STARTER GUIDE

TECHNICIAN PRIVILEGES AND FREQUENCIES, MADE SIMPLE

Think of all the radio frequencies as one long road. Your license says which stretches of that road you can drive on. The band plan is the lane markings, so people doing different things don't bump into each other. That's really all there is to it.

Printed from www.cqdeck.com/learn/technician-band-plan. The page always has the latest version.

Which stretches are yours

The road has two kinds of stretches: the ones that stay close to home, and the ones that can reach around the world.

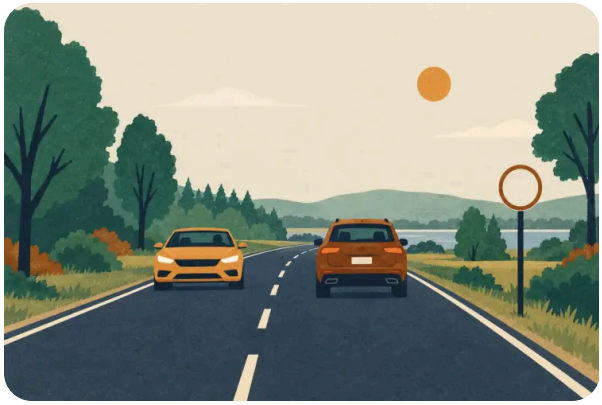
- Close to home (6 m, 2 m, 1.25 m and 70 cm): all yours, with any kind of signal. A handheld reaches a few miles on its own, and much farther through a repeater on a hill.
- Around the world (HF): mostly for higher license classes. You get a few small slices, including voice on part of 10 meters.



Close to home on the left, around the world on the right.

Rules and lane markings

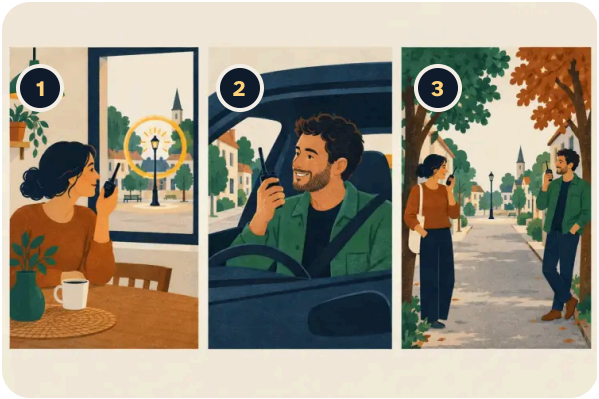
- The FCC rules are the law, like speed limits. They decide where your license lets you transmit.
- The band plan is a habit everyone agrees on, like keeping to your lane. Nobody gets a ticket for ignoring it, but you could spoil someone else's contact, and people notice.
- Every area tweaks the plan a little. Your local repeater list is the best guide.



Your first call, radio to radio

On 2 meters there's one spot everyone knows, like the clock in a town square. Here's how to use it for a simplex call (radio to radio, no repeater).

1. Tune to 146.520 MHz, the national calling spot.
2. Say your call sign and that you're listening: "N0CALL, listening on 146.520."
3. When someone answers, pick another frequency together and move there to talk, so the calling spot stays free.



Meet at the calling spot, then move somewhere quieter to talk.

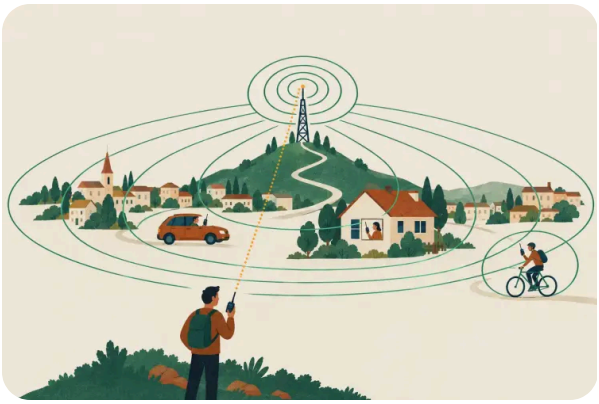
TRY IT **146.520 on the tuning dial** cqdeck.com/?tune=146.520#dial

Rehearse a simplex call cqdeck.com/practice?scenario=simplex-call

How a repeater gets you farther

A repeater sits up high. It hears you on one frequency and repeats you on another, so everyone for miles around can hear you.

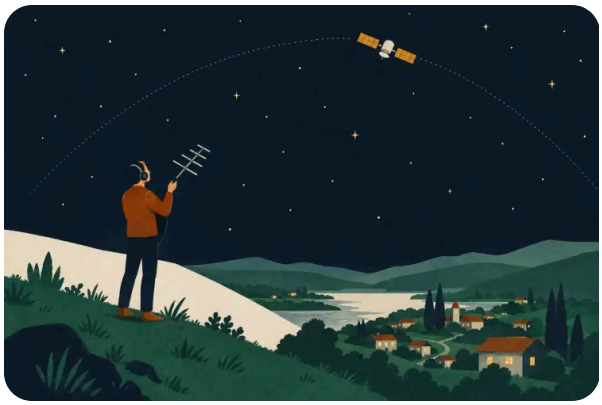
- The gap between the two frequencies is called the offset. Most radios set it for you when you pick a repeater from a list.
- Many repeaters also need a tone. Your local repeater list gives it.



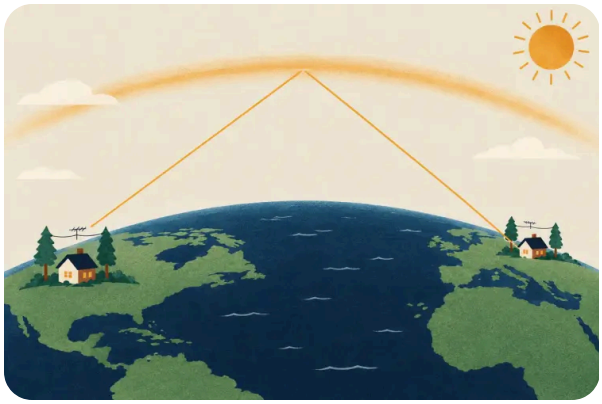
TRY IT **Repeater etiquette** cqdeck.com/learn/repeater-etiquette

Keep the satellite lanes clear

Small parts of 2 meters and 70 centimeters are kept for satellites. They often sound empty, but a satellite could be passing over someone nearby, so don't chat there.



Talking far away on 10 meters



On part of 10 meters (28.300 to 28.500 MHz) you can talk by voice to other countries. The signal bounces off a layer high in the sky that the sun charges up.

- When the sun is busy, a simple wire antenna can reach across an ocean.
- When the sun is quiet, 10 meters can sound empty for days. That’s normal.
- You also get slices of 80, 40 and 15 meters for Morse code.

TRY IT **Is the sun busy today?** cqdeck.com/learn/reading-solar-numbers

Learn Morse code cqdeck.com/learn-morse

How much power can I use?

More than you'll ever need. A handheld puts out 5 to 8 watts. The limit is 1,500 watts on most bands and 200 watts on your long-distance slices. The real rule is simpler: use only as much power as you need.

Try it on your deck

Your dashboard's band chart shows these same privileges with today's conditions, and the tuning dial on the home page tells you whether you can use any frequency.

TRY IT **Your band chart** cqdeck.com/dashboard **The tuning dial** cqdeck.com/#dial

Sources

FCC rule 97.301: authorized frequency bands https://www.ecfr.gov/current/title-47/chapter-I/subchapter-D/part-97/subpart-D/section-97.301

FCC rule 97.305: authorized modes https://www.ecfr.gov/current/title-47/chapter-I/subchapter-D/part-97/subpart-D/section-97.305

FCC rule 97.313: transmitter power https://www.ecfr.gov/current/title-47/chapter-I/subchapter-D/part-97/subpart-D/section-97.313

ARRL band plan https://www.arrl.org/band-plan

ARRL: US amateur radio bands https://www.arrl.org/frequency-allocations