

WHY HAM IT UP?

Why RVers should have a ham radio license
And how to get one

Skip Kazmarek, K4EAK
GEAR Rally 2025



WHAT IS HAM RADIO?

Amateur Radio (ham radio) is a popular hobby and service that brings people, electronics and communication together. People use ham radio to talk across town, around the world, or even into space, all without the Internet or cell phones.

There are over 740,000 hams in the U.S., all ages, all walks of life, men, women, teens, and children.

- Many schools offer ham radio courses as part of their STEM programs
- In October 2025, Georgia Tech licensing course sold out at 75 participants!
- Many retirees pursue ham radio licenses as part of an active retirement

In 2024, the number of new hams licensed increased by 24%!





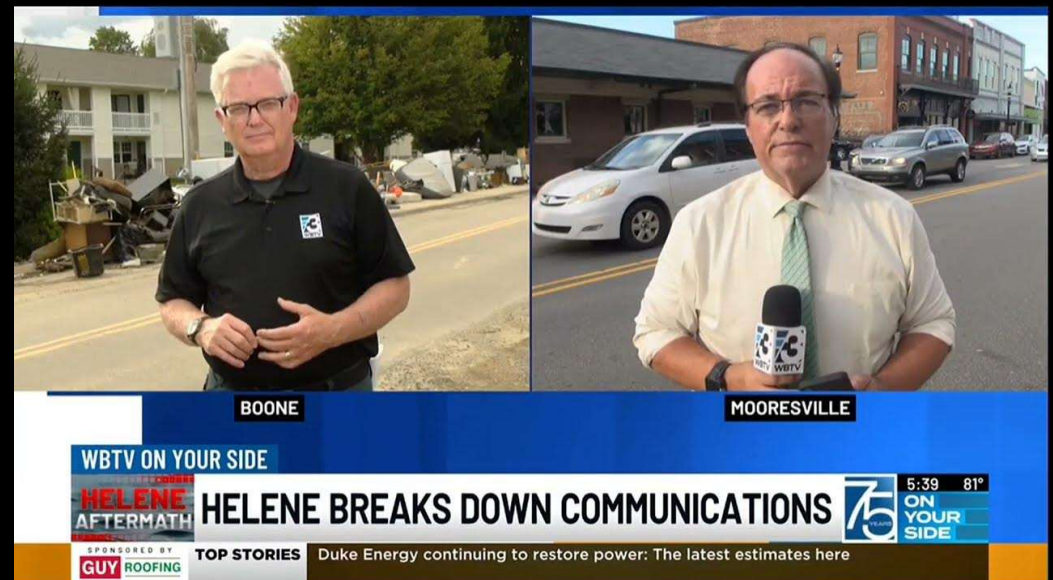
WHY GET A HAM RADIO LICENSE?

In an era of cell phones, satellite internet, and other digital technologies, why bother with a ham radio license?

- Ham radio equipment can communicate worldwide, often on battery power, at times and in places where no other communications methods are available.
- In times of emergency, all other forms of communication are often unavailable or overloaded.
- Ham radio is a great way to enjoy the outdoors.
- Ham radio as a hobby presents ways to learn new things, meet new people, and have fun exploring the varied world of wireless communications.
- **In particular, ham radio is fun and an engaging complement to the RV lifestyle.**

EMERGENCY COMMUNICATIONS

When Hurricane Helene hit western North Carolina, tens of thousands of residents were left without power or cell phone coverage. Local hams, using ham radio's ability to send text and email messages without a local internet connection, were able to relay requests for supplies and medication and send messages to let friends and family know that loved ones were OK .



EMERGENCY COMMUNICATIONS



When the storm passed, destruction was everywhere. Our road and driveway were blocked by downed trees far too large for one person to clear. Communications were cut—no 911, no cell service, no Internet. Many in town lost water as reservoirs were severely damaged.



As I wrote during the storm, amateur radio became our family's superpower. With phones and Internet down, our radios connected us to net control and our local EOC via the N2GE (Mount Mitchell) repeater. We passed traffic, performed wellness checks, and stayed in touch with neighbors using community simplex frequencies and Handy Talkies I distributed to unlicensed members of our community. By definition, this was a communications emergency, so no license was required. Those HTs kept us connected and better organized.

From Thomas Witherspoon, K4SWL
<https://qrper.net>

EMERGENCY COMMUNICATIONS

- In December 2022, a hiker went out for a casual hike. Everything was going fine until it started to get dark, his cell phone battery died, and he realized there was no way to get to a road except bushwhacking down a mountain in the dark. Fortunately, using a small, hand-held amateur radio transceiver, he was able to contact another ham, who called the hiker's wife, who then called the local police department. He was found and taken back to safety.
- In April 2024, a family traveling in Death Valley National Park got their car stuck in the mud. No cell phone coverage was available, but fortunately the father was a ham radio operator with a mobile transceiver in the car. He began calling for help and, incredibly, another ham radio operator then relayed the message and the father got out of the car in a few hours.
- Countless others.



I'm Retired Army, Got my License in 2018 after hurricane Harvey hit Texas and we could not get in touch with our daughter in Houston. That is what started my venture in this wonderful hobby.

EMERGENCY COMMUNICATIONS

Even possible to send email and text messages
over radio without a local internet connection ...

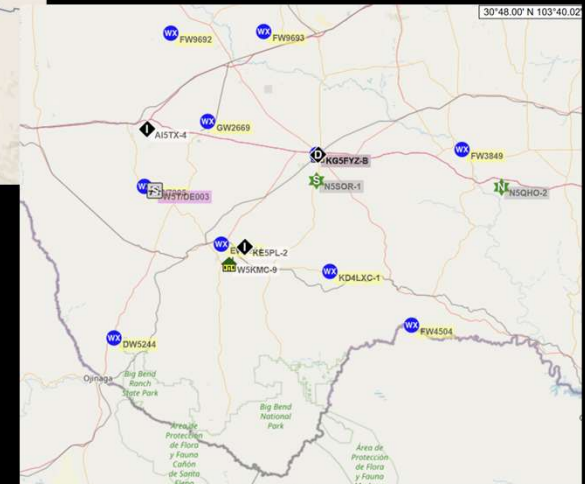
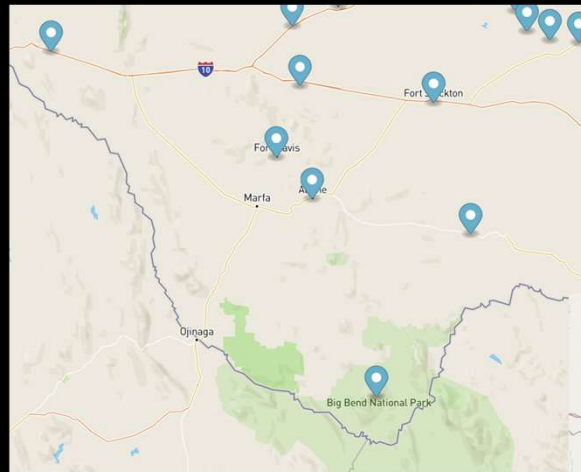
From: K4EAK@winlink.org <K4EAK@winlink.org>
Sent: Saturday, September 28, 2024 12:25 pm
To: we4rv@fmcaarc.com <swe4rv@fmcaarc.com>
Subject: We're OK

Just to let you know, we were spared the worst of the hurricane. A few trees down in the campground. No power but we're OK on batteries. No cell phone service now. Will call when cell service is back up. Don't worry ... we're fine. Please let the family know.

Dad

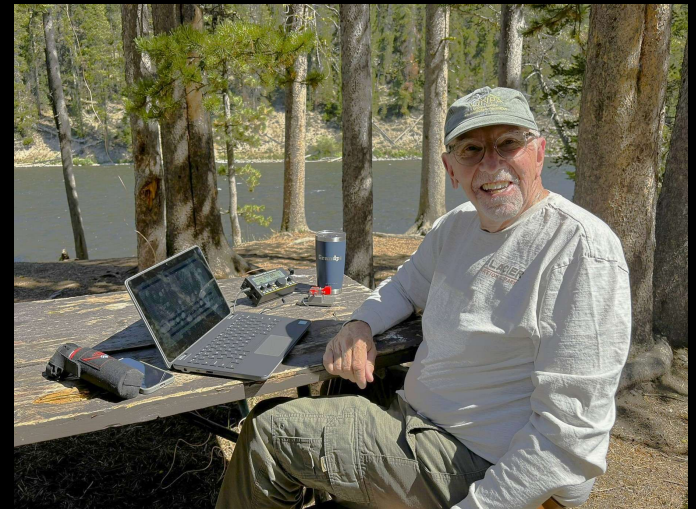
OUTLYING COMMUNICATIONS

- Rvers are often far from cell towers and WiFi access points
- But even very remote areas often have repeaters, APRS stations, and other access points
- And there are usually numerous other hams with mobile/portable rigs



HAM RADIO AND RV'ING

- Mobile Operations: Radios installed in motorhomes and tow vehicles provide local (and wider communications)
- Portable Operations: Setups at picnic tables and folding tables
- Numerous other “OTA” activities ideal for Rvers
- Numerous RV-related “nets”
- Casual chatting and “rag-chewing”
- “Field Day”

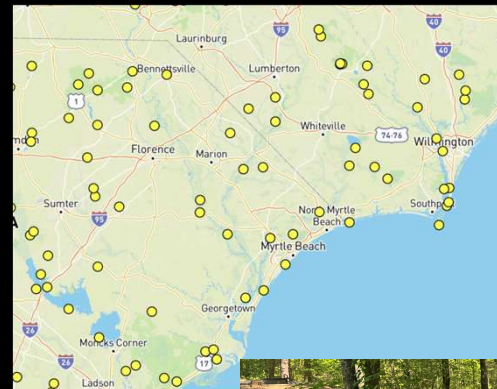


HAM RADIO AND RV'ING



PARKS ON THE AIR

- “Parks on the Air”: State and national parks, forests, wildlife refuges, and other natural areas
 - Over 12,000 locations throughout the U.S.
 - Over 10,000 ham radio “activators”
 - Over 300,000 ham radio “hunters”
- System automatically tracks your contacts and issues awards and certificates



HAM RADIO CLUBS

- Over 2000 radio clubs throughout the United States
- FRVA Amateur Radio Chapter specifically geared to hams in the RV community
 - Over 200 members
 - Several rallies and gatherings each year, always with activities for non-hams
 - Quarterly newsletter
 - On-the-air “nets” three times per week
 - Two online “nets” per week
 - Great website
 - (Free one-year membership to anyone who takes and passes the Tech exam!)

A Little About Our Chapter

We are the Amateur Radio Chapter (ARC) of the

[Family RV Association \(FRVA\)](#),

Formally the Family Motor Coach Association (FMCA)

a 501(c)(7) non-charitable nonprofit corporation.

This chapter enables our members to use their recreational vehicles and radio equipment to enjoy the fellowship of friends with common interests, i.e. RVing and Amateur Radio. Our Amateur Radio activities enable us to keep in contact on a daily basis from around the nation be it from our house or our recreational vehicle.

[To Join our Chapter or Sign-in](#)

[Request Additional Information About Our Chapter](#)

[Privacy Policy: FRVA Amateur Radio Chapter](#)

WHAT EQUIPMENT DO I NEED?

- Most people start with simple “walkie talkies” (“handy talkies”)
 - Good for short-range, line of sight communications and area-wide “repeaters”
 - Many repeaters are linked to the internet, allowing for world-wide communications
 - Some offer real-time location tracking
- Mobile equipment, similar capabilities, but even better
- Next step up is high frequency transceivers
 - Can use mobile, portable, or fixed antennas
 - Can even add amplifiers for very high-power communications
- Prices vary for new equipment, but easy to buy used





For further information, see RV Lifestyle YouTube channel
https://www.youtube.com/watch?v=Sjz6S_WTzDg

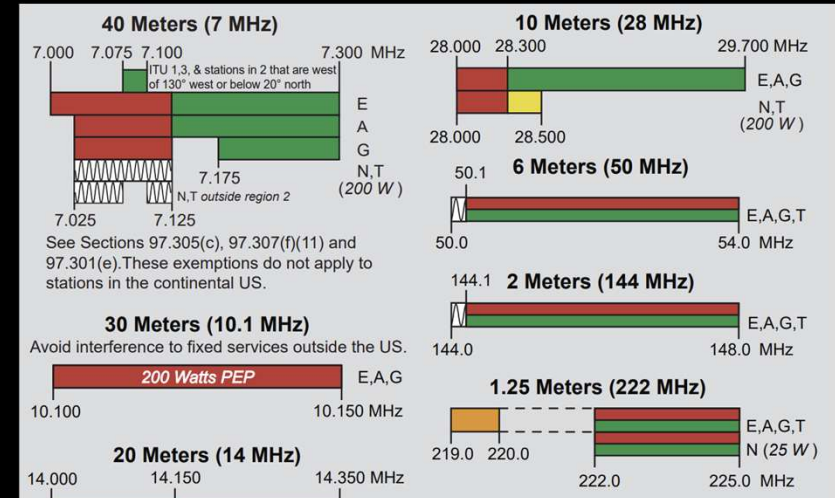


“HOW FAR CAN YOU TALK ON



HOW TO GET A HAM RADIO LICENSE

- Three levels of licenses: Technician, General, Amateur Extra
 - Each comes with increasing privileges to use the available frequencies
 - Each requires increasing levels of technical knowledge
- Technician license is the starting point
 - Relatively minimal amount of technical knowledge
 - Basic knowledge about how radios work and what regulations apply
 - Operations mostly occur on VHF/UHF frequencies (HTs and mobile rigs) with limited HF privileges



Portion of an amateur radio "band plan"



TECHNICIAN LICENSE EXAM

- **No morse code requirement;** just a simple written test.
- 35-question test drawn from a “pool” of 411 multiple choice questions,
- 10 topic areas: (1) FCC rules, (2) operating procedures, (3) radio waves, (4) operating practices, (5) electrical principles, (6) components, (7) simple circuits, (8) signals, (9) antennas, and (10) safety.
- Each topic areas each having a set number of questions (ranging from 2 to 6, depending on the topic)
- Passing score is 26 (74%) correct answers
- Many of the answers are obvious; most of the remaining can be easily memorized. Only a few require math skills (or memorizing the answer).



TECHNICIAN LICENSE EXAM – SAMPLE QUESTIONS

Which agency regulates and enforces the rules for the Amateur Radio Service in the United States?

- A. FEMA
- B. Homeland Security
- C. **The FCC**
- D. All these choices are correct

Under what circumstances is it safe to climb a tower without a helper or observer?

- A. When no electrical work is being performed
- B. When no mechanical work is being performed
- C. When the work being done is not more than 20 feet above the ground
- D. **Never**



TECHNICIAN LICENSE EXAM – SAMPLE QUESTIONS

Which of the following is a safety hazard of a 12-volt storage battery?

- A. Touching both terminals with the hands can cause electrical shock
- B. Shorting the terminals can cause burns, fire, or an explosion
- C. RF emissions from a nearby transmitter can cause the electrolyte to emit poison gas
- D. All these choices are correct

What hazard is created by touching an antenna during a transmission?

- A. Electrocution
- B. RF burn to skin
- C. Radiation poisoning
- D. All these choices are correct

TECHNICIAN LICENSE EXAM – SAMPLE QUESTIONS

What is the voltage across a 2-ohm resistor if a current of 0.5 amperes flows through it?

- A. 1 volt
- B. 0.25 volts
- C. 2.5 volts
- D. 1.5 volts

What is component 1 in figure T-1?

- A. Resistor
- B. Transistor
- C. Battery
- D. Connector

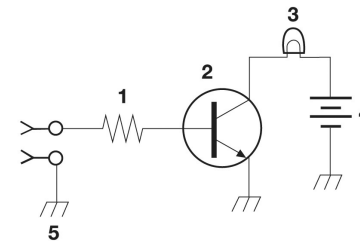


Figure T-1

HOW TO PREPARE FOR EXAM

Several ways to prepare ...

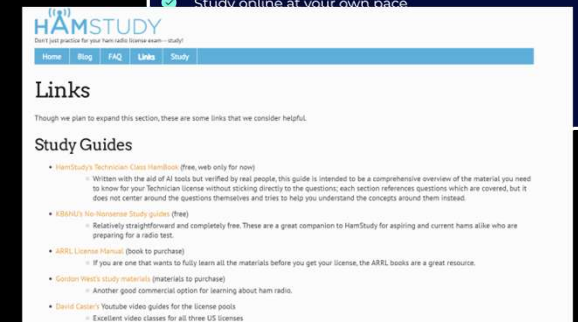
1. Get any of several available study guides and learn the material (using online or other guides as necessary), or ...
2. Take an online course (such as Ham Radio Prep <https://hamradioprep.com/>), or ...
ARRL live study course (Dec 21-22, \$99):
<https://home.arrl.org/action/Store/Product-Details/productId/2029838874>
3. Take an in-person prep session (such as the FRVA ARC prep session at the 2026 FRVA Convention)



Level 1 FCC Technician License Exam Prep Course

Covers all questions in the current FCC Technician Question Pool 2022-2026

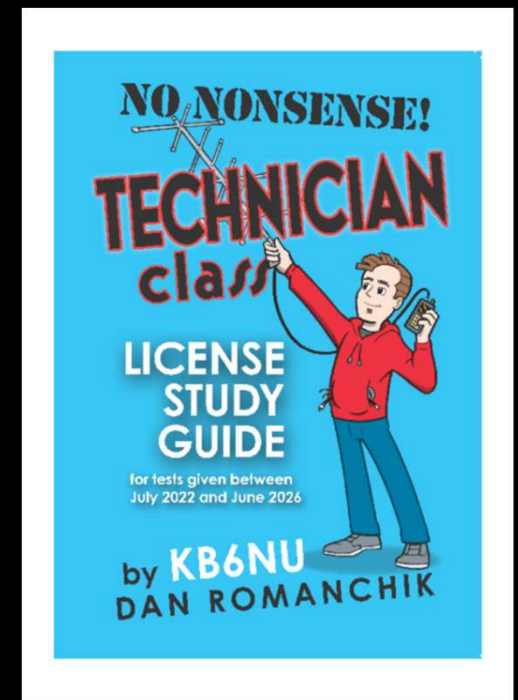
- ✓ Designed for beginners
- ✓ Study online at your own pace



AMATEUR RADIO CHAPTER PREP SESSION

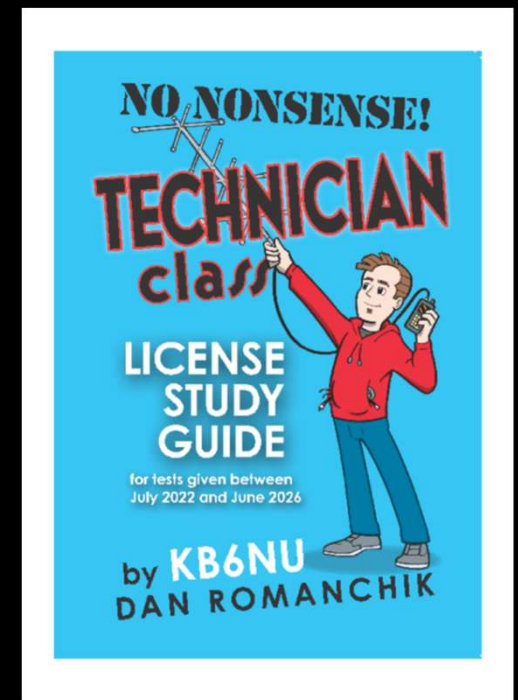
March 16, 2026, at the FRVA Annual Convention

- Go to <https://fmcaarc.com>
- Register for session
 - Space is limited, so register early
- Purchase or download the study guide
- Read through the study guide at least a couple times
- Take a few practice exams
 - Websites for practice exam on ARC website
 - Take enough to get most of the questions and identify areas for further study



AMATEUR RADIO CHAPTER PREP SESSION

- Arrive at Perry on Sunday, March 15, 2026
 - Sunday evening pot-luck dinner with members of the Amateur Radio Chapter
- Attend prep session on Monday, March 16
 - Session will review all 411 questions and the correct answers
 - Starts promptly at 8:30am
 - Lunch will be provided
 - Ends at 4:00pm
- Take the exam on Tuesday, March 17
- Exams will be graded immediately
- Those who pass the exam will be offered a free membership in the FRVA Amateur Radio Chapter!



WHAT'S NEXT?

Join	Join the Amateur Radio Chapter
Attend	Attend an ARC rally
Get	Get a radio
Get on	Get on the air
Consider	Consider an upgrade