

## 2023-11-21 Hamlet Net - Buying Used Ham Equipment

### Announcements:

- Test Session Info
  - Next VE session is Saturday, December 9th in the Clover Building at the Boulder County Fairgrounds, and starts at 10 am. For more info, and to pre-register, see the Licensing/Testing page on the club web site, <https://w0eno.org/>, under the Education menu.
- We have some volunteer opportunities available where you can help out LARC:
  - Photographer / videographer - record team activities and upload to web site / YouTube
  - LARC Fest Coordinator -
  - Newsletter Editor - put together the monthly Splatter newsletter
  - Activities Chairperson - member of the Board of Directors
- LARC is running our annual Santa on the Air event again this year, with help from the Northern Colorado Amateur Radio Club. We are planning to have Santa, Mrs. Claus, and Santa's elves operate from next Monday, November 27th through Sunday, December 10th.

Our "professional Santa" has retired this year, so we are in need of some help! We currently have one Mrs. Claus and one Elf, so we need some volunteers to round out our team.

The only requirement is that you can get into the LARC repeater or the NCARC 447.700 repeater on Mount Buckhorn - you can also use Echolink to get into the LARC repeater.

I believe Chuck has some material put together by our old Santa on how to play the part, so if you are available, please help us out!

Contact Chuck, K0ITP, at [k0itp@w0eno.org](mailto:k0itp@w0eno.org) to see how you can assist.

- RMHAM is holding their "DMR 201" presentation which includes coverage of the RMHAM network, and cBridge, using DMR for data transfer, bridging DMR and other networks, vocoders and similar topics. The presentation will be held live on December 9th at the Cherry Creek Schools Educational Services Center (4700 South Yosemite Street, Greenwood Village, CO) and via zoom, For more information, go to their web site at: <https://www.rmham.org/> and see the RMHAM UNIVERSITY link on the menu.

- Our sister club up in Nederland is looking for some help with events they are running. They have a weekly Monday night net with no predetermined agenda, so you can lead it however you want. They are also planning a Field Day site at Golden Gate State Park and are welcoming anyone who wants to participate. Finally, they are looking for operators for the Ned Gravel run on July 8th. They have signup links for all these events, so head over to their web site <https://w0ned.org/> for more information!
- You can start earning your 2024 membership or future renewal by acting as NCS for at least 5 nets this year. You can run either this Tuesday night net or the Thursday night net (or both). We have scripts available for both, so all you need is a good connection into the repeater, and somewhere to keep track of names and call signs as people check in. If you're going to be on the net anyway, why not save some dough at the same time! There are four free memberships available for 2023, so don't wait to get started!
- Chuck has set a goal for the Club of running at least one activity a month. This can be a hands-on construction activity, an operating activity like Field Day, a fox hunt, or a special event station. The goal is to get people together to have fun with amateur radio! We have multiple locations at our disposal, as well as lots of Club equipment, so if you have an idea for something you think others hams would like to do, please let us know, and if you're willing to run it, even better!
- The Club is also looking for presentation topics for 2023. If you have any ideas, or better yet, would like to present, please let Chuck know and we'll get you on the schedule!
- All club activities are open to anyone - members and non-members. If you have questions, ask them on a net or **send email to [elmer@w0eno.org](mailto:elmer@w0eno.org)**

**Presenter: Bryan, AF0W**

**Topic: Buying Used Ham Equipment**

- There are many different facets of amateur radio, but one characteristic that is shared across most hams is the desire to obtain good equipment at cheap prices
- One way to do this is by purchasing used equipment
- There are both plusses and minuses to this approach
- Pros
  - a. Gear should be available at a lower price than purchasing brand new
  - b. The basics of ham radio haven't changed much over the years - an HF radio from the 1980s is still a viable choice, assuming it works properly
  - c. You may be able to acquire a whole station at once from an estate sale

- d. Gear, especially older gear, might come with optional equipment installed that is no longer available (or which is extremely pricey when purchased individually)
- e. You may be able to see the radio in action and try it out for yourself before buying
- Cons
  - a. I mentioned lower prices - this is not always the case. I've seen used stuff (which is still available brand-new) sell on eBay for more than it would cost to purchase brand-new from somewhere like Ham Radio Outlet.
    - People also form emotional attachments to their gear and think this will increase its price.
    - They may also think that since their radio works as good as it did 10 years ago, they should be able to get their money back for it,
  - b. Used equipment generally does not come with any sort of warranty or guarantee. You may wind up with an expensive door stop!
  - c. Older radios will not have all the "bells and whistles" of modern units - things like waterfall displays, digital signal processing, recording features, USB interfaces for audio and computer control, etc.
  - d. It may be difficult to get an accurate representation of the condition of the equipment - it may arrive with scratches, broken knobs, or smell strongly of cigarette smoke
- I hope to give you some helpful tips for purchasing used gear
- First of all, make sure you have all the details for what you are looking at
  - a. Sometimes manufacturers make updates to radios but don't change the model number or name
    - One example is the Kenwood TM-D710, which is no longer produced.
    - There are two US models - the D710A and D710G
    - The A models do not have built-in GPS, but do have the ability to control some functions via DTMF tones
    - The G models have built-in GPS, but sometime in 2018, Kenwood stopped including DTMF decode ability due to unavailability of the decoder chips. Some Internet research showed that the decode ability was removed for serial numbers B8610001 and up.

- Yaesu made a popular QRP radio, the FT-817
  - The first model was the FT-817 and it reportedly had very delicate output transistors which could be damaged by high SWR, overheating and overvoltage.
  - The second model was the FT-817ND, which added 60 meters, display lighting options, modifications to the RF stage, and an updated battery pack and charger.
- b. Many radios have internal optional components, such as filters, temperature-stabilized crystals, voice recorders, and antenna tuners, to name a few.
  - Make sure you do some research to see what was available for the radio you are considering, and ask the seller whether that stuff is included
- c. Be sure to get good pictures of all parts and sides of the radio and associated equipment.
  - Some online listings have pictures that are out of focus or not close in to the radio - this may be an honest mistake, or an attempt to hide damage
  - Pictures also help show exactly what comes along with the radio. For example:
    - Is a power cable included? If so, has it been modified (fuses removed, cable cut short, etc.)?
    - Is a microphone included? Is it the proper microphone for that radio?
    - For a mobile radio, does it include all the vehicle mounting hardware that originally came with the radio?
    - Are manuals and any CDs included?
- As with many things nowadays, there are scammers, especially when buying over the Internet. There are some things you can do to minimize the potential for issues
- A big one is payment. PayPal is a frequently-used method of payment, but it has two ways you can send money. The first is "Personal" or "Friends and Family," and the second is "Goods and Services."
  - a. There are additional fees for the "Goods and Services" method, so many times, a seller will want you to pay with "Friends and Family."

- b. The problem is that while there are some buyer protections from PayPal, they do not apply to "Friends and Family." If you use F&F to pay, and the seller does not send you the item, PayPal will not help you.
  - c. If the seller really pushes just because of the additional cost, consider offering to pay it yourself - the buyer protection is well worth it.
  - d. Also avoid other payment options that do not provide any protection, such as Western Union, bank transfers, Zelle, Venmo, checks and money orders.
  - e. Never send money to a third party - such as the seller's spouse or child.
- Call the person and talk to them.
  - Realize that some people may not be hams at all, and have acquired the equipment through death or purchased cheap at a garage sale, and know nothing about it.
  - Have seen recommendations to perform a Google search on the phone number to see if anything interesting pops up (i.e. does not come back in the name of the seller, seller has negative reviews, etc.)
  - If the seller says they're a ham, check on QRZ.com to see if the email address belongs to the actual ham owning the call sign. Unfortunately, there are people out there who will claim to be a licensed ham, yet when trouble arises and you attempt to contact the ham, you'll find they know nothing about the item.
  - That being said, qth.com reports that most of the sales with issues come from sellers who are not licensed amateurs.
  - If you are the seller, never send equipment to the buyers "office" or girlfriend. Again, make sure they are not impersonating a ham.
  - Search for online feedback on the seller. QTH.com, eham.net and qrz.com all have "ham reference" forums where people can report good (or bad) experiences buying from or selling to individuals
  - There are many scams originating from overseas. Use extreme caution when dealing with hams outside of the US.
  - Use signature confirmation for deliveries. It may cost a bit more, but many shippers will not cover items stolen after they've been marked as delivered, even if this just means it was tossed on someone's porch.
  - Another scam when selling is the buyer sending a check for an amount over what the items costs, and telling you to either keep it, or deposit the check and then send that

money to someone else. The check will end up being counterfeit, and you'll be on the hook for any money you sent!

- Some other things to watch out for:
  - a. Address given does not match that in FCC database
  - b. Have no phone number, or do not answer the number they give you
  - c. Pressuring you to buy "ASAP" - perhaps by saying if you don't pay right away, they'll sell to someone else
  - d. Does not give first and last name in ad
- I've added some links with more details in the notes for this presentation
- To see if a price is "good," you can search for the item on ebay and select the "sold" filter to view the prices that it sold at (versus what people are asking for it)
- Buying something locally has some big advantages
  - a. You can actually see, touch, and hopefully test out the gear before buying
  - b. Don't have to worry about shipping fees or taxes
  - c. You can get it "right now"
  - d. Downside is that you generally don't have any "buyer protection" like PayPal offers
  - e. Also do some Internet searches for common issues with a specific radio - eham.net has product reviews from users, but you have to be careful with them
  - f. There is always a risk buying used equipment
    - Some of it is pretty old - the Kenwood TS-440S I use was built back in the 1980s - so almost 40 years old! Even if it works today, something could be ready to break at any time
      - It also has a known issue that can cause the radio to freeze up on certain bands. I was aware of this, and asked about whether it had been addressed on the radio I purchased
    - Some sellers are unscrupulous ("it worked last time I used it" or "am unable to test") or clueless (bought it at an estate sale or selling for a relative who passed away and have no idea what it is)

- No warranties (typically, warranties are only valid for the original purchaser, so just because someone "bought it last week at HRO" doesn't mean \*you\* can get warranty service on it) - be sure to check with the manufacturer and see if you would be covered or not
  - HRO does sell used equipment and includes a short warranty (30 days) on used and consignment items
- The main advantages of purchasing new is that you get a manufacturer's warranty, everything is shiny and new and all included, and you will likely get newer technology
  - a. Of course, that "new technology" can also be limited due to cost savings, so again, make sure you know what you're getting
- If you are looking at purchasing new, a great resource for us is the Ham Radio Outlet store in Denver. They've got a bunch of radios connected to antennas and power supplies that you can take for a "test drive" in the store.
  - a. This is nice because you can make sure that the displays are readable, the buttons and knobs aren't too small to use, and easily compare a radio to other similar radios.
  - b. They also have knowledgeable hams working at the store who can help you with your selections and offer advice
- As far as local sellers, I've seen radios listed on Craigslist and Facebook Marketplace, as well as local club web sites, such as LARCs. There are also local hamfests, and of course nets like this one!
- Qth.com, qrz.com, and eham.net all have "for sale" sections, as well as eBay
- If you prefer new, Ham Radio Outlet and DX Engineering are good places to start your search.

#### Questions:

- **The question for the week is:** Do you buy new or used gear, and have you had any notable experiences doing so?
- **In my case,** the only new radio I purchased was a Baofeng UV-5R - everything else has been used. Most of my accessories such as antennas, test equipment, and feedline adapters were purchased new.

So far, I've had three issues with used gear.

The first was an ICOM IC-706 MKIIG all-band all-mode mobile that I purchased on ebay from a ham in Puerto Rico. It was sold as working, and while the radio seems fine, there

is a four pin connector on the back for interfacing to an antenna tuner where the 12 volt pin is dead. I worked around this by making a small adapter cable that pulls 12 volts from the radio's power cord. I don't think that he realized the connector power didn't work.

The second was an MFJ noise cancellation device. I purchased this at a hamfest in Longmont. It was sold by a ham that said it worked, but when I got it home, it was dead. I found that it had two protection diodes right where the 12 volt power entered the unit, and both were burnt in half - presumably someone attempted to power up the device with the positive and negative connected backwards. I was able to replace them easily.

The final one was a dual band ICOM mobile. When I received the radio, I opened it up to make sure it had the optional CTCSS board installed, and noticed a black mark on the inside of the cover, and saw that there was a component which had vaporized right below it. It took some research to figure out what it was, but I was able to fix this one as well - it was the first time I had ever soldered a surface-mount component. It was some sort of power filter capacitor - the radio actually operated fine without it. The seller ever reimbursed me for the part, so I don't think he was aware of the issue.

I just remembered a fourth instance - I purchased a used Heil headset, and when it arrived, one of the switches on it was non-functional. I called Heil to see about ordering a replacement, and they sent me one free of charge, and also provided help on how to best open the headset.

### **Backup Questions:**

1. What hobbies do you have other than ham radio? Do you (or could you) use ham radio in these hobbies?
2. Share an "a-ha" moment you had with amateur radio?

### **More Info:**

#### **Used Equipment**

- Ham Radio Outlet Used Equipment: <https://www.hamradio.com/used.cfm>
- eHam.net Classifieds: <https://www.eham.net/classifieds>
- QRZ.com Swapmeet: <https://forums.qrz.com/index.php?forums/ham-radio-gear-for-sale.7/>
- QTH.com: <https://swap.qth.com/>
- GigaParts Used Equipment: <https://www.gigaparts.com/>
- LARC For Sale: <https://w0eno.org/forums/forum/equipment-for-sale-or-wanted/>



- RMHAM Swaplist: <https://www.rmham.org/the-swaplist/>

## Vendors

- Ham Radio Outlet: <https://www.hamradio.com/>
- DX Engineering: <https://www.dxengineering.com/>
- GigaParts: <https://www.gigaparts.com/>

## How Tos

- QTH.com - Avoiding Scams and Ripoffs: <https://chat.qth.com/viewtopic.php?f=5&t=12>
- QTH.com - Use Extreme Caution When Dealing With...: <https://chat.qth.com/viewtopic.php?t=934>
- eHam - You Have Been Warned: <https://www.eham.net/article/48504>
- Guide to Buying Used Radio Equipment: [https://www.electronics-notes.com/articles/ham\\_radio/amateur-equipment/used-equipment.php](https://www.electronics-notes.com/articles/ham_radio/amateur-equipment/used-equipment.php)
- Selling Ham Radio Equipment: <https://www.amateurradio.com/selling-ham-radio-equipment/>

## References

- QRZ.com - Ham-to-Ham References: <https://forums.qrz.com/index.php?forums/ham-to-ham-references.16/>
- eHam Good Seller / Buyer Beware: <https://www.eham.net/forum/index>
- QTH.com Swap Chat: <https://chat.qth.com/viewforum.php?f=5>
- If you have ideas for net topics or general meeting topics / presenters, please let us know! Tell us on a net, or send email to [k0itp@w0eno.org](mailto:k0itp@w0eno.org)

## Email to [elmer@w0eno.org](mailto:elmer@w0eno.org)

1. K0ITP - Chuck - Firestone -
2. AF0W - Bryan - El Paso via Echolink -
3. KM6SJA - Steve - Longmont -
4. N0OM - Bob - Broomfield - new call sign
5. AE0DO - John - N of Longmont -

6. KF0MXH - Art - Longmont -