

**WMXB
Tuscaloosa, AL
1280 kHz
#68420**

BSTA-20220126AAA

APPLICATION FOR ENGINEERING STA EXTENSION AND MODIFICATION

Applicant:

**Lawson of Tuscaloosa, Inc.
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205-345-4787**

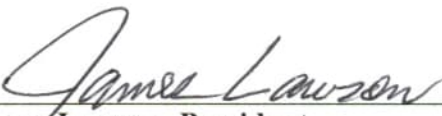
**WMXB 1280 kHz
Facility #68420
FRN 0009937590**

Purpose:

The applicant continues to actively explore a new permanent site. Continued operation through an STA is proposed at a different site using a commercially available AM antenna.

Certification:

The Applicant certifies that neither the Applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. §862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR . See §1.2002(b) of the rules, 47 CFR §1.2002(b), for the definition of "party to the application" as used in this certification §1.2002(c). The Applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.


James Lawson, President 11/4/2022

Anderson Associates

Broadcast Engineering Consultants

Technical data and exhibits for requested STA:

WMXB

1280 kHz

Facility #68420

0.1 kW Day/ 0.030 kW Night

Efficiency - 305.8 mV/m/km/kW worst case assuming 90° tower and 90° 120 radial ground system.

Site: N 33-11-27.9 W 87-31-40.5 (NAD 27)

Antenna type: Isotron ISO-AMB-400 antenna which uses a 9 meter radiator and coil loading. Detailed information on the antenna is available at:

<http://isotronantennas.com/>



Anderson Associates

Broadcast Engineering Consultants

The following exhibits are provided:

- E1 Vertical sketch
- E2 STA 0.5 mV/m Day contour is contained within the WMXB 0.5 mV/m Day
- E3 Night interference study

The 1000 mV/m population determined using AMPRO2 is 0 and the contour is -.1 km. Clearly, it is less than 300.

RF determination:

The 0.1 kW facility's RF exposure will not exceed FCC requirements since the closest person in the adjacent two story building will be at least 5 meters from the antenna and anyone at the base of the tower will be 9 meters below the antenna based on the FCC requirements that would only require a 1 meter fence for a 1,000 Watt facility.

TABLE 2. Predicted Distances for Compliance with FCC Limits: 0.21-0.4 Wavelength

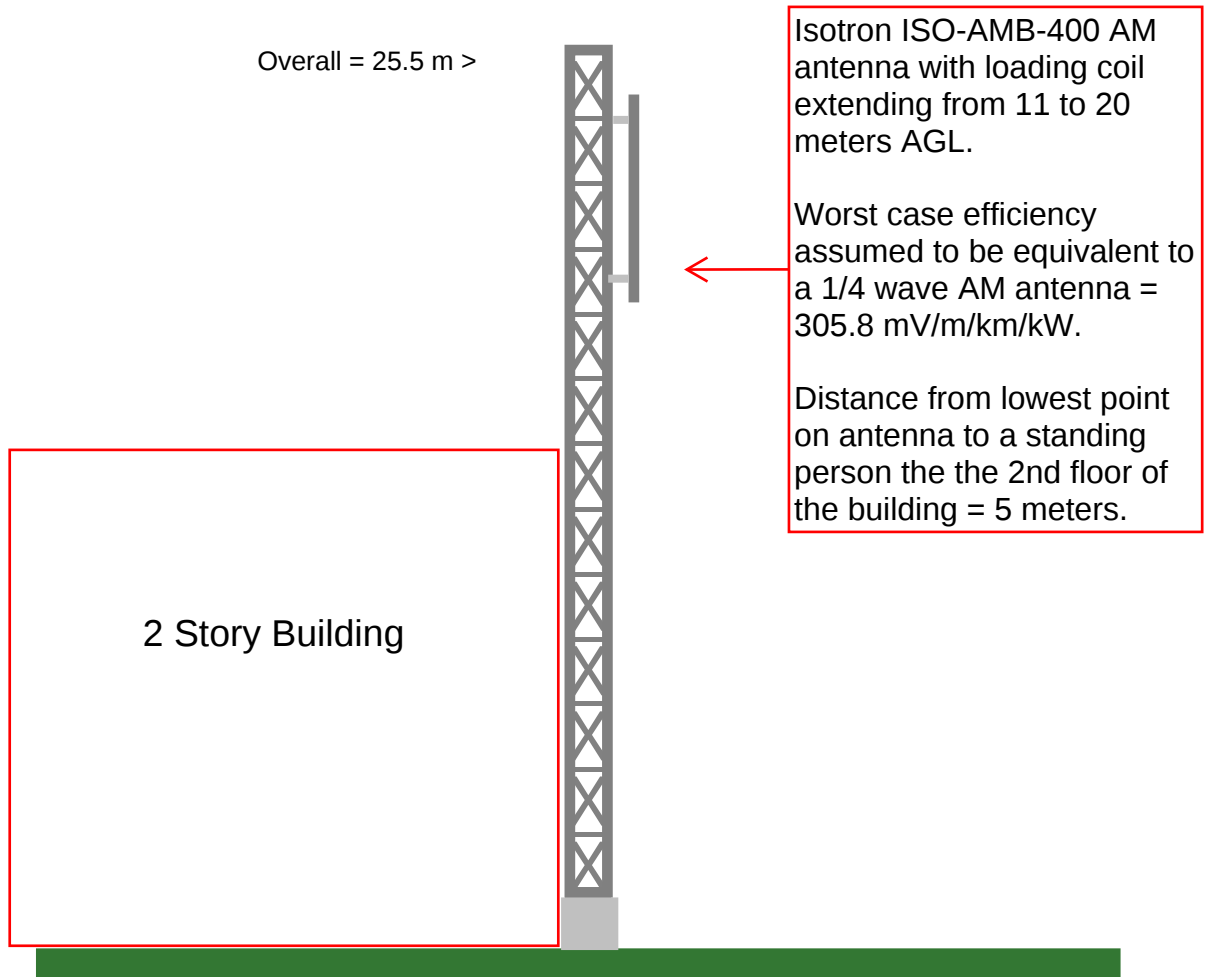
Frequency (kHz)	Transmitter Power (kW)			
	50	10	5	1
	Predicted Distance for Compliance with FCC Limits (meters)			
535-740	4	2	2	1
750-940	4	2	2	1
950-1140	4	2	2	1
1150-1340	4	2	2	1
1350-1540	4	2	2	1
1550-1705	5	2	2	1

If any additional technical information is required please contact the undersigned.

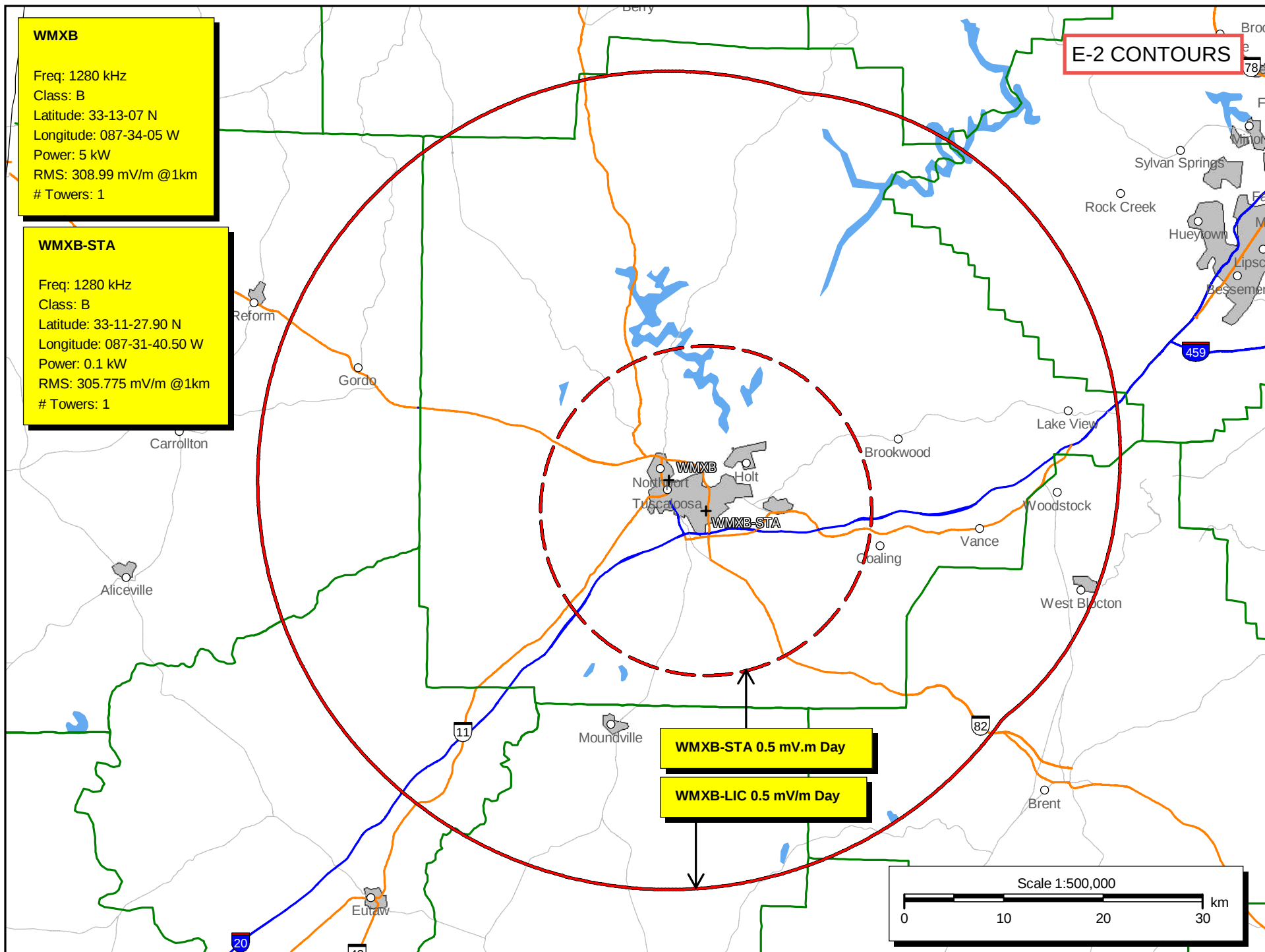


Charles M. Anderson 11-4-2022
270-535-4432
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E-1 VERTICAL SKETCH



NOT TO SCALE



E-3 Night Allocation Protection Report

Call: WMXB-STA
Freq: 1280 kHz
TUSCALOOSA, AL, US
Hours: N
Lat: 33-11-27.90 N [NAD27]
Lng: 087-31-40.50 W
Power: 0.03 kW
Theo RMS: 305.77 mV/m @ 1km @ 1kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swch	TL Swch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	90.0	0	0	0.0	0.0	0.0	0.0

Call Letters	Ct St City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
WODT	US LA NEW ORLEANS	144.08	1.492	51.77	49.53	2.24
50% = 4.132, 25% = 5.942; ZYJ-455-A=2.63 WALI=2.27 XETIZ/A=2.24 WADO=1.94 HJSO-A=1.70 HRAM-A=1.60 XECAM/A=1.57 YVQS-A=1.50 WMXB=1.49 XESQ/A=1.45						
WGBF	US IN EVANSVILLE	109.50	1.955	89.26	50.72	38.54
50% = 5.531, 25% = 7.909; WALI=5.53 WHIO=2.36 WONW=2.27 WANS=2.19 WMCP=2.16 ZYJ-455-A=2.00 WWTC=1.99 WJAY=1.95						
WMCP	US TN COLUMBIA	232.58	4.156	89.34	44.96	44.38
50% = 16.622, 25% = 16.622; WGBF=14.64 WALI=7.88						
WWTC	US MN MINNEAPOLIS	22.53	1.016	225.50	52.86	172.63
50% = 3.114, 25% = 4.065; KOIL=2.70 KNWC=1.55 ZYJ-455-A=1.42 WIRL=1.36 WODT=1.35 WBIG=1.07						
WANS	US SC ANDERSON	130.21	7.025	269.77	50.05	219.72
50% = 13.33, 25% = 18.554; WGBF=8.66 WALI=7.30 WMXB=7.03 WODT=6.59 WUZZ=6.06 WJAY=5.91 WADO=5.58 WMCP=4.51						
WUZZ	US PA NEW CASTLE	36.96	2.059	278.63	52.64	225.99
50% = 5.386, 25% = 8.398; WSUX=3.29 WADO=3.16 WONW=2.87 WHTK=2.66 WGBF=2.38 WXYT=2.26 WALI=2.22 WJAY=2.22 WHVR=2.19 CFMB/ =2.18 1280CFBN/ =2.06						

E-4 TOWAIR Determination Results

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

*** 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

PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7993.68 MTRS (7.99369 KM) AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	33-13-27.00N	087-36-15.00W	TUSCALOOSA NTL	TUSCALOOSA, TUSCALOOSA, AL	46.6	1980.5999999999999

Your Specifications

NAD83 Coordinates

Latitude	33-11-28.3 north
Longitude	087-31-40.5 west

Measurements (Meters)

Overall Structure Height (AGL)	25.5
Support Structure Height (AGL)	0
Site Elevation (AMSL)	63

Structure Type

LTOWER - Lattice Tower