Sidebands

The Newsletter of the EAST GREENBUSH AMATEUR RADIO ASSOCIATION

W2EGB

www.egara.club

December 2023

EGARA Tapped for Tech Course by Local Group

EGARA is planning on conducting a Technician class for members of the Capital District Jeep Wrangler (CDJW) off-road club after it reached out to inquire about the possibility of helping them get their FCC licenses. Their members have been using Citizen Band radios, but wanted to upgrade to Amateur Radio equipment to improve communication between vehicles and to be able to use repeaters to extend range.

"This is an opportunity for us to license as many as 20 new ham operators and we look forward to conducting a Technician class for them early next year," said EGARA President Bryan Jackson, W2RBJ. "It also gives our club the ability to develop a team of instructors who can conduct such classes in the future for other groups in our area."

The classes will be lead by EGARA's Pete Sochocki, NY2V, who is a certified ARRL instructor. Other club members will be given the chance to assist in presenting elements of the course with the goal of earning their certification as well.

Jackson and Sochocki met with members of CDJW group on November 21st to discuss the preliminary details of the class and when it might be scheduled. Currently, it is planned to be held over a weekend in February. The bulk of the course material will be presented on a Saturday, with a refresher on Sunday followed by a VE test session immediately afterwards.

"I've conducted many Technician classes over the years and had great success, with passing rates averaging 90 percent or better," said Sochocki. "Our hobby is all about getting new hams licensed and on the air -- and this is a great opportunity to amek it happen."

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Give Yourself a Christmas Present!

The holidays are here and here's a chance to spoil yourself with a gift that keeps on giving all year long -- your EGARA annual membership!

With the New Year coming fast, now is the perfect time to renew your membership for just $15 -- or just $25 for a family membership.

Submitting your dues is still easy too. Just go to the club website and pay online quickly and securely! The direct link is:

https://www.egara.club/pay-dues

Submit your dues today, spoil yourself -- and enjoy crossing one more thing off your Christmas list!

Next Membership Meeting - December 13, 2023 - Holiday Party!

"Hoola Loop" Antenna a Big Success!

By Steve VanSickle, WB2HPR

At the November EGARA meeting, club secretary Steve VanSickle, WB2HPR, made a presentation about a loop antenna which he designed and built for indoor use on the 75 meter band.

By applying knowledge and experience gained from constructing several prototypes, a 40 meter (7 mHz) version was built first. The initial designs were hastily constructed in order to test theory and to resolve an on-going RFI (interference) problem at the WB2HPR QTH. These experimental designs worked beyond expectations, thus encouraging the design of the first "Hoola Loop" -- the 40 meter version. It is so-named because it employs actual hoola hoops as a part of the mechanical structure.

Steve (left) explains his 75 meter "Hoola Loop" antenna to EGARA members during the club's November meeting

The 40 meter Hoola Loop was built to answer the need for an indoor installation in the HOA restricted property of the WB2DGE QTH. Initial tests were successful and the antenna has been in service now for 5 years. An indoor antenna allows those with similar limitations to get on the HF bands. The Hoola Loop is but one answer to solving this dilemma.

Building on the success of the 40 meter Hoola Loop, the 75 meter (4 mHz) version was developed, utilizing many of the construction techniques used to build the 40 meter loop. The purpose of building the 75 meter loop was to employ its inherent directivity to boost desirable signals and null out interference. This is the antenna which was demonstrated at the November EGARA meeting.

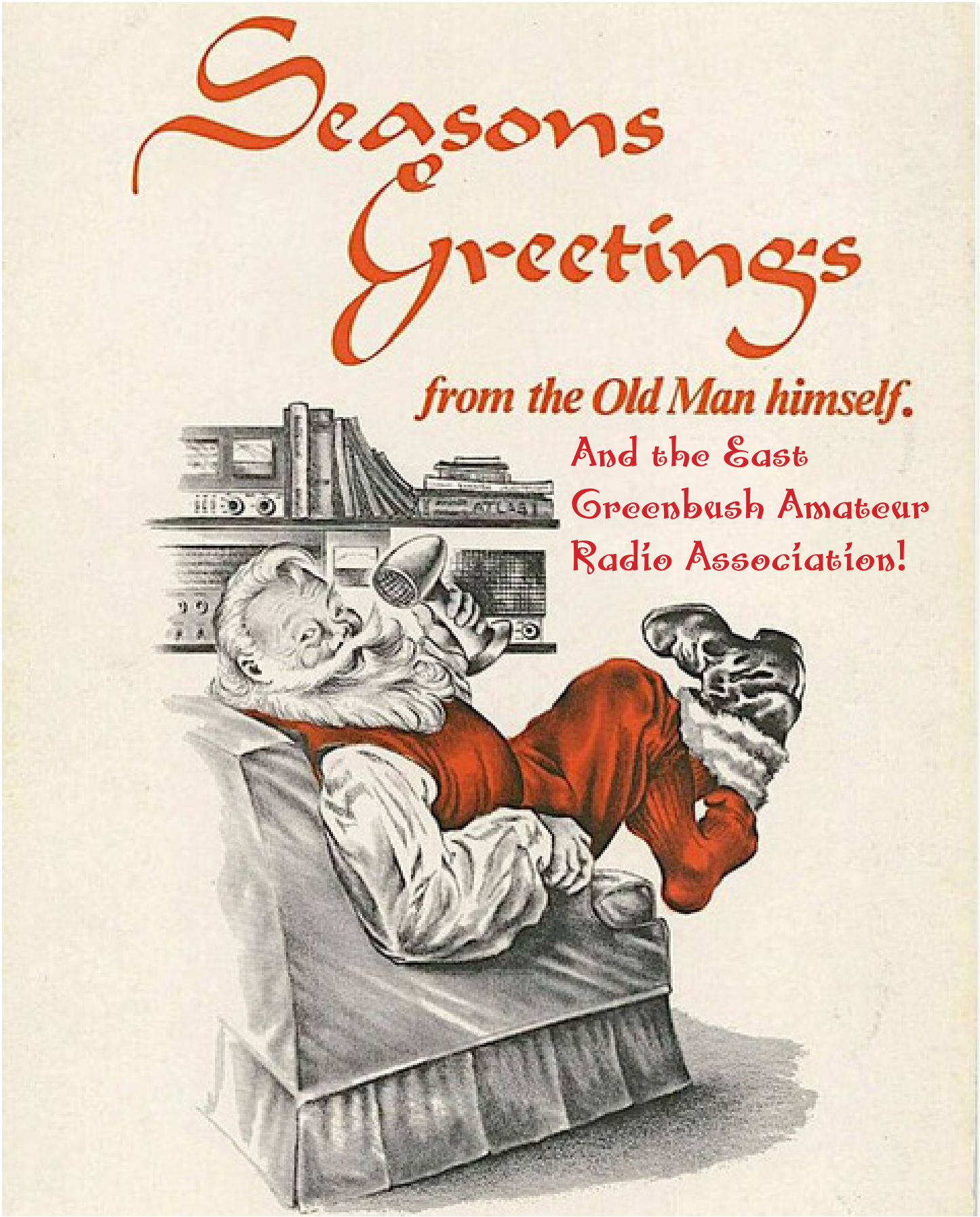
During the demonstration, contact was made with WA2WAP, WQ2A, and N2CJF using the setup inside the Masonic Temple. Transmitting a 25 watt PEP Lower Sideband signal, the two-way transmissions ranged from eight miles to WA2WAP, 60 miles to WQ2A, and 153 miles to N2CJF. Also, the WB2HPR/2 signals were received by an SDR, NA5B, located in Springfield, Virginia – a distance of 331 miles!

When the Hoola Loop antennas were designed and built, the objective was to answer a need for an indoor antenna for the HF spectrum, using readily available parts, based on established theory, with basic hand tools and no exotic skill sets. All of these objectives were met.

The cost of materials was approximately $75, and the time for the actual build was two days. The cost was for newly purchased materials, but could be reduced by using other construction techniques. Most of the materials were off-the-shelf items from Home Depot and Walmart.

It's hoped that this successful demonstration encourages others to experiment with antennas of all sorts as an answer to their particular needs or satisfy their curiosity. Despite their inherently poor efficiency, indoor loop antennas, in general, will make HF communication possible in HOA or other environments.

If you'd like to build your own Hoola Loop antenna, contact WB2HPR by email: ***stevewb2hpr@gmail.com***.


Seasons Greetings
from the Old Man himself.
And the East Greenbush Amateur Radio Association!

On the Beam
News & Notes

Holiday Party Reservations Due by December 11th

EGARA members who will be attending the club's annual Christmas party are reminded to reserve their spot no later than December 11th at noon. The party will be held at Moscatiello's Family Italian Restaurant on Wednesday, December 13th. A cocktail hour will begin at 5:30 pm, followed by dinner at 6:30 pm. Dinner will be ordered from the menu and there will be separate checks.

Santa wil have several nice gifts to raffle off -- including high-power HT radios and personal portable radios that offer SW, as well as AM/FM and MP3 functions.

RSVPs may be made by email to W2RBJ@outlook.com. Please indicate how many will be in your party.

Florida Hams Make Contact 100 Miles Apart via 10-Meter Repeater ... in Switzerland.

When 10 meters is open, amazing things can happen. Lu Romero, W4LT, knows that well. He said, "When 10 is open, I often venture up into the top of the band to see if there is any FM activity. I've always liked to use 10 FM, especially when conditions are marginal to observe the Faraday phase distortion on signals. Before FT8, 10 FM was always a good way to discover where the band was propagating to in addition to the beacons. If you hear FM (especially repeaters) operating, then the propagation is really good!"

Around 3 pm on October 23rd, the band was open. Romero went to the top of the band and found multiple signals in both simplex and via repeaters. "Usually, I receive a repeater in New York City, KQ2H, one of the strongest signals I can get down here in Florida when 10 is open, but today there was another strong signal 10 kHz above it," he said.

Using a FLEX-6400 at 75 W and the C32XR beam at 108 feet that he maintains for the Tampa Amateur Radio Club, he heard an ID through the splatter from the KQ2H repeater. "It was HB9HD in Switzerland! I set up for split and reduced power to 75 watts on the Flex and gave the repeater a kerchunk." Romero was able to contact a Swiss ham, Rene, HB3XVR, on the repeater's 70-centimeter link.

Then, on October 31st -- again around 3 pm -- Romero tried the repeater once more. "I found the repeater full quieting, even stronger than it was on October 23, and with no QRM from KQ2H, so it was clean and easy to copy! For the heck of it, I called CQ several times on the repeater. I received no callers, but finally, I received a signal that was fading up and down. I called again and that signal stopped fading for a while, and I was able to work David, WA3LXD, over the HB9HD repeater. After a little while, his signal settled down, and David asked me what my QTH was, and I told him I was in Tampa. He laughed and said we worked each other 'the hard way,' because he was in Ocala, about 100 miles to my north."

As Solar Cycle 25 continues to rise toward its peak, amateurs can expect to encounter more exciting propagation, especially on the 10- and 6-meter bands. In this case, the signals traveled roughly 9,800 miles round trip. Your mileage may vary.

EGARA November Meeting Minutes

- The November meeting of the EGARA was called to order by President Bryan Jackson, W2RBJ at 7:02 PM. There were 19 members in attendance at the Masonic Temple. After a round-robin introduction, the raffle was conducted, and several nice prizes were given out.
- Bryan Jackson, W2RBJ, gave his President's report as follows:
- The EGARA Hamfest is scheduled for Sunday, June 2nd at the East Greenbush Fire Department pavilion located on Phillips Road in Rensselaer. Admission price is $8.00
- The EGARA Christmas Party is scheduled for Wednesday, December 13th at Mosciatello's Restaurant. Cash bar at 5:30, seating at 6:30. Order off the menu, separate checks. Christmas raffle and door prizes.
- The ARRL membership dues set to increase on January 1st with an additional yearly charge of $25.00 for the printed edition of QST.
- At the recent VE session sponsored by the club, one Tech license was earned and one upgrade to Extra. Eight VE's were present.
- A local Off-Road club has requested assistance in obtaining ham licenses. The planning of a Tech license class is being planned (see story on page 1).
- Volunteers are needed to help with the monthly Lodge maintenance.
- Items for the buy/sell/swap column in the monthly club newsletter can be sent to Bryan Jackson.
- The RPI radio club is planning to reactivate their VHF and UHF repeaters.
- VP report – none given.
- Treasurers Report: Don Mayotte, KB2CDX said that dues for next year may be paid.
- Club Secretary Steve VanSickle, WB2HPR, gave a demonstration of a loop antenna, making contact with stations WA2WAP, WQ2A, and N2CJF on 3990 kHz SSB; the furthest distance was 153 miles using a 25 watt transmitter from inside the Masonic temple. The signal was also heard over 331 miles away via the NA5B SDR in Springfield, VA, a distance of 331 miles (see story on page 2).
- Refreshments were enjoyed by the membership. The meeting was adjourned at approximately 8:00 PM.
- Minutes recorded by Secretary Steve VanSickle, WB2HPR.

The History of Ham Radio: Ramifications: Regional Fine Tuning and Phone

Chris Codella, W2PA, author, John Pelham, W1JA, editor, Phil Johnson, W2SQ, editor

(Editor's note: By special arrangement with the authors, Sidebands is pleased to present this multi-part series on the history of ham radio. Subsequent chapters will be published in future monthly editions of the newsletter)

In addition to the many issues raised during the arduous process that led to the new radio law, amateurs worried about concentrating too much power with the secretary of commerce. Even though Secretary Hoover had been a strong advocate of amateur radio, he would eventually leave the job, and what would the next secretary do?

No one anticipated that Hoover's next job would be to replace his boss. Herbert Hoover was inaugurated as the thirty-first President of the United States in early 1929 just in time to participate in the latest ARRL Governors-President Relay. Similar to the ones that took place in 1921 and 1925, ARRL Section Communication Managers from all forty-eight states would identify an amateur to obtain a congratulatory message from their respective state governors to be sent in the relay on 3 March 1929. A number of Washington, DC stations and the ARRL headquarters station, W1MK, would be on the air continuously, calling CQ GPR and tuning the 80-, 40-, and 20-meter bands for incoming messages for the President. Hoover, of course, needed no introduction to amateur radio, but ARRL Communications Manager F. E. Handy nevertheless wanted "to once again put over the usual good performance and bring to his attention the fact that amateur radio is still 100% there!" He intended to document the entire operation and asked all participants to send in copies of the messages they handled.

Although only 41 messages were handled that day, and some of those didn't count since they did not originate from a state governor, the operation bested the previous GPS events. The following day, Inauguration Day, March 4, 1929, President Hoover received the messages personally from a group of D.C. amateurs led by William M. Smith, W3GP, president of the Washington Radio Club, who wrote:

> **The President afforded us an exceedingly cordial reception and inquired very closely whether or not all of the messages presented had been received by amateur radio. He was, of course, assured that such was the case and he complimented us profusely on the work that had been done.**

The landmark Washington Convention of 1927 spawned several regional follow-on conferences in 1929. The one for North America took place in Ottawa and a European one was held in Prague. W. D. Terrell, Chief of the Radio Division, Department of Commerce, led an American delegation to the Prague conference, which dealt mostly with commercial radio and concerned only European regional matters. Therefore it deferred discussion of amateur radio until the full international meeting at The Hague planned for September.

This would be the first meeting of the International Technical Consultative Committee on Radio Communications, chartered by the Washington Convention of 1927 and intended to meet every two years. Advisory in nature, the Committee meeting would be much smaller and more informal than the full convention and would only produce recommendations. (Warner called it yet another "confab" on radio.) Roughly 180 delegates representing "about 48 nations and colonies" attended.

The American delegation was headed by Charles McK. Saltzman, one of the leaders at the Washington Convention, who had retired as head of the US Army Signal Corps in 1928 after a distinguished 30-year career. The other two official delegates were the current Army Chief Signal Officer, Major General George Gibbs, and Captain S. C. Hooper, USN, Director of Naval Communications, another star of the Washington Convention.

ARRL Secretary Kenneth Warner was appointed by the State Department as a technical advisor to the US delegation, with his travel paid for by ARRL. He was joined by four technical assistants from the government, including Gerald C. Gross, W3GG, of the FRC, Commander Craven, USN, who had been "chief teacupper" at the Washington Convention, C. B. Jolliffe of the Bureau of Standards, and J. H. Dellinger, chief of the Radio Laboratory at the Bureau.

Warner's appointment was personally approved by President Hoover. This was a special arrangement since Warner was the only member of the delegation not employed by the US government. This he took to indicate the "very real interest of this government in the welfare of its radio amateurs."

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History of Ham Radio...

Supporting the three official delegates and five technical assistants were fifteen other representatives of various agencies, including the well-known inventor, businessman, and amateur, Ralph M. Heintz, W6XBB.

Preparatory work began in May with regular meetings of the Interdepartment Radio Advisory Committee in Washington, in which Warner and ARRL Vice President Charles Stewart participated and for which Warner served as vice-chairman on amateur matters. The committee's top priority was channelization of the HF allocations, taking into account the limitations of the state of the radio art.

The host country, the Netherlands, was proposing to establish uniform international guidelines for amateur licensing and practice. In agreement with the Dutch proposal, the other European delegations came to the Committee intending to press for uniformity of amateur regulations worldwide. But they also intended for the European regulations, which were highly restrictive compared with what was already in place in North America, to be the model of that uniformity. Naturally, this was unacceptable to the American delegation and they came prepared with proposals that included allowing individual nations to establish regulations independently, as long as they adhered to the Convention's specifications (which the Committee had no authority to change anyway).

Warner argued before the conference began that, since there were no such uniform regulations for other services, "why should there be for amateurs?" The League further urged that amateurs should not agree to any further restrictions beyond those established at the Washington Convention.

The US proposal was supported by Canada, Britain, the USSR, and Spain—quite different from the situation at the Washington Convention, at which they had fought it. Nevertheless, the group did not object if a group of European countries wanted to form an agreement among themselves, as long as it did not appear in the CCIR recommendations.

Four days later the European proposal was reviewed in committee. It contained restrictions such as 100-kHz band segments and 50-watt power limits. The US group, represented by General Gibbs, voiced opposition and was joined by Bolivia, the Irish Free State, Mexico, Costa Rica, China, and Colombia, followed later by five others. The European proposal would obviously be defeated and so never came to a vote, but was retained as a proposal submitted but not accepted. Instead, a group of twenty-three nations, more than half in Europe, formed a separate set of proposed, non-binding regulations. This was the origin of the narrower European band allocations, some of which persisted for the rest of the twentieth century.

One committee took up the matter of ensuring that amateurs stayed within their band limits. The European delegation proposed that amateurs should be required to use frequency meters, something the US delegation considered unnecessary, there being several other means of ensuring accuracy. Much less prescriptive language was adopted, specifying only that governments should "take effective measures" to insure that amateurs stayed within their bands.

Warner left The Hague optimistic about the next full Convention to be held in Madrid in 1932, mostly because of the heightened awareness of amateur radio worldwide and the firm backing from his own government.

At home, QRM complaints continued from both ends of the bands. Phone operators seemed to expect the phone bands to be exclusively for radiotelephone signals, when CW was actually allowed, too. And therefore they considered the whole 1,750-kHz band to be exclusive. At this point, most phone operators were also CW operators—for them, phone was a special other pursuit. While CW was mostly for traffic and DX, phone, they argued, was great for "good old fashioned chats" and also involved more complex and interesting technical challenges. Many believed that every station should use both phone and CW—they were for different purposes.

Phone operators were not without support from the uninvolved. One QST correspondent asked why not give phone ops a break and voluntarily not operate CW in the 85-meter segment below 3,550? This later became the common practice with band plans. Another correspondent, a listener from Iowa, wrote that he'd been interested in phone but most of the stations he heard on 180 meters sounded "wretched," and he found their conversations inane. However, he observed that there were a small number of stations with good sounding signals who also seemed to be carrying on intelligent conversations.

"Perhaps the modulation and the brains are inter-related," he speculated, and then asked whether it really was too difficult to adjust a phone transmitter so as to make its output sound like its input.

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History of Ham Radio...

In a later issue, W5AAG replied with some consternation, having been an early proponent for more recognition of phone operation and coverage in QST. Now that had happened, he wrote, and QST contained much for those "who find the very thrill of the amateur game in handling the intricate audio frequencies which are mingled with radio frequencies for transmission." Allowing that it did indeed take patience, effort and knowledge to achieve good phone results, he and others like him now strove to replace those awful signals with "'phones which will radiate the very personality of their operators and [with] apparatus which can command and maintain the respect of the modern broadcasting stations." For example, that past winter he had made more than 200 high quality QSOs on phone using a receiver specifically designed for it. Before judging phone signals too harshly, he advised, amateurs should be sure they were using a properly designed receiver. Many amateurs were even using broadcast equipment they "either worked or owned," adjusted to operate in the amateur bands.

The debate continued. "Fred" of W9JL facetiously suggested that one phone man and one CW man meet in Hartford to "fight it out with gloves, pistols, or swords. Wouff-hongs will not be permitted in this aristocratic fight," he warned.

Noting the debate and the growth in phone use, the ARRL board called for more space. No expansion at 80 meters was recommended, but they concluded that new allocations in the upper bands were due, within practical limits. "Manifestly it is suicide to attempt telephony in the vastly congested 7000 band," observed Warner—40 meters had for some time been the most popular band by far. Due to the still-present frequency uncertainty as equipment was used on ever shorter wavelengths, it was argued that phone on the "so-called" 20-meter band ought to be restricted to crystal controlled transmitters only. But the board thought it better to specify signal characteristics rather than specific details of equipment construction. After all, who knew what new developments lay ahead? So they decided to recommend opening the 20-meter band for telephony to Extra First Class licensees only. It was not the first attempt at incentive licensing—there had been special licenses that carried additional operating privileges ever since the 1912 law. But it was the first suggested plan that would add a new privilege to an existing, generally available license class obtainable simply by taking another test.

Responding to an ARRL petition, the FRC on November 12, 1929 opened 14,100 to 14,300 kHz to phone operation. Since phone was considered more technically challenging than CW, especially at the higher frequencies, to be granted permission to use the new allocation an amateur had to "show special technical qualifications and ability to operate within the limits prescribed," according to FRC General Order 76.

Holding an Extra First Class operator license was one way to show such qualifying ability, but the privilege was not granted automatically. Amateurs had to write to their Radio Supervisor requesting it and enclose their station license for endorsement.

If you did not have an Extra ticket you could still be granted an endorsement to operate 20-meter phone if you could show sufficient ability in other ways. In fact, this was tacit recognition that code-copying ability was less important. As Warner put it, while the Extra Eirst Class license required passing a 20-WPM code test, "there is no justification for requiring more than the normal amateur code speed of 10 words per minute from the operators of 'phone stations."

Keeping frequency accuracy and stability in mind, staying within the band would be a challenge. If the FRC rules of channel separation for phone signals were the guide, only six amateur phone stations could fit at the same time inside the new 200-kHz allocation. Cooperation would again be required.

With wabbulation still an issue, especially on the higher bands, crystal-controlled transmitters seemed to be the only way to operate. Receivers would have to be more sensitive to extract intelligible audio from weak long distance signals. This would probably favor superheterodyne designs. All of this would increase the cost of building a station for 20-meter phone. Warner estimated that the average phone station might cost about three times that of a comparable CW station.

International contacts had become commonplace on 20-meter CW. Who would be first to make international phone QSOs? Without the common abbreviations and Q-signals in use on CW, might language differences now present a barrier to communication? Even with other English speaking countries there may be problems with accents, mused Warner. "Even when we talk to our cousins in the far-flung lands of the British Empire we cannot be too sure that our harsh American accent will convey much intelligence to the carefully attuned British tympanum. We may need a new international abbreviation to mean, 'I hear you perfectly, but I haven't the slightest idea what you are talking about'," he wrote.

Will AI Help Us Have More Fun With Amateur Radio?

By Dan Romanchik, KB6NU

In this morning's email was a message from Inc. magazine with links to some articles in the magazine. At the top of the list was, "4 Unimaginable Ways A.I. Will Change Your Life Within the Next 5 Years, According to Bill Gates" (***https://www.inc.com/minda-zetlin/4-unimaginable-ways-ai-will-change-your-life-within-next-5-years-according-to-bill-gates.html***)

Gates says that in the next five years, you will have your own artificial intelligence assistant, or agent, that will be a frequent voice in your ear and will help you with everything from deciding where to go on vacation to managing your friendships and more. Let's think for a minute about Gates' 4 Ways and how they might help us enjoy amateur radio more.

1. You won't bother with software or operating systems anymore.

How cool would this be. You could simply tell your AI amateur radio assistant, "Hey, HAL. Let's operate 20-meter FT8 this afternoon," and the agent would set up the radio and begin looking for contacts. If the band wasn't open, it would come back and tell you, "I'm sorry, Dave, but propagation on 20 meters is terrible this afternoon. May I suggest 30 meters instead?"

2. Your agent will be a frequent voice in your ear.

Gates believes that most of us will wear at least one earbud most of the time so that our agents can talk to us whenever they need to. So, for example, it might be monitoring the activity on 6 meters and notify you when the band is open. Or, you might want it to notify you when a particular contest or operating event is coming up so that you don't miss it. "Dave," it might say, "remember that the 2-meter club net is at 8 pm tonight."

3. Your agent will get involved in your personal relationships.

We often don't think of amateur radio as having a personal aspect, but it really does. For example, don't we enjoy talking to some people more than others? Your personal agent could monitor your club's 2-meter repeater or 40-meter CW and notify you when your friends are on the air. Gates also notes that you could have your AI assistant talk to your friends' assistants and set up lunch for you. If those friends are also radio amateurs, you could also use that capability to set up an on-air sked.

4. It might even help you solve personal problems.

The article notes, "One of the most intriguing predictions Gates made is that your agent could also become your therapist" While many hams probably do need therapy, I'm not so sure how applicable this will be to amateur radio.

What I could see happening is using an AI assistant to help you choose your next rig or maybe help you troubleshoot a problem. Here are some scenarios:

- You ask your AI assistant what rig you should buy next. Since it already knows what bands you like to operate—and the state of your finances—it can analyze all the options and find a radio that meets your needs and fits into your budget.
- You might describe your backyard and the bands that you want to operate, and your AI Assistant could come back with antenna suggestions.
- You ask your AI assistant about a problem that you're having with your rig. It comes back with, "Dave, if you would just RTFM, you will find the answer on page 67 of the operating manual." Or, after scanning the appropriate online forums, it would tell you, "Dave, several other owners seem to be having a similar problem. Here's what they've done…."

All of this sounds kind of fun to me, but I can understand some of you having reservations. What do you think? Can you think of other ways an AI assistant would make amateur radio more fun for you?

———————-

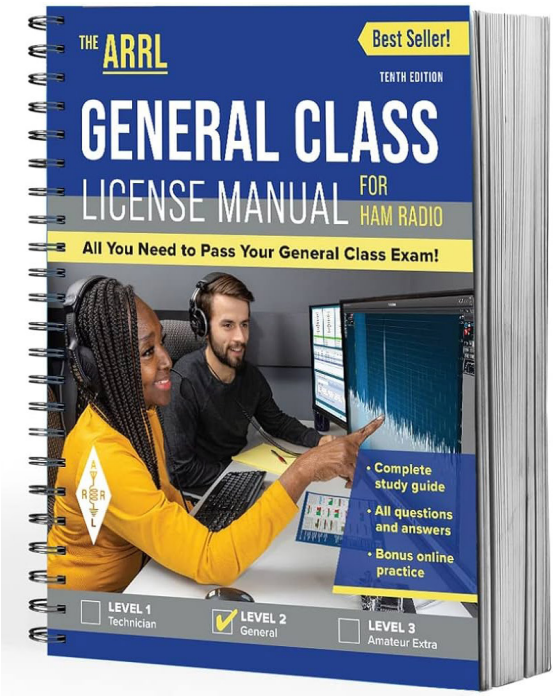
Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides. You can email your AI comments to Dan at cwgeek@kb6nu.com.

Free Online General License Course Set for January

If you've been looking to upgrade to a General Class license, a free online course is being offered by Fred Carrol, AJ4CN. The course will take place using Zoom and will run over nine Saturdays beginning January 6th. Best of all, the course is free.

"To be effective in communications you should have at least a General Class License," said Fred. "This comprehensive course will prepare you for this very worthwhile upgrade."

Techs who want to take the course must register by providing your name, call sign, address and phone number. Only Techs with a current valid call sign will be allowed to take the class. Send this information to Fred at: **AJ4CN.General@gmail.com**.



Information about the classes includes:

- The class dates will be January 6, 13, 20 & 27, Feb 3, 10, 24, Mar 2 & 9 2024 and will start at 9:00am to 12:00pm EST. Depending on the progress of the class, the 9th week may not be needed.

- Each class will be recorded and posted to the Internet for those who cannot attend any of those dates or times. For students taking the course, the recorded classes will be posted to Google Drive and a link will be sent where they can be watched. This usually happens Sat evenings, since it takes hours for the video to compile and be posted.

- The class will use the ARRL manual "General Class License Manual Tenth Edition" -- and be sure it is the 10th Edition General Manual. The cheapest is usually the Kindle electronic version.

The manual can be purchased in many places. The link for the ARRL Store: ***https://home.arrl.org/action/Store/Product-Details/productId/2009476073.*** Or, do a Google search and you might find a deal. Used books on ebay need to be carefully checked out; most are earlier versions. However, be sure it is the 10th edition.

There is no cost for the class. The manual cost is the responsibility of each individual student -- again, make sure it is the Tenth (10th) edition.

Once the course is completed, participants will be ready to take the General license test. If there are EGARA members who take the course, the club will arrange to conduct a VE test session. But, you must let the club know you plan to take the test so exam materials can be ordered. You can do this by emailing Bryan Jackson at W2RBJ@outlook.com. The test fee is $15.

Exam sessions can also be found by searching the ARRL website at: ***http://www.arrl.org/find-an-amateur-radio-license-exam-session.*** In addition to the testing fee, the FCC license price is now $35.00 for 10 years and is paid directly to the FCC once you have successfully taken the General test.

According to Fred, this method has been used before with great success, so take advantage of this course if you are looking to upgrade.

Again, the contact email address to sign up is ***aj4cn.general@gmail.com.*** After you've provided your full name, call sign, address, phone and email address, you will get a class acceptance email. If you have not registered you will not be admitted to class. **Cutoff date to register is January 1,2024 and is First come First served.** But don't delay, there are only about 90 slots available.

Made in Vermont: W1SFR

By Elissa Borden, WCAX-TV

Steve Roberts spends a lot of time messing with metal, making Morse Code keys.

"HAM radio is a very tight community really, and you have friends like all over the world, people you've never met," said Roberts, whose call letters are W1SFR.

His side hustle is key for the community, and it's not something you accidentally start doing. Roberts' journey into dots and dashes began in Vietnam.

"I wanted to be a war photographer," he recounted, sitting in his Sudbury, Vermont shop.

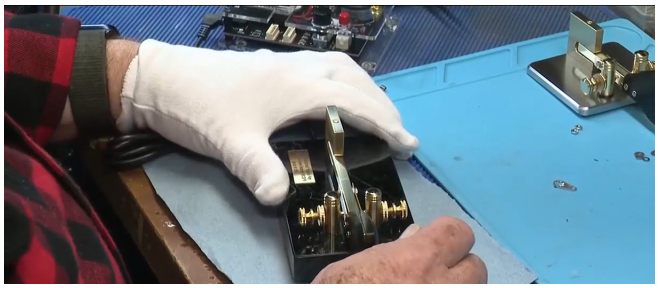
After joining the Navy, he took the aptitude tests. As it turns out, he's a bit of a "brainiac". In a flash, the Navy took his photography dreams and turned them into rotations on the radios.

"Went through all the courses, learned Morse Code. I wound up on an island in the middle of the Pacific doing surveillance stuff and I listened to a lot of code while I was there," he said.

After getting out, Roberts was happy to leave it behind. That is until a friend got into it about a decade ago.

"He sort of talked me into it 40 years after my stint in the Navy doing Morse Code stuff there," Roberts said. "It's like you don't forget it, it's like riding a bike."

Without one of the keys to tap your message, you're left with dead air. Morse Code keys don't come cheap, so Roberts started making them himself.



"It's all about function and design," he said.

This hobby started just for himself until a local HAM radio group bought his keys. The message spread from there. Now he's making waves with his intricate, hand-made keys.

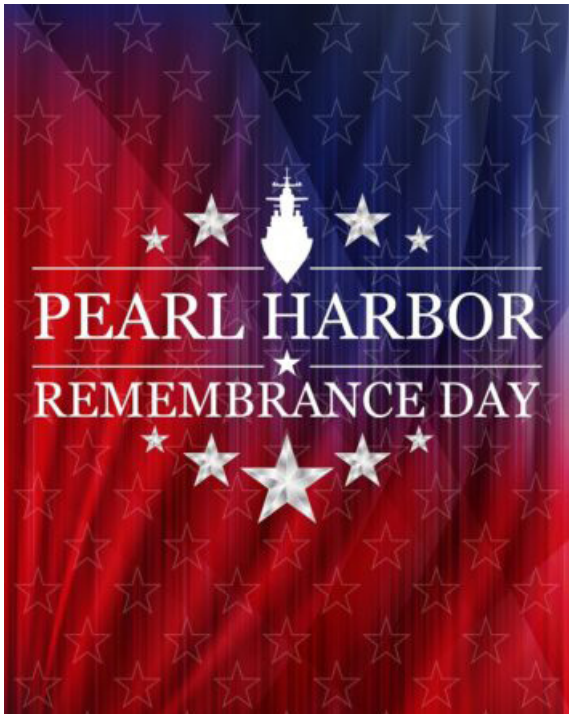
"I'm pretty well-known in this echo-sphere, you know, all over the place," said Roberts.

Attention to detail is the name of the game... smoothing, shining and adjusting these keys for customers around the world. Roberts turns out four or five keys a week. It's a bit of a slow process, but quality is crucial in this business. Engraved call letters, bases made of local granite... if you're looking for a top-notch key, dash over to W1SFR.

"When people get them, they actually say, 'Boy what a work of art this is... you know, I've never used anything like this before.' So I guess, that's definitely gratifying."

Amateur Radio Gets Waiver for Pearl Harbor Day Activities

FCC acknowledges opportunity for amateur and military communities to practice communication skills
By Radio World Magazine



The FCC has issued a waiver to allow ham radio operators to communicate with federal stations on and around Pearl Harbor Day. The American Radio Relay League requested the limited four-day waiver from the Mobility Division of the Wireless Telecommunications Bureau.

"The waiver request is for the limited purpose of a short-term event relating to National Pearl Harbor Remembrance Day, commemorating the 82nd anniversary of the Pearl Harbor attack, and to allow amateur licensees to practice communication techniques with the United States military from December 6–9, 2023," the commission explained.

Section 97.111(a) of its rules authorizes amateur stations to transmit specific types of two-way communications and limits communications with federal stations. The rule does grant such authority for one such event, the Armed Forces Day Communications Test, but no other commemoration day is authorized explicitly.

ARRL said the waiver will allow tests to help train operators and test communications capabilities between military communicators and radio stations in the Amateur Radio Service, allowing operators to demonstrate their skills in a controlled context. It said the amateur operators would follow FCC regulations including mode, maximum power and license class. ARRL added that the relevant military authorities support these cross-band operations.

In approving request, the Commission said the event "presents a unique opportunity for the amateur and military communities to practice communication skills under the guidance of military officials, which may be useful in the future and serves the public interest." It added that "this day has a historic significance and emphasizes the importance of reliable communications and the need to be vigilant in our national defense."

The waiver is conditioned on participating stations monitoring the three identified federal frequencies of 14.375 MHz, 18.1625 MHz and 21.856 MHz; responding on spectrum allocated to the amateur service and only at the request of event organizers; operating consistent with the privileges of their amateur licenses; and limiting communications to the period December 6–9.

The annual commemoration remembers the 2,403 service members and civilians killed during the Japanese attack on Pearl Harbor on December 7, 1941. Another 1,178 people were injured in the attack, which permanently sank two U.S. Navy battleships and destroyed 188 aircraft.

In 1994 Congress designated December 7 as National Pearl Harbor Remembrance Day, according to the National Park Service.

Skywarn™ Recognition Day Set for December 1-2

This year, Skywarn Recognition Day will run for 24 hours starting December 1st at 7 pm Eastern Time.

Skywarn™ Recognition Day was developed in 1999 by the National Weather Service and the American Radio Relay League. It celebrates the contributions that Skywarn™ volunteers make to the NWS mission, the protection of life and property.

Amateur radio operators comprise a large percentage of the Skywarn™ volunteers across the country, with hams also providing vital communication between the NWS and emergency management if normal communications become inoperative.

All Skywarn™ spotters provide critical weather information before, during and after adverse weather strikes. This includes reports of rain and snow, ice and wind, storms and tornadoes, flooding and fire. This is our 24 hours to recognize all of the Skywarn™ spotters serving our nation!

Here are the Skywarn™ Recognition Day Operating Instructions:

Objective: For all amateur stations to exchange QSO information with as many Amateur Radio SKYWARN Spotters and National Weather Service Stations as possible on 80, 40, 20, 15, 10, 6, 2 meter and 70 centimeter bands. Contacts via repeaters are permitted. SKYWARN™ Recognition Day serves to celebrate the contributions to public safety made by amateur radio operators during severe weather events of the past year.

Date: NWS stations will operate December 2, 2023, from 0000 - 2400 UTC.

Exchange: Call sign, name, location, signal report, a one or two-word description of the weather occurring at your site ("sunny", "partly cloudy", "windy", etc.), temperature reading if available and SRD Number if the station has one.

Modes: NWS stations will work various modes including SSB, FM, AM, RTTY, Winlink, CW, FT8, FT4, and PSK31. While working digital modes, special event stations will append "NWS" to their call sign (e.g., N0A/NWS).

Station Control Operator: It is suggested that during Skywarn™ Recognition Day operations for NWS offices a non-NWS volunteer should serve as a control operator for your station.

Event and QSL Information: The National Weather Service will provide event information via the internet. Event certificates will once again be electronic and printable from the main website after the conclusion of Skywarn™ Recognition Day.

Log Submission: To submit your log summary for Skywarn™ Recognition Day you can use the online submission form that will be made available on the NWS Skywarn™ Recognition Day Recognition main page when the event is completed. Deadline for log submission is January 31, 2024.

NOTE ON NWS STATION OPERATIONS:

Guidance on in-person Amateur Radio operations by volunteers will be determined by each National Weather Service Local Forecast Office. Amateur radio operators must make all necessary inquiries ahead of Skywarn™ Recognition Day with the appropriate NWS staff at your respective Weather Forecast Office.

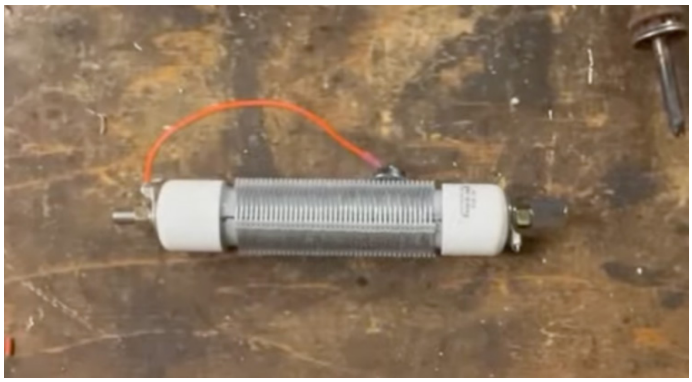
Additional Information is available at: ***https://www.weather.gov/crh/skywarnrecognition?fbclid=IwAR1UNO0LepJtMvU_YhcuwWUf3eZ6Hd-iMFVYQ-kssXYEDrnH522kOkkWPTI***

Radio 101... Loading Coils

A newly licensed amateur radio operator's first foray into radios is likely to be a VHF or UHF radio with a manageable antenna designed for the high frequencies in these radio bands. But these radios aren't meant for communicating more than a double-digit number of kilometers or miles.

The radios meant for long-distance communication use antennas that are anything but manageable, as dipole antennas for the lowest commonly used frequencies can often be on the order of 50 meters in length. There are some tricks to getting antenna size down like folding the dipole in all manner of ways, but the real cheat code for reducing antenna size is to build a loading coil instead.

A loading coil is simply an inductor that is placed somewhere along the length of the antenna which makes a shorter antenna behave as a longer antenna. In general, though, the inductor needs to be robust enough to handle the power outputs from the radio.



There are plenty of commercial offerings but since an inductor is not much more than a coil of wire, it's entirely within the realm of possibility to build them on your own. A design made by VA5MUD uses a piece of PVC with some plastic spacers to wind some thick wire around, and then a customized end cap with screw terminals attached to affix the antenna and feedline to the coil.

It's worth noting that the coil doesn't have to be attached between the feedline and the antenna. It can be placed anywhere along the antenna, with the best performance typically being at the end of the antenna. Of course this is often impractical, so a center-loaded coil is generally used as a compromise. Coils like these are not too hard to wind by hand, but for smaller, lower-current projects it might be good to pick up a machine to help wind the coils instead.

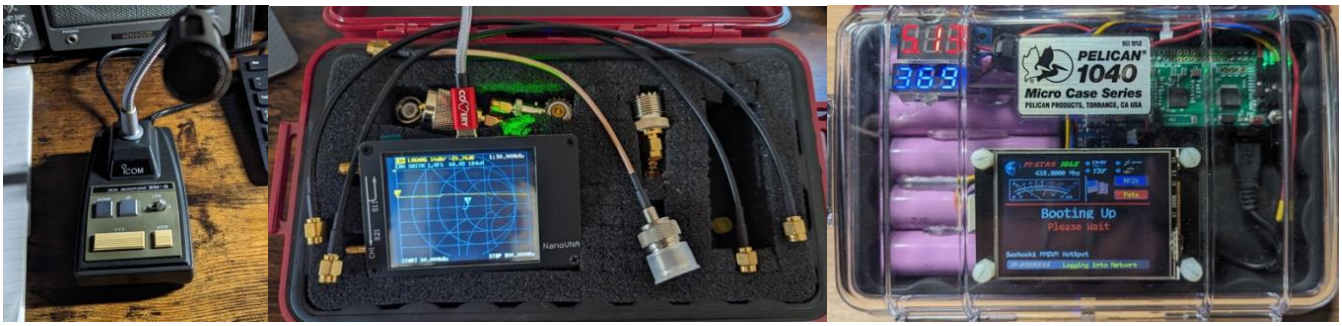
Of course you'll need to do a bit of math to figure out exactly how many turns of wire will be best for your specific situation, but beyond that it's fairly straightforward.

Still, it's always helpful to have someone show you how such things are built -- so you may wish to check out this YouTube video: ***https://www.youtube.com/watch?v=GTx-YeoFPBg.***

Another helpful video for extending a 10-40 meter antenna to operate on 80 meters can be found on YouTube here: ***https://www.youtube.com/watch?v=Iqs-911Mll0***

And you'll also find a handy online calculator for coil shortened dipole antennas at this link: ***https://www.66pacific.com/calculators/coil-shortened-dipole-antenna-calculator.aspx***

For coil shortened verticle antennas, check out this calculator at: ***https://www.66pacific.com/calculators/coil-shortened-vertical-antenna-calculator.aspx***



LARGE ESTATE SALE

I have many items to sell. All items have been tested and cleaned and are working to expectations. All listed prices are derived from previous sales of similar on QTH, QRZ, and Ebay. I am willing to negotiate. If you are interested in something, please let me know. **Contact Pete, NY2V @ 315-427-1364**

ICOM 756 HF Transceiver Recently tuned. Includes Icom SM-2 desk mic, power supply. $ 50

ICOM IC 275h 2 meter all mode XCVR. Excellent Condition. $ 300

ICOM IC 475h 440 all mode XCVR. Excellent Condition $ 300

Icom PS-30 Linear Power Supply **$150**

ICOM SM-8 Desk Mic 2 Available. $ 125 each

ASTRON LINEAR POWER SUPPLIES. RS-20M. $75. VS-20M. $75

ASTRON SS-30M Power Supply. $ 125

MMDVM Hot Spot Battery operated, weatherproof case (Great for POTA!) $ 150

HYGAIN TAILTWISTER ROTOR WITH CONTROL BOX & 40 FT CABLE. Heavy duty version. $400

BIRD MODEL 43 METER WITH 6 SLUGS. Various frequencies and power levels. One slug not marked. $250

HEIL PROSET HEADSET For use with Kenwood (Adapter included). **$ 125**

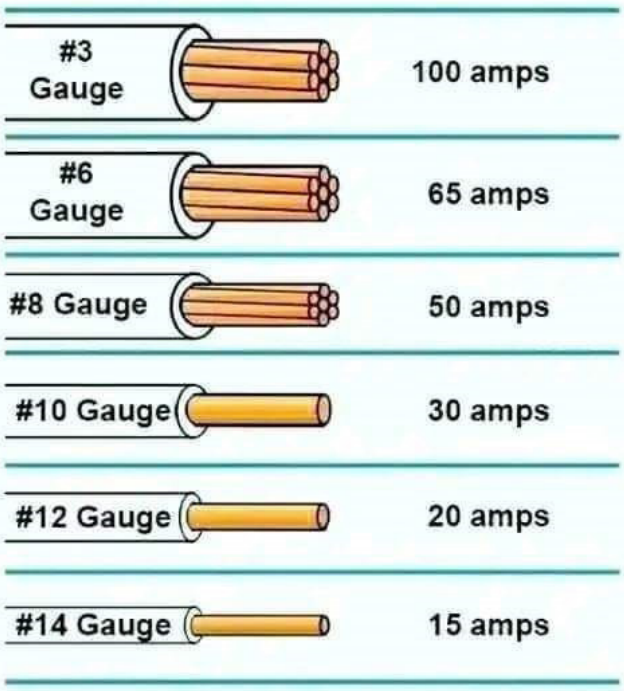
CALENDAR

December 13, 2023 - Annual Holiday Party - Mosciatiello's Restaurant - 5:30 pm Cocktails / 6:30 pm Dinner

January 1, 2024 - ARRL annual dues increase takes effect

January 10, 2024 - Regular monthly club meeting, East Greenbush Masonic Lodge

Pro Tip: Wire Capacity Visualized



The East Greenbush Amateur Radio Association

Organized in 1998, by Bert Bruins, N2FPJ, (SK) and Chris Linck, N2NEH, the East Greenbush Amateur Radio Association, an ARRL affiliate, is committed to providing emergency services, educational programs, and operating resources to amateur radio operators and residents of the Capital Region of New York State. The club station is W2EGB. The club also has several VHF and UHF repeaters open to club members and the public.

GEAR FOR SALE

- **Discone antenna suitable for working 2. M. And 440 m and scanner $15.**

Contact Don, KB2CDX at: ddm653@gmail.com

- **Heil RS 1 12' riser brand new $ 30.00**

Contact Walt, N2WJR at N2WJR07@gmail.com

Sell your unused gear with a free ad in Sidebands! Send details to: W2RBJ@Outlook.com