

# **Unit 5.**

# **Antenna Tower**

# **Information**

# FCC Antenna Regulations

- FAA Notification Required for
  - Any new construction greater than 200 feet (60.96 meters) above ground
  - Near an airport runway, taller than
    - 100:1 for a horizontal distance of 20,000 feet
    - 50:1 for a horizontal distance of 10,000 feet
    - 25:1 for a horizontal distance of 5,000 feet of a heliport

## Universal Licensing System

FCC > WTB > ULS

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**ULS Online Systems** ★ =New and Improved

All applications are operating properly.

**NEW USERS**  To use the FCC Online Systems, you first need to register with the FCC.  
[Learn more](#)

**ONLINE FILING**  Apply for a new license, renew, modify, assign authorization, transfer control, manage licenses and applications, associate call sign(s) and more.

**SEARCH**

- LICENSES** Find licenses using the **enhanced** license search across all services.
- APPLICATIONS** Find applications.
- ARCHIVES** Find archived licenses.

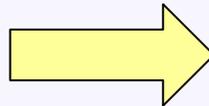
**QUICK LINKS**

**More Resources**

- [Getting Started](#)
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- [Batch Filing](#)

**Other Online Systems**

- [Pay Fees](#)
- [Antenna Structure Registration \(ASR\)](#)
- [TOWAIR](#)
- [Tower Construction Notification](#)
- [Submit a Pleading](#)



**Recent Releases**

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1/23/2006

The FCC's TOWAIR system will determine if FAA notification is required by checking antenna heights and proximity to airports.

**Alerts**

[FCC Registration Number Required for ASR & ULS](#)

[More Alerts](#)

**Downtime Schedule**

No downtimes scheduled, with the exception of the Daily downtimes.

[Daily](#): 12 Midnight - 2 AM ET

**Technical & Licensing Support**

- [Dialup Connections](#)
- [Getting Connected](#)
- [New Users Guide](#)
- [Smart Updates](#)
- [More ULS Support Topics...](#)

**System Access**

Trouble accessing the system?  
Contact: [FCC Support](#).

**Licensing & Forms**

Questions about licensing and forms?  
Contact: [FCC Support](#).

## TOWAIR Determination

[?](#) HELP

The FCC does not require each antenna structure to be registered. This screen enables the user to enter and submit key information about their antenna structure in order to determine whether or not registration with the FCC is necessary. After submitting the form, you receive one of two reply messages:

- The antenna structure requires registration. A list of reasons is provided. Or
- The antenna structure does not require registration. A list of reasons is provided.

For more details on the FCC rules on antenna structure registration see the [Code of Federal Regulations \(CFR\) 47 Part 17.7](#) (Revision 10/01/1996).

### Tower Construction Notification

Notify Tribes and Historic Preservation Officers of your plans to build a tower.  
Note: Notification does NOT replace [Section 106 Consultation](#).

DETERMINE if Registration is Necessary	
NAD83 Coordinates ( <a href="#">Convert from NAD27</a> )	
Latitude	<input type="text"/> ° <input type="text"/> ' <input type="text"/> " N (+) ▾
Longitude	<input type="text"/> ° <input type="text"/> ' <input type="text"/> " W (+) ▾
Measurements	
Measurement System	Meters ▾
Overall Structure Height (AGL)	<input type="text"/>
Support Structure Height (AGL)	<input type="text"/>
Site Elevation (AMSL)	<input type="text"/>
Structure Type	
TOWER - Free standing or Guyed Structure ▾	
<input type="button" value="SUBMIT"/> <input type="button" value="RESET"/>	

## TOWAIR Determination

[? HELP](#)

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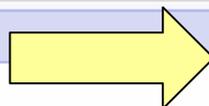
For more details on the FCC rules on antenna structure registration see the [Code of Federal Regulations \(CFR\) 47 Part 17.7](#) (Revision 10/01/1996).

### Tower Construction Notification

Notify Tribes and Historic Preservation Officers of your plans to build a tower. Note: Notification does NOT replace [Section 106 Consultation](#).

DETERMINE if Registration is Necessary	
NAD83 Coordinates ( <a href="#">Convert from NAD27</a> )	
Latitude	<input type="text" value="43"/> ° <input type="text" value="22"/> ' <input type="text" value="19"/> " <input type="text" value="N (+)"/>
Longitude	<input type="text" value="84"/> ° <input type="text" value="17"/> ' <input type="text" value="20"/> " <input type="text" value="W (+)"/>
Measurements	
Measurement System	<input type="text" value="Meters"/>
Overall Structure Height (AGL)	<input type="text" value="320"/>
Support Structure Height (AGL)	<input type="text" value="250"/>
Site Elevation (AMSL)	<input type="text" value="2230"/>
Structure Type	
<input type="text" value="TOWER - Free standing or Guyed Structur"/>	
<input type="button" value="SUBMIT"/> <input type="button" value="RESET"/>	

Enter info,  
then press  
"Submit"



## Antenna Structure Registration

[FCC](#) > [WTB](#) > [ASR](#) > [Online Systems](#) > TOWAIR

### TOWAIR Determination Results

[HELP](#)

[New Search](#) [Printable Page](#)

#### \*\*\* 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	
<b>This structures requires registration. The antenna structure is taller than 60.96 meters (200 feet) and does not meet the criteria for the 6.10-meter (20-foot) Rule exception.</b>	
Your Specifications	
NAD83 Coordinates	
Latitude	43-22-19.0 north
Longitude	084-17-20.0 west
Measurements (Meters)	
Overall Structure Height (AGL)	320
Support Structure Height (AGL)	250
Site Elevation (AMSL)	2230
Structure Type	
TOWER - Free standing or Guyed Structure used for Communications Purposes	

#### [Tower Construction Notification](#)

Notify Tribes and Historic Preservation Officers of your plans to build a tower.

Note: Notification does NOT replace [Section 106 Consultation](#).

**In this example, FAA Notice is required because the structure is taller than 200 feet.**

## Antenna Structure Registration

[FCC](#) > [WTB](#) > [ASR](#) > [Online Systems](#) > TOWAIR

### TOWAIR Determination Results

[HELP](#)

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#### DETERMINATION Results

**Structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.**

#### Your Specifications

##### NAD83 Coordinates

Latitude	43-22-19.0 north
Longitude	084-17-20.0 west

##### Measurements (Meters)

Overall Structure Height (AGL)	20
Support Structure Height (AGL)	15
Site Elevation (AMSL)	2230

##### Structure Type

POLE - Any type of Pole

#### [Tower Construction Notification](#)

Notify Tribes and Historic Preservation Officers of your plans to build a tower.

Note: Notification does NOT replace [Section 106 Consultation](#).

**In this example, no FAA Notice is required.**