

**SECTION III - LICENSE APPLICATION ENGINEERING DATA**

Name of Applicant

**Saga Communications of Tuckessee, LLC**

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)

☐

Station License

☒

Direct Measurement of Power

**1. Facilities authorized in construction permit**

Call Sign	File No. of Construction Permit (if applicable)	Frequency (kHz)	Hours of Operation	Power in kilowatts	
<b>WKFN</b>		<b>540 kHz</b>	<b>Unlimited</b>	Night <b>0.055 kW</b>	Day <b>4.0 kW</b>

**2. Station location**

State <b>Tennessee</b>	City or Town <b>Clarksville</b>
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**3. Transmitter location**

State <b>Tennessee</b>	County <b>Montgomery</b>	City or Town <b>Clarksville</b>	Street address (or other identification) <b>On Old Clarksville-Russellville Pike 0.32 miles from the city of Clarksville, TN</b>
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**4. Main studio location**

State <b>Tennessee</b>	County <b>Montgomery</b>	City or Town <b>Clarksville</b>	Street address (or other identification) <b>On Old Clarksville-Russellville Pike 0.32 miles from the city of Clarksville, TN</b>
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**5. Remote control point location (specify only if authorized directional antenna)**

State	County	City or Town	Street address (or other identification)
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6. Has type-approved stereo generating equipment been installed?

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Yes

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No

7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68?

☐

Yes

☐

No

☒

Not Applicable

Attach as an Exhibit a detailed description of the sampling system as installed.

Exhibit No.

**8. Operating constants:**

RF common point or antenna current (in amperes) without modulation for Night System <b>1.34 amperes</b>	RF common point or antenna current (in amperes) without modulation for day system <b>11.45 amperes</b>
Measured antenna or common point resistance (in ohms) at operating frequency Night <b>30.5 ohms</b> Day <b>30.5 ohms</b>	Measured antenna or common point reactance (in ohms) at operating frequency Night <b>- j 25.9 ohms</b> Day <b>-j 25.9 ohms</b>

**Antenna indications for directional operation**

Towers	Antenna monitor Phase reading(s) in degrees		Antenna monitor sample current ratio(s)		Antenna base currents	
	Night	Day	Night	Day	Night	Day

Manufacturer and type of antenna monitor:

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9. Description of antenna system ((f directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

Type Radiator Guyed, uniform cross-section steel tower mounted on a concrete base pier and insulator	Overall height in meters of radiator above base insulator, or above base, if grounded.  111.2 meters	Overall height in meters above ground (without obstruction lighting)  112.4 meters	Overall height in meters above ground (include obstruction lighting)  113.3 meters	If antenna is either top loaded or sectionalized, describe fully in an Exhibit.  Exhibit No.
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Excitation



Series



Shunt

ASR(NDA D1/N1) = 1044988

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

North Latitude	36 °	32 '	31 "	West Longitude	87 °	19 '	32 "
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If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits.

Exhibit No.  
See Vertical Plan

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system.

Exhibit No.

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

No changes to the AM radiating base insulated tower have been implemented other than the addition of the new W256CI - Clarksville, TN FM Translator antenna and isolation circuitry as authorized under Construction Permit BMPFT-20140121HBG.

11. Give reasons for the change in antenna or common point resistance.

This Form 302-AM is being filed to reflect a new antenna resistance measurement taken after the recent tower modifications associated with, and as a §73.1692(a) condition of licensing for, W256CI - Clarksville, TN FM Translator Construction Permit BMPFT-20140121HBG.

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Name (Please Print or Type) Justin W. Asher	Signature (check appropriate box below) 
Address (include ZIP Code) P.O. Box 220 385 Airport Drive Coldwater, MI 49036	Date March 14, 2014  Telephone No. (Include Area Code) 1(517)278-7339



Technical Director



Registered Professional Engineer



Chief Operator



Technical Consultant



Other (specify)

# WKFN(AM) – Clarksville, TN

## Vertical Plan of Antenna System

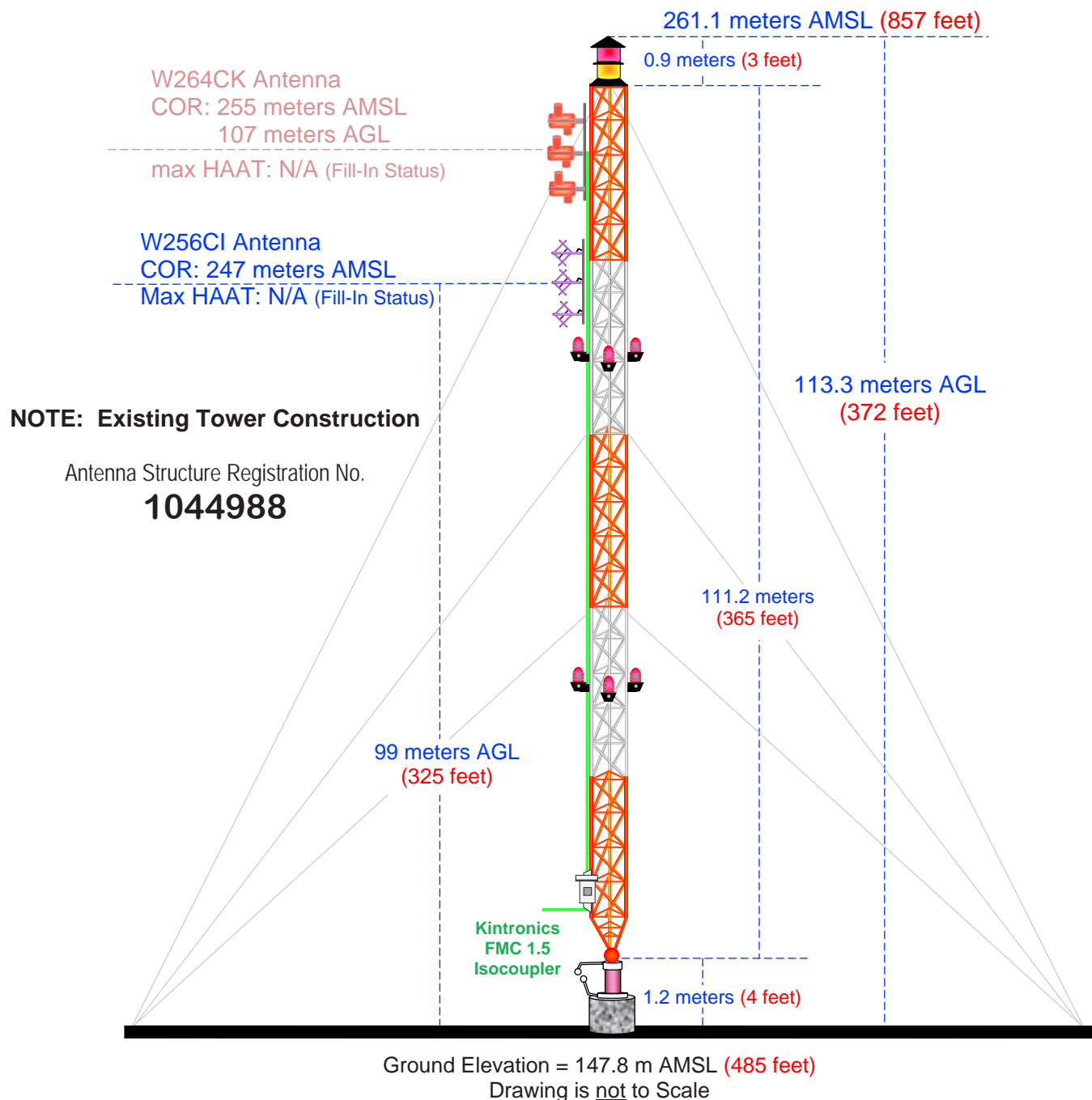
The site is located on Old Clarksville-Russellville Pike, 0.32 mi from the city of Clarksville, Montgomery County, Tennessee.

### Site Location (NAD 27)

NL: 36° 32' 31"

WL: 87° 19' 32"

(N 36-32-31.0; W 87-19-31.9 (NAD '83))



**MUNN-REESE, INC.**

Broadcast Engineering Consultants  
Coldwater, MI 49036