

APPLICATION FOR CONSTRUCTION PERMIT

W245AZ - LEESBURG, FLORIDA
FACILITY ID: 142461
96.9 MHz / 250 W ERP DA

CENTRAL FLORIDA
EDUCATIONAL FOUNDATION, INC.

JANUARY, 2018

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01.17.2018

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APPLICATION FOR CONSTRUCTION PERMIT

The following engineering statement and attached exhibits have been prepared for **Central Florida Educational Foundation, Inc.** ("CFEF"), licensee of FM translator station W245AZ at Leesburg, Florida, and are in support of their application for construction permit.¹ This application proposes a change in the primary facility, an increase in the effective radiated power, and a change to a directional antenna. No change in the location or channel of operation is proposed under this application.

Currently, W245AZ is licensed to operate on FM channel 245 with a maximum effective radiated power of 27 Watts utilizing a non-directional antenna at a center of radiation of 110 meters above mean sea level. The proposed facility would operate with a maximum effective radiated power of 250 Watts utilizing a directional antenna, also at a center of radiation of 110 meters above mean sea level. The proposed antenna type is a single bay ERI LPX-1E-DA.

WPOZ at Orlando, Florida is the licensed primary station for W245AZ.² CFEF proposes under this application that the primary station be changed to WMYZ. WMYZ is currently licensed to Clermont, Florida, but is filing concurrently with this application an application to modify that facility, and change the community of license to Leesburg, Florida.³ The proposed facility would qualify as a fill-in translator for the modified WMYZ technical parameters. Exhibit E-1 provides a comparison between the WMYZ 60 dBu service contour specified in the concurrently filed application, and the proposed W245AZ 60 dBu service contour.

¹ The Facility ID for W245AZ at Leesburg, Florida is 142461.

² The Facility ID for WPOZ at Orlando, Florida is 9876.

³ The Facility ID for WMYZ is 27291.

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The proposed facility complies with the provisions of Section 74.1204 of the Commission's Rules. Due to the channel of operation, Section 74.1205 is not applicable. Exhibit E-2 is a tabular interference study for the proposed facility. This study demonstrates that the contour overlap provisions of Section 74.1204 would be met to all relevant authorizations. This tabular interference study is depicted in the contour map comprising Exhibit E-3.

The proposed facility would not constitute a significant environmental impact, and is exempt from environmental processing. The translator antenna would utilize a tower that is registered with the Commission. The tower utilized by W245AZ was damaged in 2017 during Hurricane Irma. The tower is to be reconstructed soon. W245AZ has been silent under a special temporary authority since Irma, but will return to air within the required period.⁴

Additionally, the proposed facility would not constitute a radiofrequency radiation hazard to persons at the site. The Commission's online *FM Model* utility returns a calculated maximum power density of 0.51 $\mu\text{W}/\text{cm}^2$ at a distance of 85 meters from the tower. This value complies with the uncontrolled environment of the Commission's safety standard, and is sufficiently low to categorically exclude the facility. The ERI model LPX-1E-DA antenna is considered a "type-3" antenna, and was analyzed as such.

CFEF certifies that it will coordinate with all other users of the site to ensure that workers and other personnel are not exposed to levels of radiofrequency radiation in excess of the

⁴ See FCC File No. BLSTA-20170925ABL.

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applicable safety standards. Coordination activities will include, but are not necessarily limited to, a reduction in transmitter power or cessation of operation.

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature
License Expires November 30, 2019

Jeremy D. Ruck, PE
January 17, 2018

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W245AZ.X
BLFT20090224AAD
Latitude: 28-49-45 N
Longitude: 081-54-08 W
ERP: 0.25 kW
Channel: 245
Frequency: 96.9 MHz
AMSL Height: 110.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

WMYZ.X
PROPOSED
Latitude: 28-54-16 N
Longitude: 081-57-36 W
ERP: 35.00 kW
Channel: 204
Frequency: 88.7 MHz
AMSL Height: 110.9 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

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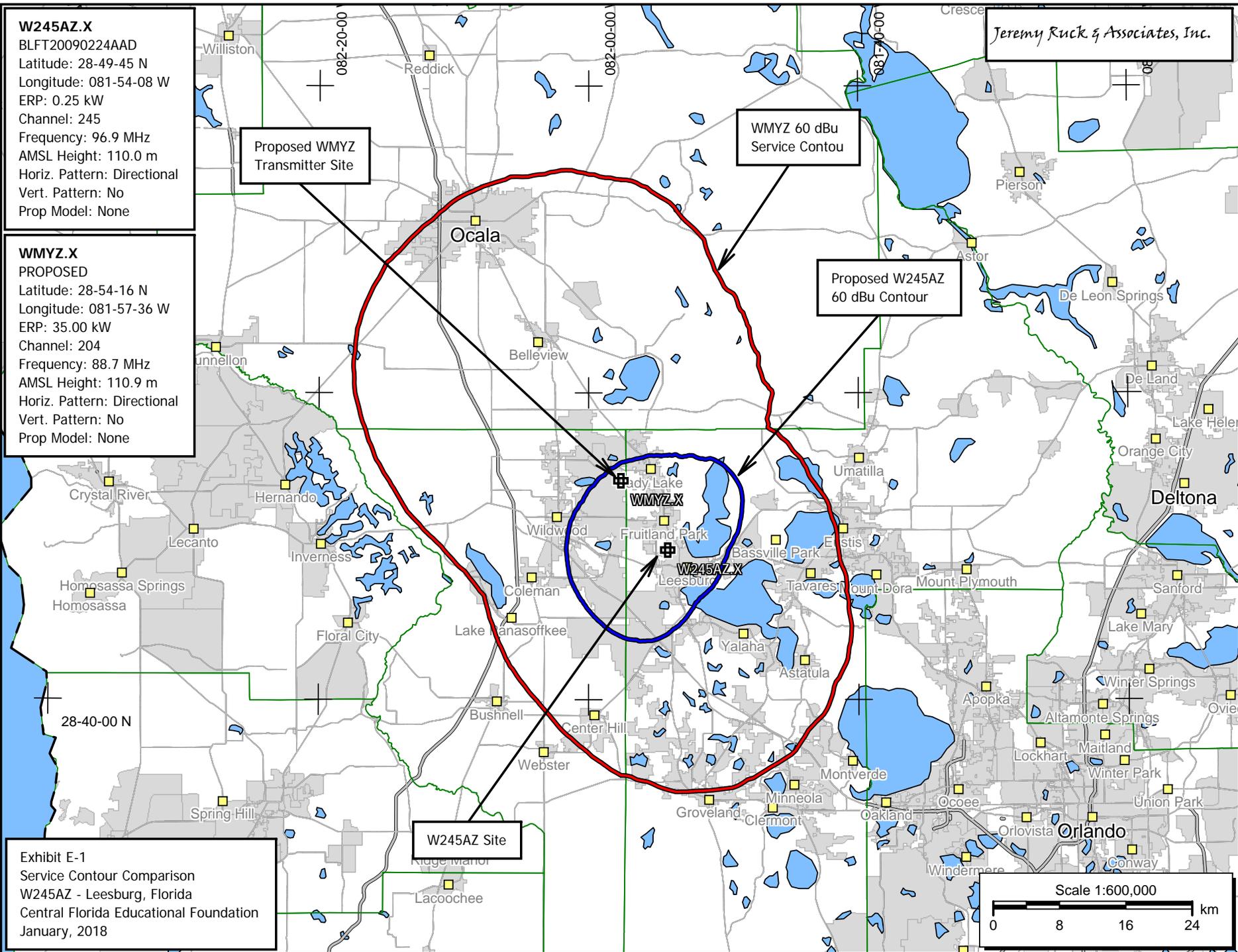
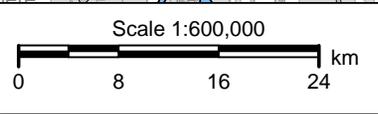
Proposed WMYZ
Transmitter Site

WMYZ 60 dBu
Service Contour

Proposed W245AZ
60 dBu Contour

W245AZ Site

Exhibit E-1
Service Contour Comparison
W245AZ - Leesburg, Florida
Central Florida Educational Foundation
January, 2018



Jeremy Ruck & Associates, Inc.
 Consulting Engineers - Canton, Illinois

Exhibit E-2 - Tabular Interference Study
 W245AZ - Leesburg, Florida
 CH# 245D - 96.9 MHz, Pwr= 0.25 kW DA, HAAT= 87.0 M, COR= 110 M
 Average Protected F(50-50)= 12.03 km
 Standard Directional

REFERENCE
 28 49 45.0 N.
 81 54 08.0 W.

DISPLAY DATES
 DATA 01-17-18
 SEARCH 01-17-18

CH CITY	CALL	TYPE ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
245D Leesburg	W245AZ	LIC _C_ FL	0.0 0.0	0.00 BLFT20090224AAD	28 49 45.0 81 54 08.0	0.027 87	21.7 110	6.5 Central Florida Educationa	-33.1*	-45.5*
245C0 Jacksonville	WJGL	LIC _C_ FL	11.4 191.6	164.14 BMLH20130124AAR	30 16 34.0 81 33 53.0	100.000 309	173.0 315	73.0 Cox Radio, Inc.	-20.6*	50.9
245D Deltona	W245CL	LIC DC_ FL	119.6 299.8	50.01 BLFT20150916ADC	28 36 21.6 81 27 24.6	0.250	40.6 173	12.1 Clear Channel Broadcasting	2.5	14.6
243C Orlando	WDBO-FM	LIC NCY FL	109.1 289.5	87.60 BLH20011219AAC	28 34 07.0 81 03 16.0	100.000 454	12.1 463	83.1 Cox Radio, Inc.	68.4	4.2
244C3 Yankeetown	WXOF	LIC NCX FL	285.8 105.4	79.48 BLH20121218AAC	29 01 18.0 82 41 20.0	14.500 132	57.6 135	38.1 Wgul -fm, Inc.	9.7	23.4
246L1 Mount Dora	WVGT-LP	LIC _C_ FL	97.1 277.3	26.41 BLL20171205ACH	28 47 57.9 81 37 59.5	0.100 29	54	10.6 Seminole County Community	10.6	10.6
248C0 Winter Haven	WPCV	LIC _CN FL	156.2 336.4	85.34 BLH19890908KA	28 07 35.0 81 33 03.0	100.000 310	10.2 340	72.8 Hall Communications, Inc.	66.0	12.1
245C Fort Myers	WINK-FM	LIC _C_ FL	176.5 356.6	225.98 BLH20060727AAL	26 48 01.0 81 45 48.0	100.000 457	187.3 465	83.7 Fort Myers Broadcasting Co	27.9	109.1
299C Mount Dora	WGMF	LIC _C_ FL	79.8 260.1	57.79 BLH20081201AGU	28 55 10.1 81 19 07.4	100.000 484	23.5 494	15.8 Clear Channel Broadcasting	28.5R	29.3M
246D Clermont	W246BT	LIC DC_ FL	136.1 316.3	42.53 BLFT20150806AAI	28 33 11.0 81 36 01.0	0.027	4.1 111	2.9 Clear Channel Broadcasting	31.3	29.8
246C2 Holiday	WSUN	LIC NC_ FL	229.8 49.4	111.05 BLH19980608KG	28 10 56.0 82 46 06.0	11.500 224	67.6 226	45.7 Cox Radio, Inc.	31.5	47.8
242D Ocala	W242CA	LIC _C_ FL	329.6 149.5	47.95 BLFT20141007ADA	29 12 04.0 82 09 07.0	0.250 57	1.1 79	9.6 Generations Broadcasting C	34.9	37.2
247C2 Mi canopy	WSKY-FM	LIC NCX FL	332.7 152.5	88.48 BLH20080402AAT	29 32 09.0 82 19 18.0	50.000 150	5.6 173	49.6 Entercom License, Lic	71.0	37.4
246L1 Debary	WJVE-LP	LIC _C_ FL	83.3 263.6	60.41 BLL20170425AAA	28 53 29.0 81 17 09.0	0.094 31	43	42.6 Ministerio R.m., Inc.	43.2	43.2

Terrain database is FCC 30 meter, 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. Reference zone= East Zone, Co to 3rd adjacent.
 All separation margins (if shown) include rounding.
 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.

W245AZ.X

PROPOSED
Latitude: 28-49-45 N
Longitude: 081-54-08 W
ERP: 0.25 kW
Channel: 245
Frequency: 96.9 MHz
AMSL Height: 110.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

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- 60 dBu F(50,50) Service Contour
- 40 dBu F(50,10) Interference Contour
- 54 dBu F(50,10) Interference Contour
- 100 dBu F(50,10) Interference Contour
- IF Spacing Limit

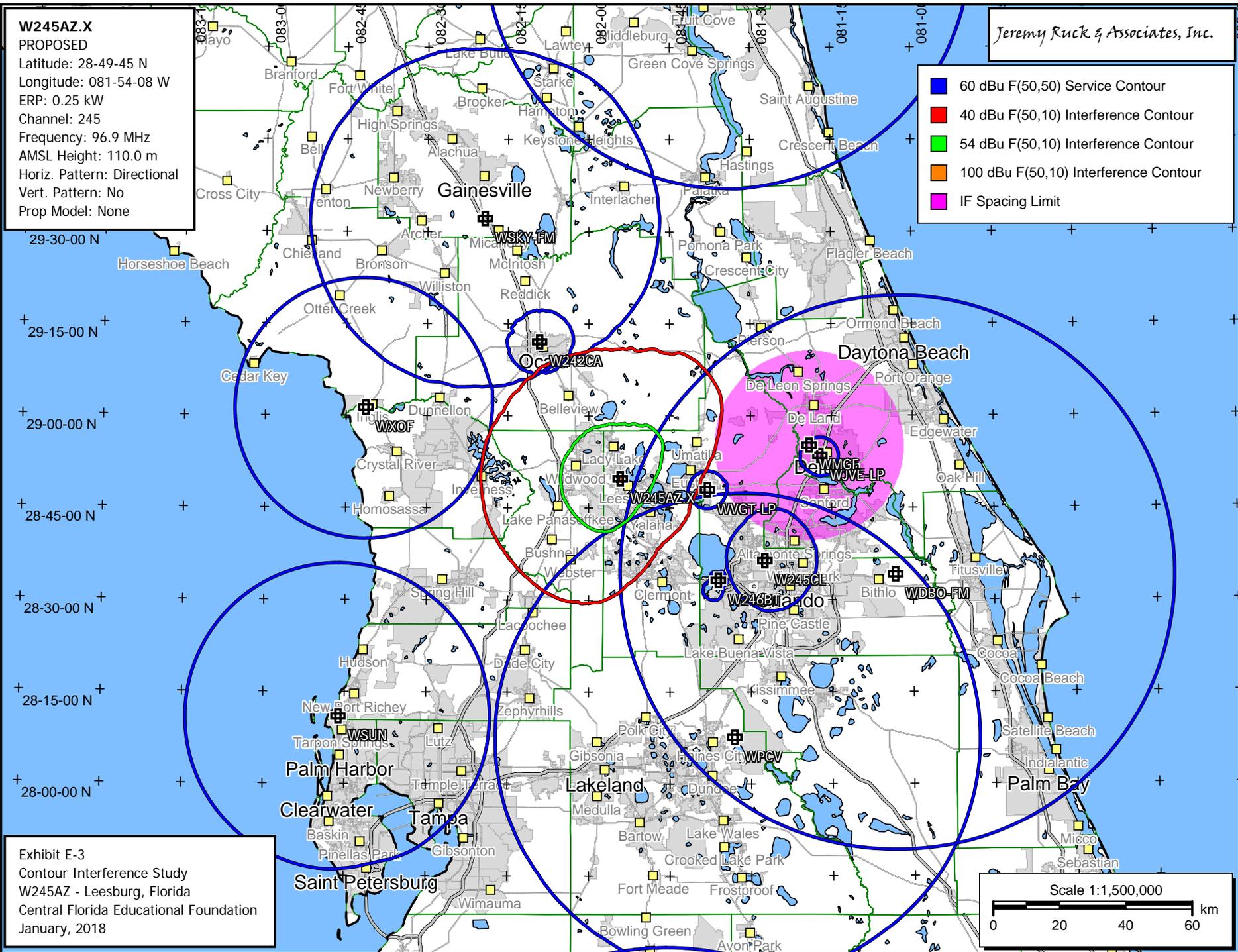


Exhibit E-3
Contour Interference Study
W245AZ - Leesburg, Florida
Central Florida Educational Foundation
January, 2018

