.37% of the Maximum Permissible Exposure (MPE) limits for Occupational/Controlled Exposure and 1.87% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute (ANSI). Since operation of the proposed LPFM facility will not exceed 5.0% of the MPE limit for Occupational/Controlled Exposure or General Population/Uncontrolled Exposure at any point on the ground, the proposed facility is not considered a "significant contributor" to the RF exposure environment pursuant to OET Bulletin 65, Edition 97-01. Therefore, contributions of exposure from other sources were not accounted for in this analysis. It is safe to conclude that the emissions will be insignificant and well within the maximum allowable requirements.

12.0 RADIO READING SERVICE

LPFM stations must satisfy the second-adjacent channel minimum distance separation requirements with respect to any third-adjacent channel FM station that, as of September 20, 2000, broadcasts a radio reading service via a subcarrier frequency pursuant to Section 73.807(a)(2) of the FCC Rules. Referring to **Appendix E** in this document, it can be seen that the proposed LPFM station satisfies the third-adjacent channel Radio Reading requirements pursuant to Section 73.807(a)(2) of the FCC Rules.

13.0 NOTIFICATIONS

The proposed facility is not within the affected areas of the following installations and stations pursuant to 73.1030 of the FCC Rules.

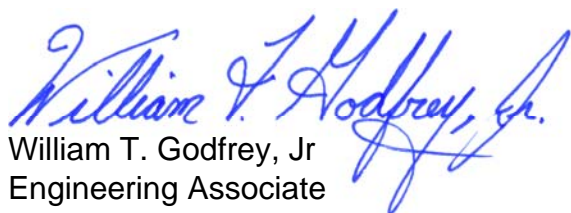
- 73.1030(a) National Radio Astronomy Observatory Quite Zone at Green Bank, WV.....**Okay**
- 73.1030(a) Arecibo Observatory, Puerto Rico, Radio Astronomy Coordination Zone.....**Okay**
- 73.1030(b) Table Mountain Quiet Zone, Boulder, CO.....**Okay**
- 73.1030(c) Monitoring Station at ALLEGAN, MI..... **Okay**
- 73.1030(c) Monitoring Station at ANCHORAGE, AK..... **Okay**
- 73.1030(c) Monitoring Station at BELFAST, ME..... **Okay**
- 73.1030(c) Monitoring Station at CANANDAIGUA, NY..... **Okay**
- 73.1030(c) Monitoring Station at DOUGLAS, AZ..... **Okay**
- 73.1030(c) Monitoring Station at FERNDALE, WA..... **Okay**
- 73.1030(c) Monitoring Station at VERO BEACH, FL..... **Okay**
- 73.1030(c) Monitoring Station at GRAND ISLAND, NE..... **Okay**
- 73.1030(c) Monitoring Station at KINGSVILLE, TX..... **Okay**
- 73.1030(c) Monitoring Station at LAUREL, MD..... **Okay**
- 73.1030(c) Monitoring Station at LIVERMORE, CA..... **Okay**
- 73.1030(c) Monitoring Station at POWDER SPRINGS, GA..... **Okay**
- 73.1030(c) Monitoring Station at SANTA ISABEL, PR..... **Okay**
- 73.1030(c) Monitoring Station at HONOLULU, OAHU, HI..... **Okay**

14.0 CONCLUSION

The engineering conducted and discussed in this report demonstrates that Channel 299 (107.7 MHz) is available for the proposed LPFM facility. The proposed LPFM facility is well within compliance on all regulatory matters and a construction permit should therefore be issued to GALF.

15.0 CERTIFICATION

This technical statement was prepared by William T. Godfrey, Jr., Engineering Associate with the firm Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida, and has been working with the firm in the field of radio and television broadcast consulting since 1998. Mr. Godfrey was a graduate from the University of North Florida and a Distinguished Military Graduate from the University of Florida. As a Professional in the field of Telecommunications he states under penalty of perjury that the information contained in this report is true and correct to the best of his knowledge and belief.



William T. Godfrey, Jr.
Engineering Associate
Kessler and Gehman Associates, Inc.



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APPENDIX A – NAD83 TO NAD27 CONVERSION

Antenna Location Coordinates. The proposed antenna site must be specified using North American Datum 27 (NAD 27) coordinates. The latitude and longitude Coordinates for all points in the United States for this LPFM service are based upon the 1927 North American Datum (NAD 27). The National Geodetic Survey is in the process of replacing NAD 27 with the more accurate 1983 North American Datum (NAD 83) and updating current topographic maps. In addition, coordinates determined by use of the satellite-based Global Positioning System already reflect the NAD 83 datum. To prevent intermixing of data from these two sources, the Commission has announced that, until further notice, all LPFM applicants are to furnish coordinates based on NAD 27 datum on all submissions and the Commission will continue to specify NAD 27 coordinates in its data bases and authorizations.

Output from NADCON for station NAD83 to NAD27 Conversion

North American Datum Conversion

NAD 83 to NAD 27

NADCON Program Version 2.11

=====

Transformation #: 1 Region: Conus

	Latitude	Longitude
NAD 27 datum values:	26 33 0.58411	82 00 45.22439
NAD 83 datum values:	26 33 1.86000	82 00 44.55000
NAD 27 - NAD 83 shift values:	-1.27589	0.67439 (secs.)
	-39.268	18.667 (meters)
Magnitude of total shift:	43.479 (meters)	

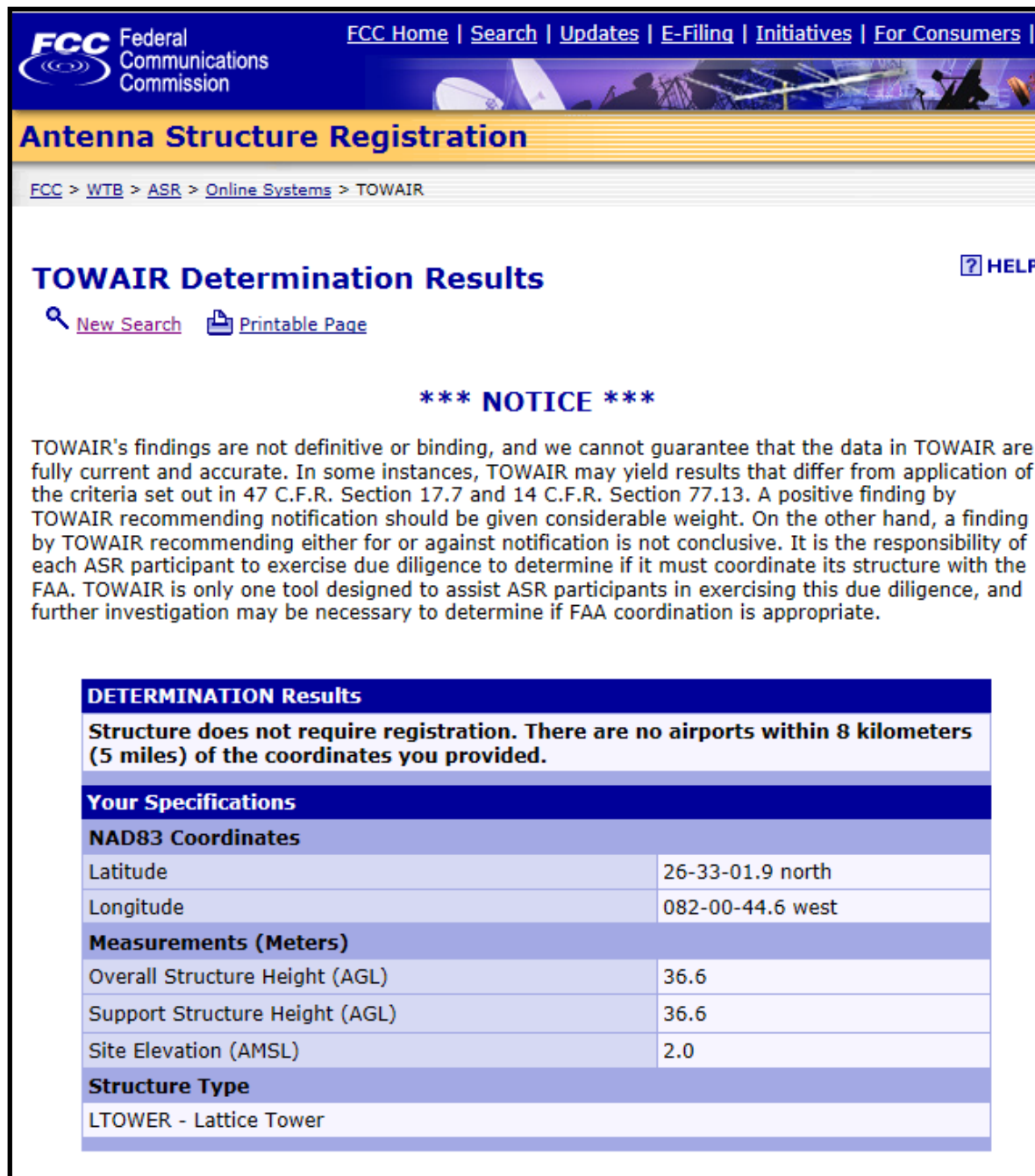
[NGS HOME PAGE](#)

APPENDIX B – FCC TOWAIR Study

Antenna Structure Registration (ASR) filing determination was calculated from the FCC's structure registration tool:

<http://wireless2.fcc.gov/UlsApp/AsrSearch/towairSearch.jsp>

Results: Structure does not require registration.



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Antenna Structure Registration

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TOWAIR Determination Results [? HELP](#)

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***** NOTICE *****

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results	
Structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.	
Your Specifications	
NAD83 Coordinates	
Latitude	26-33-01.9 north
Longitude	082-00-44.6 west
Measurements (Meters)	
Overall Structure Height (AGL)	36.6
Support Structure Height (AGL)	36.6
Site Elevation (AMSL)	2.0
Structure Type	
LTOWER - Lattice Tower	

APPENDIX C – Height Above Average Terrain (HAAT) Calculation

The Height Above Average Terrain (HAAT) was calculated using a 3-arc second terrain database; therefore, the applicant requests that the FCC also calculate the HAAT using 3 second terrain so that the applicant can operate with and ERP of 67 W. (See Appendix D for ERP calculation).

Results are as follows:

HAAT Calculation

Latitude: 26-33-00.60 N
 Longitude: 082-00-45.20 W
 Number Of Radials: 8
 Broadcast Type: ☐ TV ☒ FM
 Update Average Terrain
 Average Terrain: 1.348 m
 HAAT: 37.25 m
 AMSL Height: 38.6 m

Transmitter Properties

Transmitter | Antenna | Info

Transmitter Parameters

Identification: LPFM
 Latitude: 26-33-00.60 N
 Longitude: 082-00-45.20 W
 ERP: 0.067 kW
 Frequency: 107.70 MHz
 Channel: 299
 FM Broadcast Mode: Analog
 HAAT: 37.25 m
 Base Elevation: 2.00 m
 Antenna Height AG: 36.6 m
 Class: Max L1
 Propagation Model: Don't Calculate Signal
 Broadcast Type: ☐ TV ☐ DTV ☒ FM ☐ Other
 To Ref From Ref
 Load From FCC Database
 Print Transmitter Info
 Property Files: Import Export
 Specify Xmitter Height AMSL
 Calc HAAT
 Get Elevation Auto
 Calc COR

APPENDIX D – FM Propagation Curves Calculation

The Effective Radiated Power (ERP) was calculated from the FCC's FM Propagation Curves Calculator tool:

<http://transition.fcc.gov/mb/audio/bickel/curves.html>

Results are as follows:

The screenshot shows the FCC's FM Propagation Curves Calculator results page. At the top is the FCC logo and navigation links: FCC Home, Search, Updates, E-Filing, Initiatives, For Consumers, Find People, and MB. Below this is the Audio Division header with the phone number (202)-418-2700 and the title FM and TV Propagations Curves Calculations. The breadcrumb trail reads FCC > MB > Audio Division > FM and TV Curves Calculations, with a link to the FCC site map. The main heading is Results -- FM and TV Propagation Curves Calculations. A green box contains the Results of Calculation: Effective Radiated Power (ERP) = 0.067 kW, and Unrounded ERP = 0.067 kilowatts. Below this are two buttons: Back to Numeric Entries and Back to Initial Selections. A pink box contains the input data from Pages 1 and 2: HAAT entered = 37.30 meters, Distance entered = 5.640 kilometers, Field Strength entered = 60.000 dBu, Find the ERP, given a Distance to the Contour and a Field Strength, F(50,50) curves for service contours, and FM and NTSC analog TV Channels 2 through 6. A note at the bottom states: NOTE: While this ERP will produce the desired contour at the given distance for the given HAAT, please be aware that the ERP / HAAT combination might not comply with the limits for the FM station class or be equivalent in terms of F(50, 50) service when compared to another ERP / HAAT. Equivalence may be evaluated by comparing the distances to the 60 dBu (1 mV/m) contour, using the F(50,50) curves.

FCC Federal Communications Commission

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Audio Division (202)-418-2700 [FCC > MB > Audio Division > FM and TV Curves Calculations](#) [FCC site map](#)

FM and TV Propagations Curves Calculations

Results -- FM and TV Propagation Curves Calculations

Results of Calculation

Effective Radiated Power (ERP) = 0.067 kW

Unrounded ERP = 0.067 kilowatts

[Back to Numeric Entries](#) [Back to Initial Selections](#)

For input data from Pages 1 and 2:

HAAT entered = 37.30 meters
Distance entered = 5.640 kilometers
Field Strength entered = 60.000 dBu
Find the ERP, given a Distance to the Contour and a Field Strength
F(50,50) curves for service contours
FM and NTSC analog TV Channels 2 through 6

NOTE: While this ERP will produce the desired contour at the given distance for the given HAAT, please be aware that the ERP / HAAT combination might not comply with the limits for the FM station class or be equivalent in terms of F(50, 50) service when compared to another ERP / HAAT. Equivalence may be evaluated by comparing the distances to the 60 dBu (1 mV/m) contour, using the F(50,50) curves.

APPENDIX E – Channel 299 Spacing Study – 3 Second Terrain Data

Minimum separation requirements for LPFM stations are depicted in §73.807 of the FCC Rules. The proposed LPFM station is in compliance with the required co-channel, and first- and second-adjacent channel separations. The proposed LPFM station also meets the minimum separation requirements with respect to authorized FM translator stations, cutoff FM translator applications, and FM translator applications filed prior to the release of the Public Notice announcing the LPFM window period.

Kessler and Gehman Associates, Inc. Telecommunications Consulting Engineers LPFM Channel Study Get A Life Foundation								
REFERENCE				CLASS = L1		DISPLAY DATES		
26 33 00.6 N.						DATA 11-09-13		
82 00 45.2 W.				Current Spacings to 2nd Adj.		SEARCH 11-09-13		
----- Channel 299 - 107.7 MHz -----								
Call	Channel		Location		Azi	Dist	FCC	Margin
ALLO	USE	300C2	Coral Cove	FL	329.9	70.63	79.5	-8.9
WSRZ-FM	LIC	300C2	Coral Cove	FL	326.2	80.27	79.5	0.8
W299BJ	LIC	299D	Naples	FL	148.4	43.66	25.5	18.2
W298AV	LIC	298D	Englewood	FL	326.7	55.92	20.5	35.4
WCIW-LP	LIC	300L1	Immokalee	FL	103.9	61.05	13.5	47.6
WFLU-LP	LIC	300L1	Miles City	FL	123.1	78.98	13.5	65.5
W299AU	LIC	299D	Zolfo Springs	FL	11.5	105.14	25.5	79.6
W299AU	APP	299D	Zolfo Springs	FL	11.5	105.14	25.5	79.6
WEAT	LIC	300C1	West Palm Beach	FL	82.1	181.46	99.5	82.0
WAMR-FM	LIC-D	298C1	Miami	FL	109.4	191.35	99.5	91.9
ALLO	USE	298C1	Miami	FL	115.0	195.66	99.5	96.2
ALLO	USE	300C1	West Palm Beach	FL	83.8	196.27	99.5	96.8
Coordinates updated from LIC record				BLH6033				
WXGL	LIC	297C1	St. Petersburg	FL	339.2	176.79	72.5	104.3
W299AU	APP-D	298D	Zolfo Springs	FL	23.2	128.87	20.5	108.4
WMFM	CP	300C1	Key West	FL	166.3	213.57	99.5	114.1
One Step Application								
ALLO	USE	300C1	Key West	FL	166.3	213.57	99.5	114.1
One Step Application								
WWMA-LP	LIC	300L1	Avon Park	FL	21.9	128.88	13.5	115.4
ALLO	USE	300C1	Key West	FL	174.4	222.44	99.5	122.9
1571787	APP	299D	Lake Wales	FL	13.7	160.20	25.5	134.7
637651	APP	299D	Lake Wales	FL	13.7	160.20	25.5	134.7
WMGF	LIC	299C	Mount Dora	FL	14.4	271.31	129.5	141.8
ALLO	USE	299C	Mount Dora	FL	14.4	271.47	129.5	142.0
Coordinates updated from LIC record				BLH870526KB				
1562850	APP	298D	Lake Wales	FL	19.4	157.85	14.5	143.4

All separation margins include rounding								

Radio Reading Service study for Channel 299 (3 Second Terrain Data)

LPFM stations must satisfy the second-adjacent channel minimum distance separation requirements with respect to any third-adjacent channel FM station that, as of September 20, 2000, broadcasts a radio reading service via a subcarrier frequency. WCKT-FM (below) is a 3rd adjacent station that does not provide a Radio Reading Service and therefore is not protected on its 3rd adjacent channel pursuant to Section 73.807(a)(2).

Kessler and Gehman Associates, Inc. Telecommunications Consulting Engineers LPFM Channel Study Radio Reading Service Spacing Study							
REFERENCE				CLASS = L1		DISPLAY DATES	
26 33 00.6 N.				Current Spacings to 3rd Adj.		DATA	11-09-13
82 00 45.2 W.				Channel 299 - 107.7 MHz		SEARCH	11-09-13
Call	Channel	Location	Azi	Dist	FCC	Margin	
WCKT	LIC	296C2	Lehigh Acres	FL 139.1	34.28	52.5	-18.2
ALLO	USE	296C2	Lehigh Acres	FL 120.9	39.22	52.5	-13.3
ALLO	USE	300C2	Coral Cove	FL 329.9	70.63	79.5	-8.9
WSRZ-FM	LIC	300C2	Coral Cove	FL 326.2	80.27	79.5	0.8
W299BJ	LIC	299D	Naples	FL 148.4	43.66	25.5	18.2
W298AV	LIC	298D	Englewood	FL 326.7	55.92	20.5	35.4
1550772	APP	296D	Port Charlotte	FL 355.5	48.20	7.5	40.7
1568863	APP	296D	Port Charlotte	FL 355.5	48.20	7.5	40.7
WCIW-LP	LIC	300L1	Immokalee	FL 103.9	61.05	13.5	47.6
WFLU-LP	LIC	300L1	Miles City	FL 123.1	78.98	13.5	65.5
W299AU	LIC	299D	Zolfo Springs	FL 11.5	105.14	25.5	79.6
W299AU	APP	299D	Zolfo Springs	FL 11.5	105.14	25.5	79.6
WEAT	LIC	300C1	West Palm Beach	FL 82.1	181.46	99.5	82.0
WAMR-FM	LIC-D	298C1	Miami	FL 109.4	191.35	99.5	91.9
ALLO	USE	298C1	Miami	FL 115.0	195.66	99.5	96.2
ALLO	USE	300C1	West Palm Beach	FL 83.8	196.27	99.5	96.8
Coordinates updated from LIC record				BLH6033			
WXGL	LIC	297C1	St. Petersburg	FL 339.2	176.79	72.5	104.3
W299AU	APP-D	298D	Zolfo Springs	FL 23.2	128.87	20.5	108.4
WMFM	CP	300C1	Key West	FL 166.3	213.57	99.5	114.1
One Step Application							
ALLO	USE	300C1	Key West	FL 166.3	213.57	99.5	114.1
One Step Application							
WWMA-LP	LIC	300L1	Avon Park	FL 21.9	128.88	13.5	115.4
ALLO	USE	300C1	Key West	FL 174.4	222.44	99.5	122.9
1571787	APP	299D	Lake Wales	FL 13.7	160.20	25.5	134.7
637651	APP	299D	Lake Wales	FL 13.7	160.20	25.5	134.7
WMGF	LIC	299C	Mount Dora	FL 14.4	271.31	129.5	141.8
ALLO	USE	299C	Mount Dora	FL 14.4	271.47	129.5	142.0
Coordinates updated from LIC record				BLH870526KB			
1562850	APP	298D	Lake Wales	FL 19.4	157.85	14.5	143.4
WAOA-FM	LIC	296C1	Melbourne	FL 35.9	218.34	72.5	145.8

All separation margins include rounding							

APPENDIX F - SHORT SPACING WAIVER CALCULATIONS

Short Spacing Undesired-to-Desired Ratio Calculation to second-adjacent channel facility: **N/A – Proposed LPFM station is fully spaced**

APPENDIX G – TRANSLATOR AND BOOSTER PROXIMITY

The proposed transmitter site proximity to FM boosters and translators was determined using the FCC's FMQuery tool:

<http://www.fcc.gov/encyclopedia/fm-query-broadcast-station-search>

Results are as follows:

Boosters within 10km of the proposed LPFM transmitter site: 0

Search Parameters	
Service:	FB
Search radius:	10.00 km
Center lat / lon:	N 26 33 0.60 W 82 0 45.20
Lower Channel	200
Upper Channel	300
*** 0 FM Records within 10.00 km distance of 26° 33' 0.60 " N, 82° 0' 45.20" W ***	

Translators within 10km of the proposed LPFM transmitter site: 0

Search Parameters	
Service:	FX
Search radius:	10.00 km
Center lat / lon:	N 26 33 0.60 W 82 0 45.20
Lower Channel	200
Upper Channel	300
*** 0 FM Records within 10.00 km distance of 26° 33' 0.60 " N, 82° 0' 45.20" W ***	