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DIGITAL LPTV FACILITY MINOR CHANGE APPLICATION

WFGZ-LD

FCC FACILITY ID: 189670

LAKE CITY, FLORIDA

OCTOBER 2023

ENGINEERING NARRATIVE

Minor Change Application:

WFGZ -LD (was W22EF) seeks to modify its licensed facility to specific a new transmitter site and antenna system parameters. The proposed antenna is a PSI PSILP12BA horizontally polarized directional UHF slot antenna system. A full-service filter mask is to be employed. The facility requested is not contingent upon a grant or channel move of any other known facility at the time of filing.

Maximum Effective Radiated Power (ERP) is 15-kilowatts, horizontal polarization only.

Modification Compliance:

Pursuant to 47 CFR §74.787(b) the instant application is considered a “minor” change because;

- There is no change in transmitting antenna location such that the protected service contour resulting from the change does not overlap some portion of the protected service contour of the authorized facility of the station license as illustrated in Figure 1, Present & Proposed Service Contours.
- There is no change in transmitting antenna location ***greater than 30 miles*** (48.27 km) from the reference coordinates of the existing station licensed antenna location, as noted below:

CALCULATED DISTANCE BETWEEN EXISTING LICENSE AND PROPOSED SITES

SITE	LAT (NAD83)	LON (NAD83)	(KM)	(MI)
CURRENT/EXISTING	29-51-34.0 N	082-34-28.0 W	43.41	26.98
PROPOSED MOD	29-32-09.9 N	082-19-16.9 W		

FCC Tower Registration - 1029135

FAA Notification Not Required.

The proposed antenna mounting structure is 104.5 meters in overall height above ground level (AGL). No change in the overall height of this structure will occur. This is an existing communication tower that does not require further FAA notification. The antenna is to be side-mounted on the supporting structure at the 45.7 meter AGL level.

Antenna Elevations:

The ground elevation at the site is 29.0 meters above mean sea level (AMSL). The center of radiation of the proposed antenna is 117.0 meters above ground level (AGL). The center of radiation is 146.0 meters above mean sea level (AMSL), as tabulated below:

ALL ELEVATIONS IN METERS

GROUND ELEVATION	29.0
SUPPORTING STRUCTURE OVERALL HEIGHT AGL	152.4
ANTENNA HEIGHT AGL	117.0
ANTENNA RCAMSL	146.0

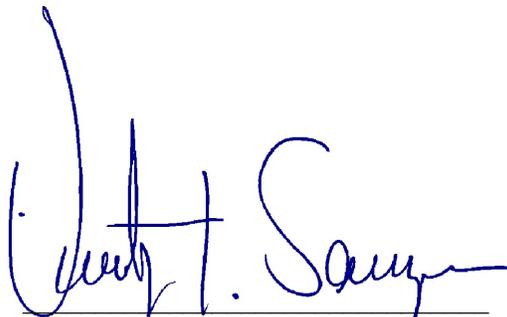
FCC TVStudy Results: 01 Terrain Profile Spacing Requested

The results of a interference study of the proposal using the **FCC TVStudy program (Version 2.2.5)**, shows that no prohibitive interference will occur from the proposal. A copy of the summary report has been included in this application. The applicant accepts any incoming interference that is predicted to exist to the proposed facility by any authorized or pending, primary or secondary TV station at the time this application is submitted. **A cell size of 1.0 kilometer, with a 0.1 terrain profile spacing is requested due to terrain/elevation deviations within the study area.**

Environmental Evaluation Statement:

The environmental evaluation statement concerning this proposal has been included in this application and can be found as a separate file upload within the application. A grant of this proposal would NOT be an action which would have a significant environmental effect as demonstrated in the environmental evaluation statement.

October 4, 2023



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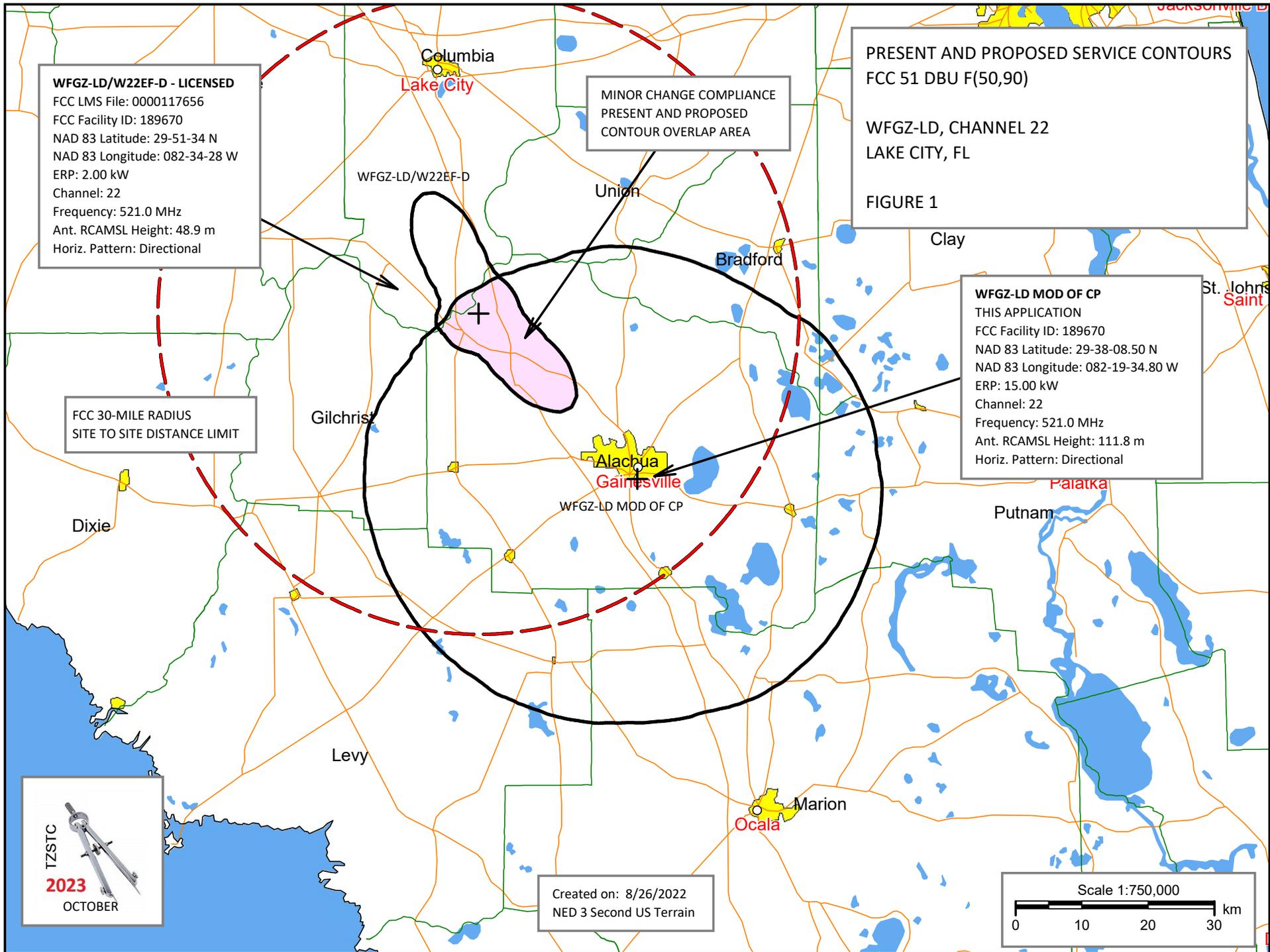


FIGURE 2 - PSILP12BA Antenna Pattern

Pre-Rotation Antenna Pattern

Azimuth (deg)	Relative Field
0.0	1.0
10.0	0.98
20.0	0.96
30.0	0.93
40.0	0.93
50.0	0.94
60.0	0.97
70.0	0.99
80.0	0.98
90.0	0.95
100.0	0.87
110.0	0.77
120.0	0.63
130.0	0.47
140.0	0.35
150.0	0.23
160.0	0.21
170.0	0.22
180.0	0.23
190.0	0.22
200.0	0.21
210.0	0.23
220.0	0.35
230.0	0.47
240.0	0.63
250.0	0.77
260.0	0.87
270.0	0.95
280.0	0.98
290.0	0.99
300.0	0.97
310.0	0.94
320.0	0.93
330.0	0.93
340.0	0.96
350.0	0.98

Rotation Angle = 287

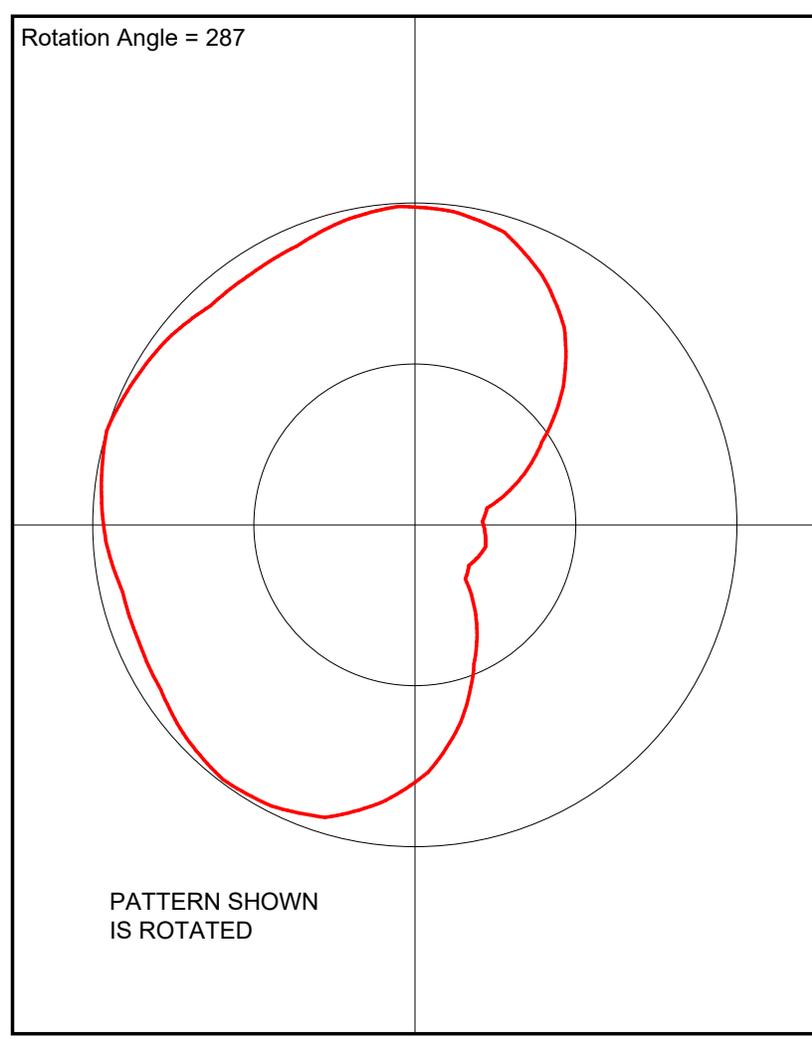


FIGURE 3 - FCC TVSTUDY SUMMARY REPORT

NOTE: Study cell size: 1.00 km

Profile point spacing: 0.10 km

Proposal: WFGZ-LD D22 LD CP LAKE CITY, FL
 File number: WFGZ-LD MOD CP
 Facility ID: 189670
 Station data: User record
 Record ID: 716
 Country: U.S.

Build options:
 Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WCLF	D21	DT	CP	CLEARWATER, FL	BLANK0000219893	188.3 km
No	WCLF	D21	DT	LIC	CLEARWATER, FL	BLCDT20060627AAQ	190.9
No	WDYB-CD	D21	DC	LIC	DAYTONA BEACH, FL	BLANK0000106571	119.0
Yes	WJEB-TV	D21	DT	LIC	JACKSONVILLE, FL	BLANK0000105949	110.0
No	WKME-CD	D21	DC	LIC	KISSIMMEE, FL	BLANK0000090448	152.6
No	WKMG-LD	D21	LD	LIC	OCALA, FL	BLANK0000087100	37.8
No	W21AU-D	D21	LD	LIC	ORLANDO, FL	BLANK0000025170	160.0
No	W21EH-D	D21	LD	CP	TALLAHASSEE, FL	BLANK0000215027	214.6
No	W21EL-D	D21	LD	LIC	VALDOSTA, GA	BLANK0000177717	150.4
No	WCOV-TV	D22	DT	LIC	MONTGOMERY, AL	BLANK0000115937	456.1
No	WGCU	D22	DT	LIC	FORT MYERS, FL	BLANK0000107706	307.3
No	WGFS-LD	N22-	TX	CP	FORT MYERS, FL	BPTTL20140501ACL	346.7
No	WUBF-LD	D22	LD	LIC	JACKSONVILLE, FL	BLANK0000068178	105.5
Yes	WVEN-TV	D22	DT	LIC	MELBOURNE, FL	BLANK0000100080	160.0
No	WFOR-TV	D22	DT	LIC	MIAMI, FL	BLANK0000205002	447.0
No	WPFN-CD	D22	DC	LIC	PANAMA CITY, FL	BLANK0000062893	341.0
Yes	WTWC-TV	D22	DT	LIC	TALLAHASSEE, FL	BLANK0000118579	203.4
No	WARP-CD	D22	DC	LIC	TAMPA-ST. PETERSBURG, FL	BLANK0000132166	187.8
No	WJCL	D22	DT	LIC	SAVANNAH, GA	BLANK0000029019	295.6
No	WKCF	D23	DT	LIC	CLERMONT, FL	BLANK0000143772	160.0
No	WKBJ-LD	D23	LD	LIC	Jacksonville, FL	BLANK0000108066	110.0
No	W23FJ-D	D23	LD	LIC	JENNINGS, FL	BLANK0000194407	116.5
No	DW23AQ	N23-	TX	APP	LAKE CITY, FL	BLTT19931215JE	81.1
No	WTBZ-LD	N29z	TX	LIC	GAINESVILLE, FL	BLTTL20050907ABX	25.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D22
 Mask: Full Service
 Latitude: 29 32 9.90 N (NAD83)
 Longitude: 82 19 16.90 W
 Height AMSL: 146.0 m
 HAAT: 0.0 m
 Peak ERP: 15.0 kW
 Antenna: PSI PSILP12BA (ID 111377) 287.0 deg
 Elev Pattn: Generic

49.6 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	14.6 kW	115.0 m	45.8 km
45.0	6.49	127.2	42.6
90.0	0.681	125.5	31.0
135.0	0.766	115.9	30.9
180.0	9.60	110.9	43.3
225.0	14.2	123.3	46.3
270.0	14.0	126.9	46.4
315.0	13.1	125.0	46.0

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 121 m

Distance to Canadian border: 1349.4 km

Distance to Mexican border: 1488.7 km

Conditions at FCC monitoring station: Vero Beach FL
Bearing: 142.1 degrees Distance: 270.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 305.6 degrees Distance: 2387.6 km

Study cell size: 1.00 km

Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Proposal causes 0.02% interference to BLANK0000105949 LIC scenario 2
Proposal causes 0.46% interference to BLANK0000100080 LIC scenario 1
Proposal causes no interference to BLANK0000118579 LIC

---- Below is IX received by proposal WFGZ-LD MOD CP ----

Proposal receives 1.86% interference from scenario 1

No IX check failures found.

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WFGZ-LD

LPTV CHANNEL 22 OPERATION

FACILITY ID: 189670

LAKE CITY, FLORIDA

OCTOBER 2023

ENVIRONMENTAL EVALUATION STATEMENT

A grant of this proposal would NOT be an action which would have a significant environmental effect as demonstrated in this environmental evaluation statement. Any changes in equipment, or construction, if necessary will not trigger any event with regards to Section 106 of the National Historical Preservation Act (NHPA).

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 radio frequency 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.)

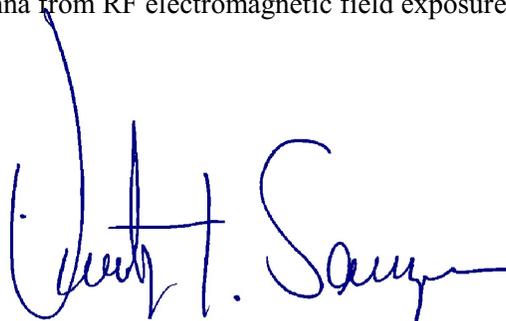
CALCULATED POWER DENSITY AT 2 METERS AGL (0.5 ANTENNA RELATIVE FIELD VALUE) ERP MAX (H ONLY)

CR AGL 117.0 M ERP MAX 15.0 KW	MPE ($\mu\text{W}/\text{CM}^2$)	CALCULATED VALUE ($\mu\text{W}/\text{CM}^2$)	% OF MPE	PASS/FAIL
CONTROLLED AREA	1736.7	9.47	0.55%	PASS
PUBLIC AREA	347.3		2.73%	PASS

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs are posted at the site. The applicant will coordinate exposure procedures with any co-located facilities and will reduce power or cease operation as necessary to protect persons having access to the site, tower, or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

October 4, 2023

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