

Preparing to License

Before you begin the license process, you must have detailed information about your radio system to provide to the frequency coordinator, such as:

Frequency/ Frequency Band

What frequency band or specific frequency you want to operate on. Note: Frequencies in the 470-512 MHz band are shared with UHF-TV channels 14-20 and are only available in 11 cities. The Commission's rules require licensees to show that any assigned channels in this band in a particular urbanized area are at full capacity before they will be assigned additional 470-512 MHz channels in that area. See [Shared Frequencies](#) for more information.

Mobile Radio Count

The number of mobile radios that will operate on the system.

Output Power/ERP

The output power of the system amplifier, as well as the effective radiated power (ERP), which is the system's power at the antenna.

Emission Designators

Includes several pieces of vital information: modulation, signal, type of information and size of the channel. This determines the channel width your system will occupy.

For stations near the Canadian border, refer to the [Industry Canada](#) site to access Canadian licensing information. Note that the Canadian database does not show all valid stations.

Antenna Information

You must also provide the following information about your antenna:

Structure

The most common codes are:

- B - Building with side mounted antenna
- BANT - Building with antenna on top
- MAST - Self-supported structure
- PIPE - Pipe antenna
- POLE - Any type of pole antenna
- TOWER - Free standing guyed structure used for communications purposes

Height

Antenna height from ground to tip, in meters.

Support Structure Height

If antenna is mounted on top of a building, it is the distance from ground to the top of the building. Check with your building management company for this information.

Coordinates

All coordinates (latitude/longitude) must be referenced to the North American Datum of 1983 (NAD83). Latitude and longitude must be listed in degrees, minutes and seconds.

Site Elevation

The antenna site ground elevation above sea level. This information should always be in meters.

FAA Antenna Structure Registration

Refer to ASR [TOWAIR Determination](#) to determine if your antenna needs to be registered with the FCC.