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**LA PROMESA FOUNDATION
FM TRANSLATOR STATION W245CB
TALLAHASSEE, FLORIDA
FACILITY ID: 138352**

**MINOR CHANGE APPLICATION
ANTENNA SYSTEM & FACILITY LOCATION**

MARCH 2020

ENGINEERING EXHIBIT

IN SUPPORT OF

**APPLICATION FOR AUTHORITY TO
CONSTRUCT OR MAKE CHANGES IN AN
FM TRANSLATOR OR FM BOOSTER STATION**

ENGINEERING EXHIBIT

**LA PROMESA FOUNDATION
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TABLE OF CONTENTS:

	Narrative Engineering Statement
Figure 1	FCC ASR or Tower-Airport Slope Results
Figure 2	Vertical Sketch of Supporting Structure
Figure 3	Proposed Service Contour - Fill-in Translator
Figure 4	FM Channel Study - Contour Overlap Study - Tabulation Contour Overlap - Waiver Request to 2 nd Adj. Channel FM Translator - W243EG, Tallahassee, FL No population within Contour

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NARRATIVE STATEMENT

The engineering exhibit, of which this narrative is part, was prepared on behalf of LA PROMESA FOUNDATION, in support of a MINOR CHANGE application to modify the licensed facility of W245CB, Tallahassee, Florida. The station will CONTINUE to provide a "fill-in" service for co-owned and licensed AM Broadcast Station WCVC, Tallahassee, Florida, FCC Facility ID: 71303. No change in the designation of the primary station is sought.

Changes Sought:

The applicant seeks to change the antenna type and model to be utilized, and the location of the facility (a site move of 4.98 kilometers to the east). The changes sought are classified as "minor" by the Commission's application processing rules.

The applicant seeks to operate nondirectionally (omni) with an effective radiated power (ERP) of 250 watts (0.250 kW).

The antenna is a two (2) bay/element, nondirectional, antenna SWR FM-1, a standard FM broadcasting antenna, employing both horizontal and vertical polarization with full wavelength spacing between bays.

In support of the requested changes, the following figures, exhibits or tables are provided:

Figure 1 – Supporting Structure Tower Registration/FAA Notice:

No changes are proposed in the structure's overall height. The applicant proposes to side-mount its antenna on an existing communications tower. The tower has been registered with the FCC and issued ASR number 1030679. Notice to the FAA is not required.

Figure 2 – Vertical Sketch of Tower and Antenna:

A vertical sketch of antenna supporting structure with the antenna mounting elevation and other antenna details is provided.

Figure 3 – Predicted Service Contour & Primary Station Service Area:

The predicted service contour for the FM translator facility was calculated in accordance with the provisions of 47 CFR 73.313. The average terrain elevations from 3 to 16 kilometers from the proposed translator site were obtained from the NGDC 30-second computer database. The standard twelve radials evenly spaced at 30-degree intervals were used for determining the distance to the 60 dBu translator service contour. The 2 mV/m daytime groundwave contour from the primary AM station was computed using the soil conductivity values from the FCC M3 soil conductivity map. The predicted coverage contours for both stations have been drawn.

As the map shows, the predicted service contour (60 dBu) from the translator lies COMPLETELY inside the PRIMARY STATION's 2.0 mV/m daytime groundwave contour or with a 25-mile radius of the primary station's transmitter site. This proposal complies with the FCC's requirements for AM cross-service fill-in translators.

Figure 4 – FM Channel Study - Contour Study - Waiver Requested:

The proposed operation fully protects all other stations of concern, as detailed in the contour overlap study in Figure 4. No prohibitive contour overlap is predicted to occur when the downward radiation field (vertical plane) value is considered.

Details of a Contour Overlap - Waiver Request to 2nd Adj. Channel station FM Translator - W243EG, Tallahassee, FL, is provided within Figure 4. The interference contour from this proposal extends approximately 15.49 meters and does not reach the surface; thus, no population exists within the interference contour.

Environmental Considerations:

The applicant believes its proposal will not significantly affect the environment for the following reasons:

The proposal does not meet any of the criteria specified in Section 1.1307 of the FCC Rules. More specifically, the proposed facilities are not known to fall within any of the categories enumerated in Sections 1.1307(a)(1)-(7) and will not involve the use of high-intensity white lights. Furthermore, operation of the proposed facility will not involve the exposure of workers or the general public to levels of radiofrequency electromagnetic fields exceeding guidelines adopted by the Federal Communications Commission. (The current FCC guidelines are based upon criteria contained in the National Council of Radiation Protection and Measurements (NCRP) Report No.86 (1986) and ANSI/IEEE C95.1-1992.)

The results of the FCC FM Model computer program output indicate that the power density from this proposal using a “Type 1 or Other” EPA model antenna is predicted to be 2.25 $\mu\text{W}/\text{cm}^2$ or less. The computed power density is 0.23% of the Commission’s guidelines for a controlled area and 1.115% for an uncontrolled area.

La Promesa Foundation
FM Translator, W245CB
Tallahassee, Florida

This level is well below the Commission's guidelines for maximum exposure levels to electromagnetic fields, and no further study is required (contributes less than 1% to the controlled area MPE, and less than 5% to the uncontrolled area MPE.)

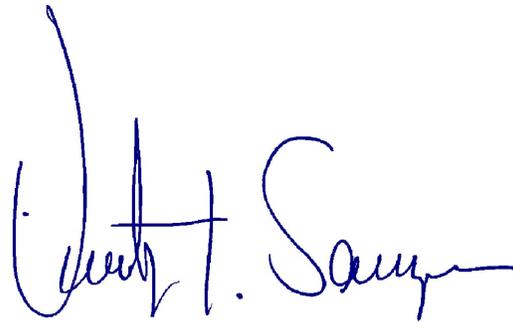
The applicant will fully-cooperate and coordinate with all site users as required by the Commission's rules.

Summary:

The proposed FM translator will continue to operate as a fill-in translator for AM Broadcast Station WCVC, Tallahassee, Florida, with a maximum ERP 0.250 - kilowatts (H & V Polarization), utilizing a simple two-bay (element) NONDIRECTIONAL antenna system operating on FM Channel 245D (96.9 MHz).

The proposed operation is fully in compliance with all areas of the Commission's rules and applicable international agreements.

March 6, 2020



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Existing Communications Tower - No FAA Notice Required
(No change in existing tower height is proposed)

Registration Detail			
Reg Number	1030679	Status	Constructed
File Number	A0246999	Constructed	01/01/1993
EMI	No	Dismantled	
NEPA	No		
Antenna Structure			
Structure Type	TOWER - Free standing or Guyed Structure used for Commu		
Location (in NAD83 Coordinates - Convert to NAD27)			
Lat/Long	30-29-17.1 N 084-16-47.1 W	Address	3000 N MERIDIAN RD
City, State	TALLAHASSEE , FL		
Zip	32312	County	LEON
Center of AM Array		Position of Tower in Array	
Heights (meters)			
Elevation of Site Above Mean Sea Level		Overall Height Above Ground (AGL)	
65.5		192.1	
Overall Height Above Mean Sea Level		Overall Height Above Ground w/o Appurtenances	
257.6		182.8	
Painting and Lighting Specifications			
FAA Chapters 3, 4, 5, 12 Paint and Light in Accordance with FAA Circular Number 70/7460-1K			
FAA Notification			
FAA Study	00-ASO-3878-OE	FAA Issue Date	09/01/2000

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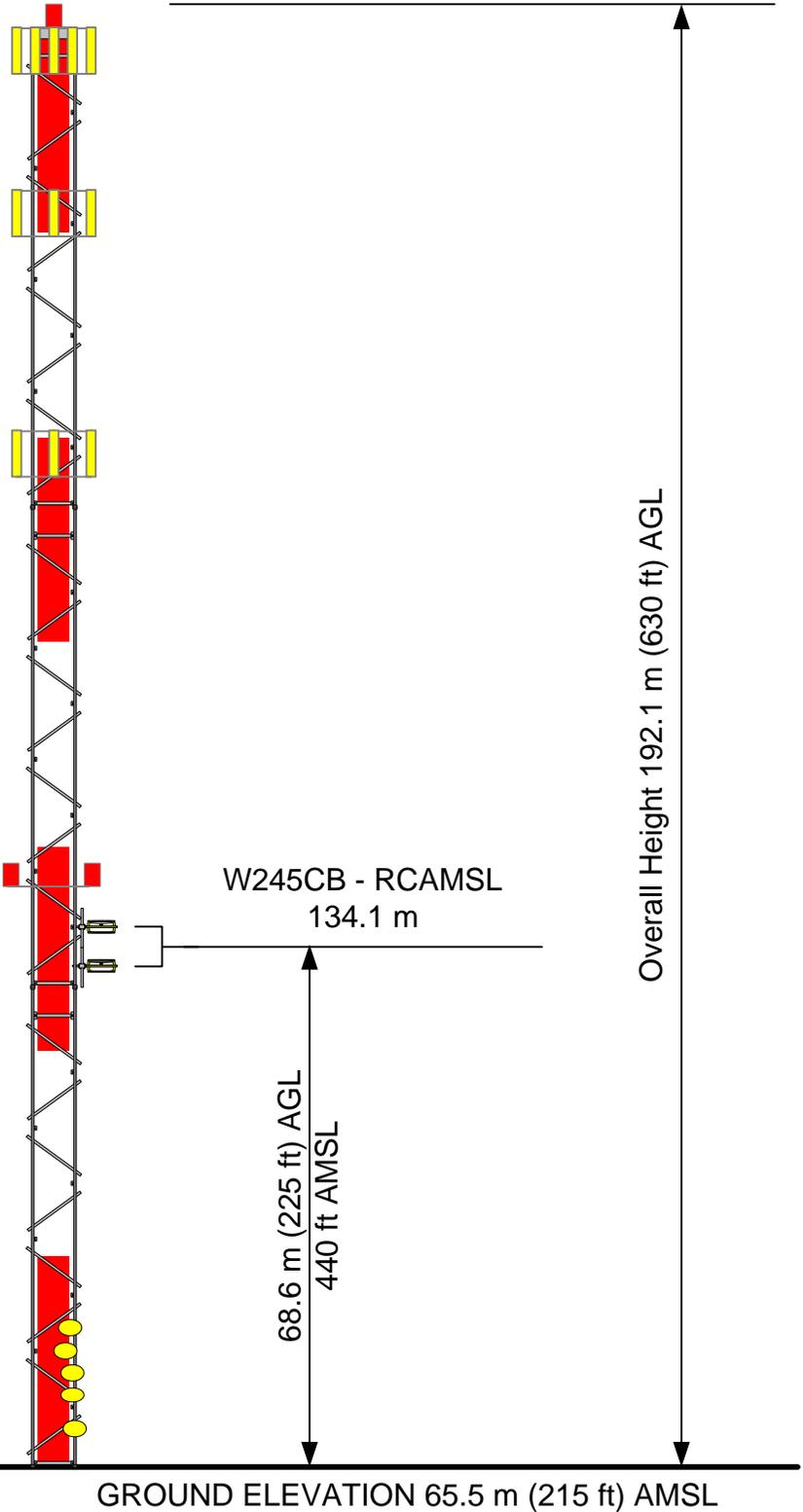
**FCC TOWER ASR REGISTRATION (ASR)
1030679**

W245CB FM TRANSLATOR
TALLAHASSEE, FLORIDA

**FIGURE
1**

SIZE	CAGE NO	DWG NO	REV
A	N/A	20200306W245CB.F1	
SCALE	N/A	MARCH 2020	SHEET

**EXISTING
COMMUNICATIONS TOWER
FCC ASR #: 1030679**



TOWER MOUNTED
SAT RCV DISHES

W245CB - RCAMSL
134.1 m

68.6 m (225 ft) AGL
440 ft AMSL

Overall Height 192.1 m (630 ft) AGL

GROUND ELEVATION 65.5 m (215 ft) AMSL

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VERTICAL SKETCH OF SUPPORTING STRUCTURE

**W245CB FM TRANSLATOR
TALLAHASSEE, FLORIDA**

**FIGURE
2**

FALL CHURCH, VIRGINIA 22043-2555

SIZE
A

CAGE NO
N/A

DWG NO
20200306W245CB.F2

REV
NONE

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SCALE DO NOT SCALE

MARCH 2020

SHEET

W245CB APP
NAD 83 Latitude: 30-29-17.10 N
NAD 83 Longitude: 084-16-47.10 W
ERP: 0.25 kW
Channel: 245 Frequency: 96.9 MHz
Antenna RCAMSL Height: 134.1 m
Horiz. Pattern: Omni

W245CB - FM TRANSLATOR SERVICE
FILL-IN TRANSLATOR PRESENT AND PROPOSED SERVICE
WCVB (AM) PRIMARY STATION
FIGURE 3

25 MILE AM RADIUS WCVB PRIMARY

PROPOSED 250W
60 DBU FCC F50,50

WCVB PRIMARY 2.0 MV/M GW

EXISTING 250 WATT DIRECTIONAL
60 DBU FCC F50,50

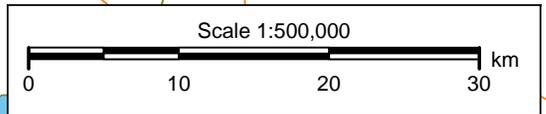


Figure 4

W245CB CONTOUR TO CONTOUR STUDY

La Promesa Foundation

REFERENCE CH# 245D - 96.9 MHz, Pwr= 0.25 kW, HAAT= 100.4 M, COR= 134.1 M
 30 29 17.1 N. Average Protected F(50-50)= 12.9 km
 84 16 47.1 W. Omni-directional

CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
245D Tallahassee	W245CB!	LIC D	FL	266.0	4.98	30 29 05.70	0.250	120	La Promesa Foundation	---	Reference---
245C0 Hartford	WDJR	LIC	AL	289.4	148.35	30 55 19.70	100.000	173.9	Gulf South Communications,	73.7	-38.5* 30.5
* 243D Tallahassee	W243EG	LIC D	FL	306.0	0.84	30 29 33.10	0.099	0.6	Clear Channel Broadcasting	12.9	-12.8* -13.2*
247C0 Bainbridge	WGEX	LIC	GA	341.2	77.97	31 09 12.70	100.000	10.3	Cc Licenses, LLC	73.1	55.1 3.9
244C2 Valdosta	WGOV-FM	LIC N	GA	68.1	95.26	30 48 13.70	50.000	72.3	W.G.O.V., Inc.	47.2	10.1 29.3
246D Carrabelle	W246AX	LIC	FL	208.0	79.28	29 51 24.70	0.120	10.0	Florida State University	7.0	55.6 51.7
242C1 Albany	WJIZ-FM	LIC N	GA	12.4	120.55	31 32 58.00	79.000	8.8	Cc Licenses, LLC	66.7	99.5 53.0
299C3 Perry	WAJP	LIC N	FL	121.8	76.04	30 07 36.00	9.400	0.0	Hispanic Target Media Inc.	0.0	12.0R 64.0M
244D Apalachicola	W244BM	LIC	FL	215.1	102.32	29 43 57.80	0.250	17.7	Florida State University	12.0	71.1 69.9
245A Fitzgerald	WRDO	LIC	GA	35.0	170.61	31 44 33.70	6.000	84.6	Broadcast South, LLC	26.7	73.6 101.2
298A Donalsonville	WWGF	LIC	GA	310.3	84.72	30 58 45.70	6.000	0.0	Augusta Radio Fellowship In	0.0	10.0R 74.7M

Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM,
 M= Margin in KM In & Out distances between contours are shown at closest points.
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
 "*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

Facility is okay with respect to AM station towers.
 Facility is okay with respect to FCC monitoring stations.
 Facility is okay toward West Virginia Quiet Zone.
 Facility is okay toward Table Mountain.

NOTES:

* W243EG, TALLAHASSEE FL - No population within interference contour from this proposal - See technical showing contained herein - waiver requested if needed. Interference contour from this proposal extends a freespace distance of 15.49 meters, Proposed antenna is 68.6 meters above ground level, interference contour to W243EG does not reach ground level. No population.

No prohibitive contour overlap occurs as a result of no population within 137.1 dBu interference contour from this proposal.

Figure 4

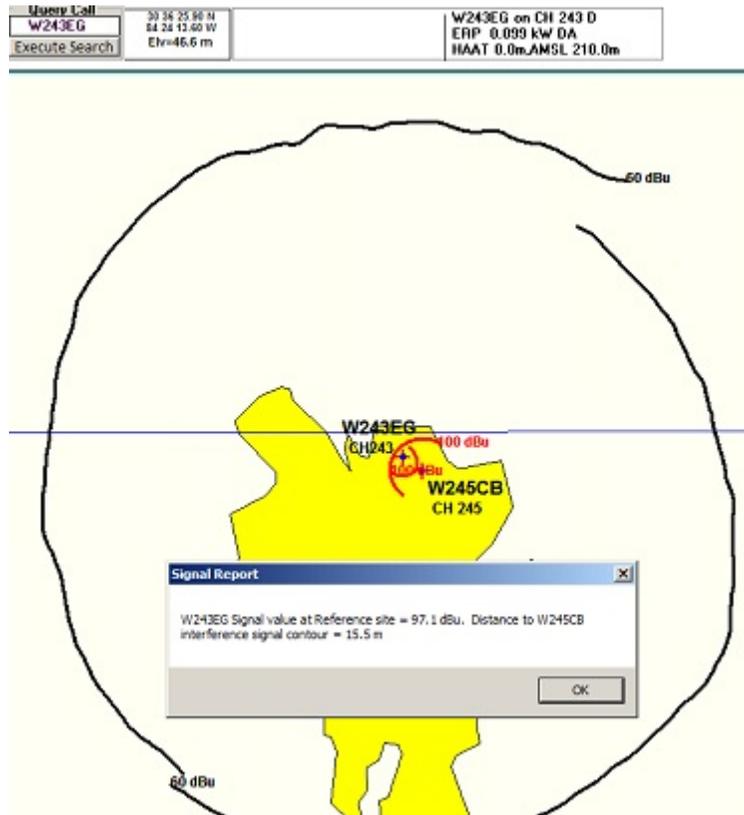
Waiver request - To Second Adjacent Channel Facility
 (Based on Lack of Population within Interference Contour)

Applicant seeks a waiver request of CFR 47 §74.1204(a)(3) with regards to protected and interference contour overlap based on a demonstration of no population within the interference contour to the station of concern.¹

This figure support the demonstration of no population/ or lack of population within the predicted interference contour based on the antenna elevation above ground level.

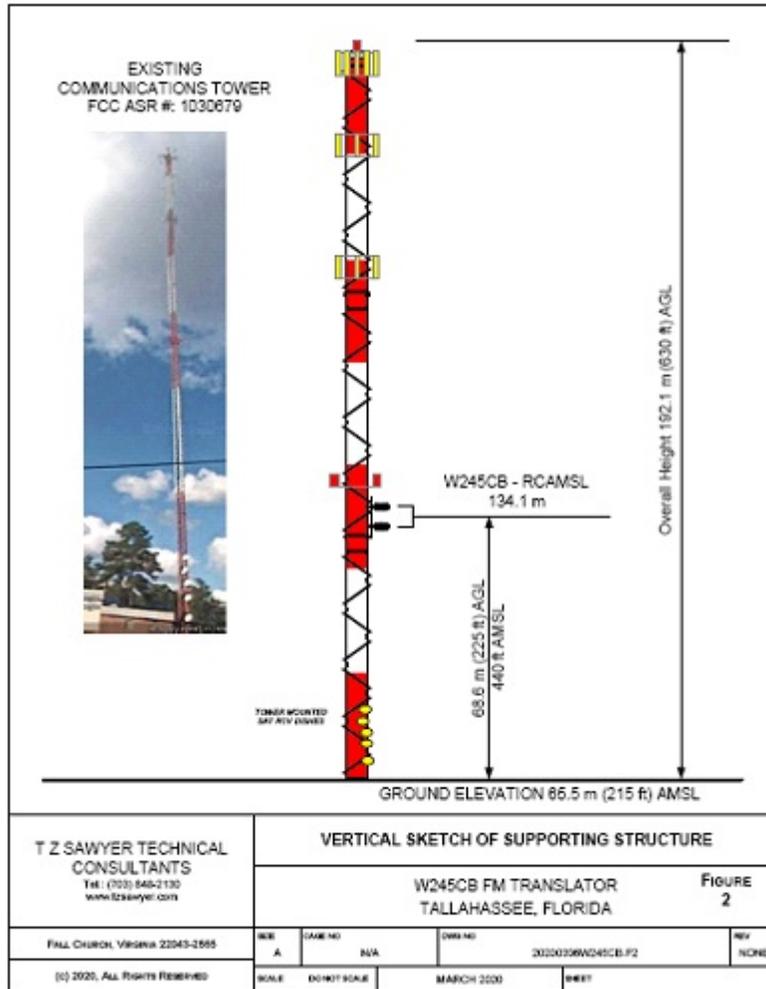
Station	Received Signal (at proposed site)	D/U Ratio (dB)	Resultant Interference Contour (from proposal)	Interference Contour Distance (free space)
W243EG	97.1 dBu f(50,50)	40	137.1 dBu (free space)	~ 15.49 meters

As can be determined from the table above the 137.1 dBu interference contour from the proposal extends a free space distance of 15.49 meters (51 feet), and the map below shows the predicted W243EG signal strength at the proposed site to be 97.1 dBu.



¹ In accordance with CFR 47 §74.1204(d), the provisions concerning prohibited overlap will not apply where the area of such overlap lies entirely over water, or an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.

Figure 2 of this application (Vertical Sketch of Supporting Structure) shows that the antenna height above ground for this proposal is 68.6 meters. Therefore, the 15.5 meter interference contour from the antenna remains 53.1 meters above ground level [$68.6\text{m} - 15.5\text{m} = 53.1\text{m}$] at all locations without any consideration of additional attenuation as a result of the downward radiation from the antenna. As the interference contour remains well above the surface, no population resides or travels within the interference contour. There are no nearby structures that enter the zone or area of concern.



Therefore, based on the demonstration of no interference to W243EG, a grant of this waiver request if needed is in the public interest.