Sidebands

The Newsletter of the EAST GREENBUSH AMATEUR RADIO ASSOCIATION

W2EGB

www.egara.club

February 2022

Club Special Event Station to Mark WGY's 100 Years

On Sunday, February 20th, WGY will celebrate its 100th anniversary and EGARA members will commemorate the historic radio milestone by running a Special Event station. When the famed broadcasting facility first went on the air, it was announced that the "W" stood for Wireless, that the "G" represented the first letter of General Electric, which owned the station, and that the "Y" stood for the last letter in Schenectady, its city of license. Over the next century the station would become a leader in both programming and technical innovation.

WGY's First "T-Top" Antenna

Because of the potential difficulties of setting up a centrally located Special Event station during winter weather, and continued concerns about Covid, EGARA members will participate by operating their own home equipment. At the February meeting, members will coordinate the bands and times they plan to operate. A Special Event QSL card from the club will be made available to confirmed contacts and instructions will be posted on the club's website for those who wish to receive one. The Special Event call sign "W7Y" has been requested, with the number 7 representing "G" -- the 7th letter of the alphabet.

WGY actually got its start in early 1915, when GE was granted a Class 3-Experimental license with the call sign 2XI. That license was canceled in 1917 as the United States entered World War I. 2XI was relicensed in 1920.

Starting on December 1, 1921, the U.S. Department of Commerce set aside two wavelengths for use by broadcasting stations: 360 meters (833 kHz) for "entertainment", and 485 meters (619 kHz) for "market and weather reports".

In This Issue

On February 4, 1922, GE received its first broadcasting license, for a new station located in Schenectady which was authorized to transmit on the 360 meter entertainment wavelength and was issued the call letters WGY.

The original transmitter produced an antenna power of 1,500 watts, which was three times the wattage of the standard "high-powered" station at the time. Unusual for the period, the station's studio and transmitter site were at separate locations. Broadcasts originated from a studio on the fourth floor of Building 36 at the General Electric Plant in Schenectady, which was connected to a T-top wire antenna located atop another GE building about 3/5ths of a mile (one km) distant.

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Next Membership Meeting - 7 pm - Wednesday, February 9, 2022

WGY Special Event Station

Kolin Hagar, WGY's first manager and chief announcer

The station was placed under the oversight of Martin P. Rice, who was the manager of the company's publication bureau. WGY's debut broadcast started at 7:47 p.m. on February 20, 1922, when Kolin Hager, or as he was known on the air, "KH", signed on with the station's call letters, and explaining what they stood for -- even though in truth they had been randomly assigned by the Commerce Department.

The first broadcast, "furnished by some of this city's best talent" lasted about one hour. It consisted of live music and announcements of song titles and other information. The station's second program took place two days later, and featured a speech about George Washington, delivered by W. W. Tranch, Schenectady's American Legion post commander, followed by a concert.

WGY was a pioneer in the use of remote broadcasts originating from locations outside of the main studio, carrying out the first one just days after it signed on. On February 23, 1922, the station ran a telephone line connection to the Union College gymnasium, where New York governor Nathan L. Miller and others gave speeches commemorating the 17th anniversary of the Rotary Club. This was followed by a short concert. Other early programming included coverage of the Yale-Harvard football game live from New Haven, Connecticut; the WGY String Orchestra live from the State Theater in Schenectady, and talks and presentations by various GE innovators, explorers, state and local officials.

The WGY Players in action, complete with sound effects.

A few months after WGY began broadcasting, Edward H. Smith, director of a community theater group in Troy called the "Masque," suggested to Kolin Hager that WGY carry weekly 40-minute long adaptations of plays. A troupe was formed known as the WGY Players performing as radio's first dramatic series. On August 3, 1922 they presented Eugene Walter's 1908 play The Wolf, the first of forty-three dramatizations performed during the 1922-1923 season.

Smith also became a pioneer of radio drama sound effects during this first play when he slapped a couple of two-by-four boards together to simulate the slamming of a door. Meanwhile, the WGY Orchestra was used to provide music between acts. Response was immediate, with the station reporting that the broadcast resulted in its receiving more than two thousand letters.

In 1923, Guglielmo Marconi, credited as the inventor of radio, paid a visit to Schenectady to see WGY's transmitter and studios. In 1924, the transmitter site was moved to its current location in the Town of Rotterdam, then known as South Schenectady. This site was also home of GE's experimental shortwave radio stations W2XAF (31.48 meters or 9.525 MHz) and W2XAD (19 meters or 15 MHz). WGY's power levels were steadily increased, first to 5,000 watts, then 10,000 watts and finally to 50,000 watts on July 18, 1925.

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The History of Ham Radio: Call Sign Confusion

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)

With the arrival of international amateur communication, the lack of a worldwide system of station identification led to confusion over call signs. Without prefixes as we know them today, there was no way to use a call sign to identify a station's country. And since each country issued call signs independently, duplicates were inevitable. This hadn't been a big problem for US hams before the first international QSOs since Canada was the only other country within normal range having a large numbers of active hams. In Europe, where several countries were reachable, they had been considering the problem for some time.

Lloyd Jacquet, French 2KT, wrote that he did not like the method that had been used for some time by US and Canadian amateurs of replacing DE (the Morse code characters called an intermediate, indicating that the preceding call sign is that of the station being called, and the one to follow identifies the station doing the calling) by other letters depending on who was transmitting to whom. He rightly pointed to the rapidly growing number of combinations that became possible once a few other countries were added; it would require a dictionary. Jacquet and the French radio organization SATSF suggested using one additional letter—the first initial of the country's name—at the beginning of the call sign, to indicate national identity, as proposed by Leon Deloy, France's best-known amateur. Thus, the US (America) would use A; France, F; the UK (England), E; Holland, H; and Spain, S. He did not explain how to handle the situation when another country was added that had the same first letter as one already being used. Another suggested method, pooling (prefix-less) call sign blocks around the world, was deemed impractical since it did not automatically eliminate existing duplicates and therefore would require reassigning many thousands of call signs, especially in the US.

ARRL secretary Kenneth Warner, in response, liked the prefix idea better than the proposed system of intermediates (DE and its variants), but suggested that another option might be to use intermediates composed of one letter from each country. He did not seem to like the idea of lengthening call signs. The example he gave was that if the US used U, Canada, C, France, F, etc., then a US-to-US contact would replace DE simply with the single letter U. Two letters would be used when calling between nations with the called country first. Thus, a US station calling France would be "8AB FU 1BHW." This might not work, he admitted, since international regulation specifically prescribed the use of DE.

The ARRL appealed to the US Department of Commerce for advice on the matter, hoping that they would suggest a solution at the next International Radio Congress.

But hams needed at least a temporary solution now. In late 1923 international communications was coming about faster than anticipated, triggered by the first successful two-way contact across the Atlantic. Because amateur call signs were not assigned according to the rules governing commercial stations (which, in fact, had been using prefixes for a long time), the confusion on the air continued and compounded.

The League polled as many amateur radio organizations in other countries as possible in an attempt to construct a scheme that might be accepted by the majority of them. There were many suggestions. A list of requirements to eliminate call sign ambiguity was worked out, mostly trying to avoid lengthening exchanges or changing call signs. That was why prefixes were not considered at first and probably why League Director Charles A. Service continued to advocate replacing DE as the intermediate instead of adopting international prefixes. Whatever was eventually agreed upon would be used only until the next International Radiotelegraphic Convention, which might not happen for a few years.

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History of Ham Radio...

Although there was no complete agreement, the most widely adopted scheme built upon the American-Canadian pattern already in limited use. A single letter was assigned to each country and the intermediate was then composed of one letter for each station, first the called, then the calling station, as Warner had earlier described.

With U for the US, and C for Canada, an example calling sequence would be "1AW UC 9AL," with 1AW, of course, being the US station. When stations of the same country were involved, only one letter would be used. Thus, DE would be done away with completely since neither letter was assigned to any country in the new list. Duplicates were eliminated by using a different letter that was still "phonetically suggestive" of the country. The initial list had fourteen entries:

A-Australia
C-Canada
F-France
G-Great Britain
I-Italy
M-Mexico
N-Netherlands
O-South Africa (the exception)
P-Portugal
Q-Cuba (phonetic)
R-Argentina (phonetic)
S-Spain
U-United States
Z-New Zealand

Although there were not enough letters for all the countries of the world, only a small number of them had amateurs. Eventually there would be a problem, but since twelve were left unused, most believed that the supply of letters would last until the next convention.

Official governmental sanctioning of this scheme was not sought, since the agreement was made directly among groups of amateurs and would neither affect other services nor change any call signs. Nevertheless, several countries unofficially indicated approval.

UK officials, however, insisted that instead of using a new intermediate, British amateurs should add the appropriate letter to both call signs. Thus a French amateur would use the agreed upon intermediate, but in reply, the British station would continue using DE, but call, for example, F8AB DE G2SH. UK amateurs, it seems, were ahead of the game since this is exactly the scheme that would eventually be adopted internationally.

There were some other objections, favoring the British plan, but at this early stage it was deemed not to be universally acceptable since some countries specifically prohibited adding a letter to a call sign. In some other countries non-amateur services were already being assigned call signs based on a sequence of one letter followed by a number. Official prefixes would have to wait a few more years.

Faced with the new reality of international QSOs, amateurs also wondered whether the myriad of worldwide languages would pose an obstacle to easy communication. They began to discuss several so-called universal language ideas that were popular at the time.

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History of Ham Radio...

In Europe, where multiple languages had long existed within a short distance, amateurs were forming "international radio societies" which were attempting to define a simple international language, or I.L. as they called it, for use on the air. Their language was called Ido and was based on 11,000 word roots taken from eight languages. Together with fourteen "grammatical terminations," the roots were used to form a variety of words and conjugations that could be recognized, it was claimed, by a large percentage of native speakers of the various constituent languages.

In North America, Henry W. Hetzel, Secretary of the Philadelphia Esperanto Society argued that radio was just one example of increasing interaction across language barriers, and that there was a greater need than ever for an international language, as promoted by the International Auxiliary Language Movement. He was certain that an international language "will be one of the realities of the very near future," and that his choice, Esperanto, was certainly better than Latin.

The rationale seemed to take hold at the ARRL, at least for a little while. Reasoning that the question of an international language for radio was linked to the use of one for all other purposes, the League decided to endorse Esperanto in September 1924 after studying the matter for two years. It was considered the most widely adopted worldwide. Realistically, however, hams would not adopt such a language solely to support their radio activities, Warner admitted, and would not "make the necessary slight effort until the whole world takes up the idea." With the prevalent use of Q-signals and other abbreviations, amateurs would come to understand that they had little need for a new universal language—they already had one.

Stay Up to Date with EGARA's Groups IO

Don Mayotte, KB2CDX, has set up an EGARA groups site to offer information relating to Amateur Radio.

If anyone would like to join our groups.io, you can sign up at https://groups.io and follow these easy steps:

1. Click on find a group at the top and that will take you to a search page.
2. On the Right of that page in the Search window type egara there will only be one selection under publicly listed groups.
3. Then click on the link egaraclub / EGARA
4. Almost to the bottom on the left you will see a blue rectangular box to apply for a subscription. If you click on that you will send an email.
5. TYPE subscribe in the subject and in the body of the message please place your Name and Call sign unless that info is in your email signature.

This new information source is in addition to our official website and provides an additional place to find and share info about our hobby.

If you would like to share information about Amateur Radio, please try to only upload a link to the topic instead of a full document, as there is limited space provided for our free account.

Any further question please contact Don Mayotte at: ddm653@gmail.com

EGARA January Meeting Minutes

- **The January 12, 2022 meeting of the EGARA was called to order at 6:56 PM by Treasurer Don Mayotte, KB2CDX. A total of 14 members attended at the Masonic Temple;**
- **A raffle was conducted and several members won prizes. Proceeds were deposited into the club's bank account;**
- **Minutes of previous meetings can be found on the www.EGARA.club website, as a part of the archived Sidebands newsletters;**
- **The Treasurer's report was given by Don Mayotte, KB2CDX. Monthly expenses were in keeping with seasonal variations, and the EGARA fund balance is favorable;**
- **Ridge Macdonald, KB2HWL informed the membership about the Albany County Winter Field Day operations at Lawson Lake. Also, on the first Tuesday of each month, ARES/RACES video presentations are given ZOOM on line;**
- **Upcoming events include annual elections, and interested members may self-nominate for positions on the board. Dave Smith , WA2WAP suggested a future presentation on FT-8;**
- **A date has not been set for the next VE session;**
- **Items for sale or trade, or wanted to buy can be listed in Sidebands, the EGARA monthly newsletter. Members may contact Bryan Jackson, W2RBJ by email at W2RBJ@outlook.com to list their items;**
- **Dues for 2022 may be paid at any monthly meeting, or via paypal through the club website, EGARA. Club. ARRL annual dues may be paid through the club – contact Bryan Jackson, W2RBJ, for more information and instructions;**
- **A multi-media presentation about Software Defined Radio (SDR) was given by Don Mayotte. Don made a live demonstration of several on-line SDRs, including one which was located in Spain. Different reception modes were explored, and the automatic CW decoder function was tested. Don explained how these receivers can be used for reception when propagation was poor, as well as troubleshooting one's station and antenna system. Don demonstrated SDRs at web sites KIWISDR.COM and WEBSDR. ORG;**
- **The meeting was adjourned at 7:56 PM.**
- **Submitted by Steve VanSickle, WB2HPR - Secretary**

On the Beam
News & Notes

ARRL Foundation to Create Club Grants Program

A new ARRL Foundation Club Grants program, funded by a grant from Amateur Radio Digital Communications (ARDC), will make $500,000 available to radio clubs. The program will provide up to $25,000 for worthy club projects. Requests for more than that will be referred back to ARDC.

ARRL has long recognized that it is in the best interests of amateur radio to encourage and support amateur radio clubs. Clubs historically have recruited, licensed, and trained new radio amateurs and have provided the community setting for radio amateurs to continue their education and training. The new Club Grants program will help clubs to more easily provide and expand their important services.

Beginning in April 2022, amateur radio clubs will be able to apply for these grants by filling out a simple form on the ARRL website. The ARRL Foundation will evaluate the grant proposals. The Foundation was established in 1973 to advance the art, science, and societal benefits of the amateur radio service by awarding financial grants and scholarships to individuals and organizations in support of their charitable, educational, and scientific efforts.

A key criterion for determining awards will be how the project will advance amateur radio in the grantee's community. In most cases, this process should take no longer than 90 days.

ARRL Foundation President David Woolweaver, K5RAV, shared his enthusiasm about this new program. "This program will substantially contribute to the growth of amateur radio clubs and their efforts to expand and support the amateur radio community," he said.

ARDC is a California-based foundation that awards grants to projects and organizations that follow amateur radio's practice and tradition of technical experimentation in both amateur radio and digital communication science. ARDC Executive Director Rosy Schechter, KJ7RYV, noted that this program will streamline the process for getting club projects funded, so that clubs can get started on these projects more quickly.

"We're very excited about working with the ARRL Foundation on this program," said Schechter. "We can't wait to see what kinds of creative things clubs will do with these grants.

EGARA members are encouraged to develop and submit projects that may qualify for an ARDC grant.

Support EGARA with Your 2022 Dues

It's a new year and time to renew your annual membership -- unless you took advantage of an EGARA multi-year discount. It's easy to pay dues on-line, using the club's fast and secure PayPal account, or you may mail a check.

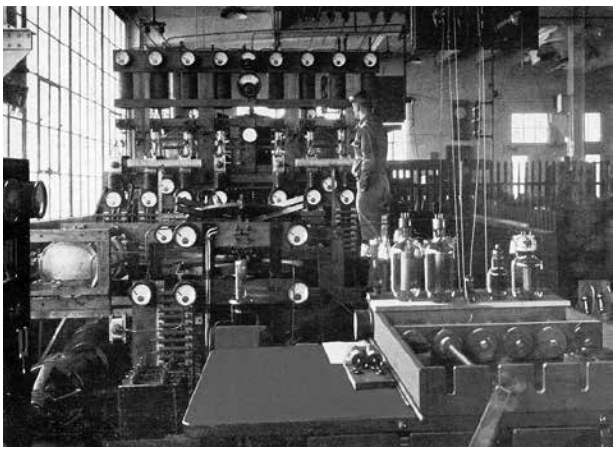
Information on dues options and the PayPal link are at:

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

Thanks to income from our Hamfest, dues remain the same for 2022.

WGY -- Marking 100 Years of Operation

By 1928, the WGY transmitter was capable of operating at 150,000 watts, and an application was made to increase to this power. However, this was three times the limit allowed by the Federal Radio Commission (FRC), and the application was denied. Temporary broadcasts were carried out at the 100 kW power level on August 4, 1927 and at 200 kW on March 9, 1930. From those broadcasts, the station received reception letters and telegrams from as far away as New Zealand. Plans were to make those power increases permanent, but were never carried out.



WGY's first 50,000 watt transmitter. The station was first in the nation to broadcast with that amount of power.

By 1935, the engineering staff of WGY began work to replace the T-top antenna system with a single vertical radiator tower. At the time, the station was plagued with signal fading at a distance of 30–100 miles from the transmitter site due to cancellation by out-of-phase co-channel signals from the same source. The ideas for this tower were formed from experiments at WJZ in New York. From this, a square, half-wavelength (on 790 kHz) 625 foot tower was constructed in 1938. The half-wavelength design greatly reduced high angle radiation, thus solved the close in fading issues, and this antenna is still in use today.

WGY's Art Deco studio building in 1938. It would be demolished in the early 1960s to make way for Interstate 890.

In 1938 the station's studios were moved from Building 36 into a brand new building on River Road, in Downtown Schenectady. These studios were torn down in 1961 to make way for Interstate 890. At that time the studios were moved to 1400 Balltown Road in Niskayuna, New York, co-located with GE owned-and-operated WRGB-TV Channel 6.

In 1926, WGY affiliated with the newly established WEAF-based NBC Red Network. WGY remained with NBC Radio until it discontinued operations in 1989.

In 1941, the stations on 790 kHz, including WGY and KGO, were moved to 810 kHz to comply with the North American Regional Broadcasting Agreement (NARBA). In 1942, during World War II, a concrete wall was built around the base of the transmitter tower to prevent saboteurs from shooting out the base insulator on the tower and taking the station off the air.

As the "Golden Age of Radio" ended, WGY evolved into a full service, middle of the road format of popular music, news and talk. It was the flagship station of General Electric's broadcasting group until 1983, when it was sold to Sky Communications and soon after to Empire Radio Partners, Inc. General Electric's Schenectady operations also pioneered television by putting WRGB-TV on the air, which signed on as W2XB in 1928. It also pioneered FM broadcasting in 1940 with radio station W2XOY, later WGFM, then WGY-FM, and today WRVE. It is credited as the first FM station to broadcast in stereo around the clock.

EGARA is honored to be able to commemorate WGY's Centennial anniversary with its Special Event Station.

WGY Photo Gallery
100 Years of Broadcasting

This is one of the first photographs of a broadcast from WGY, taken in 1922. Mlle. Ladd is at the harp, and Kolin Hager is at the microphone. His assistant, Robert Weidow, is at the rear.

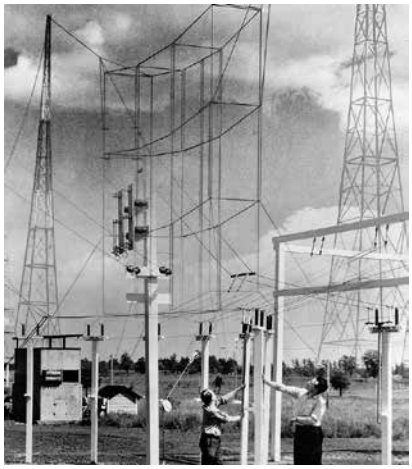
In the 1920's, WGY billed itself as "The Electric City Station".

This was the transmitting panel of the experimental GE 100 kW transmitter used for superpower tests by WGY in Schenectady in 1927. Three of the system's five high power water-cooled tubes are to the left of the operator.

In 1929, Amelia Earhart broadcast over WGY and its shortwave station W2XAF. She is with WGY Publicity Manager Martin P. Rice.

WGY engineer Al Knapp explains the WGY control room to Betty Bauer, Maude Clark and Jean Craig in 1942. Women were being hired as studio engineers because qualified men were in short supply during World War II.

Photo on Right: This view shows the antennas of GE's commercial shortwave stations WGEO and WGEA in 1941. The next year, these stations would be turned over to the government to form the beginnings of the Voice of America.



Why Do Hams Say 73?

By Dan Romanchik, KB6NU

At the end of a contact with a friend, most hams will call out a hearty "73." It's so popular that you may see ham radio operators sign "73" at the bottom of an email or even social media post. The formal definition of 73 is "Best Regards" – it's a nice way to say goodbye that is unique to amateur radio. But, have you ever stopped to think why we use that number to end a contact? The answer takes us all the way back to the days of land line telegraphy.

The origins of '73'

Almost as soon as telegraphers began sending messages, they realized that they were sending the same messages over and over. Often, these messages were meant for other operators to facilitate the handling of messages. For example, one operator might ask another operator, "Are you ready?" meaning are you ready to receive a message. Another common message would be one asking the operator on the other end of the line to wait.

Instead of sending these messages over and over, operators developed a shorthand for common messages. To save time, they would send a number instead of the complete message. For example, the number 1 meant "Wait a minute." "Are you ready?" was shortened to the number 6. An operator would send 134 when he or she wanted to ask, "Who is at the key?" This code was standardized in 1857, and published in that year's National Telegraphic Review Operator's Guide.

The Guide also defines the message 73. Today, we take this to mean "best regards," but in those days, the literal definition was quite different from the definition we have today. In 1857, 73 meant literally, "My love to you." Even though it stood for a flowery sentiment, telegraph operators adopted this code as a way to greet each other on the wire and to wish each other well.

The 92 Code

In 1859, the Western Union Company published the "92 Code". This code is similar to the list published in 1857 and consists of a list of numerals from one to 92 that stood for canned messages that were to be used by all operators on Western Union wires. In the 92 Code, the meaning of 73 changed from "all my love" to "accept my compliments." The message is still quite formal, but that's how people spoke back then.

Between 1859 and 1900, the literal definition continued to change. Dodge's The Telegraph Instructor defines it simply as "compliments." The Twentieth Century Manual of Railway and Commercial Telegraphy defines it as "compliments," but also as "my compliments to you." Theodore A. Edison's Telegraphy Self-Taught, which was first published in the early 1900s once again defines 73 as "accept my compliments." The 1908 edition of the Dodge Manual gives two definitions: "compliments" and today's definition, "best regards."

By the way, the 92 Code also defines a couple of other messages that are still in use today: 88 and 30. 88 is defined as "love and kisses." You'll sometimes hear 88 used at the end of contacts between male and female operators, especially when those operators are husband and wife. If you ever listen to Citizen Band Radio, you'll sometimes hear them say "eights" at the end of a contact. That's just an abbreviation of 88.

The 92 Code defines 30 as "no more" or "the end." You still often find this code, written as "-30-," at the end of press releases. It signals whoever is reading the press release that they've reached the end and that there is no more to follow. Today, when sending traffic, we'd use the prosign AR instead of 30.

73 today

The use of 73 continues to change, even today. For example, QRP operators, that is to say operators using less than 5 W output power, sign off with the code 72. (72 is less than 73, right?) This use of 72 goes back at least to the early 1990s.

While "best regards" may be the formal definition of 73 these days, we use it in a much less formal, much more cordial way these days. We're not just saying "good bye," but also "thanks" and "hope to see you again soon." And, with that, 73 from Dan, KB6NU.

A Checklist for Keeping Your Shack On The Air
(and safe)

Check the following components for corrosion, damage, modifications or removal:

- **Coaxial shield ground kits (including on your tower, if applicable). Use binoculars to make tower inspections.**
- **Grounding cable and connections to the tower base.**
- **Guy wire jumper and ground wire connections.**
- **Entrance bulkhead cable boots, mounting provisions and grounding connections. Check cable boots for pliability, cracks and leaks.**
- **Ground bar connections in all racks, to RF components and cabinets.**
- **Single point ground. Meter and record all values. Compare to previous ground readings. Test for any current flow on each ground connection with the clamp-on ammeter. Record any readings and compare with previous readings.**
- **Inspect all coaxial, low voltage, DC and 120V surge suppression devices related to the antenna systems. Measure VSWR reflected energy at each coaxial suppressor and compare to previous readings. Replace suppressors if VSWR increases more than 10% of if damage is apparent. Replace all suppressors every 3 to 5 years. On low voltage, DC and 120V surge suppressors observe failure lights if available and inspect for damage or inoperative equipment.**
- **Review all underground ground cables and radials for any obvious dig-ins or activity that might disturb the system. Check any suspect areas and inspect grounding continuity.**
- **Verify that surge suppressors are still functional by observing failure lights. Proper functioning of suppressors are important to the life of all low voltage, DC and 120V equipment.**
- **Test any UPS units serving equipment for proper operation. Follow manufacturer's Maintenance and Test Guidelines.**

Periodic inspection of your shack's gear, ground system, antenna, coax and related equipment can head off problems before they impede performance or result in expensive damage.

Resolutions and Ramblings

by Steve VanSickle, WB2HPR

It's hard for me to fathom – but here we are at the tail end of January, with bitter cold temperatures on a bright and sunny day. As I sit writing this, I think about all the usual "to-dos" for today, next week, and the following month or two. One of my duties as club secretary, is to remind the membership about upcoming spring election of officers.

Now is the time to think about who you envision as filling the leadership positions in EGARA for the upcoming year. If you have someone in mind, or if you are interested in taking a position, you will get your chance to make a nomination. The club is always interested in members who would participate on the board of directors – and we are always interested in members who would act as a program chair, field day coordinator, or other available position. EGARA is your club – resolve to make a difference – there are plenty of opportunities for you to help the club to promote amateur radio.

Another idea came to mind… with the recent advances in digital communication formats, it can be daunting to stay abreast of the latest operating modes available to our ham radio community. I, for one, have resolved to pay more attention to these areas of specialization, and try to catch up on some of the new digital modes. My last great digital adventure was PSK-31, and I have to admit that since then, I have only tried DRM, albeit for a very brief time. And that wasn't possible without help from Don, KB2CDX! So, resolve to learn some new facet of radio communication, be it a new mode, antenna, or other new technology.

Looking past this cold weather, as things begin to thaw, EGARA will be holding a VE session. This could present a great opportunity to many of our members. You could help your club by becoming a VE. If you hold a General or Extra class license, you need only study the VEC syllabus and then take the open book test and apply to the VEC. The VEC syllabus is on line as part of the ARRL website.

If you're not ready to become a VE and wish to upgrade your license, now is the time to bone up on the material in the various study guides. If you need help, check with your fellow EGARA members -– we want you to succeed! Or, maybe you will find time to mentor a fellow member and help them with their upgrade.

Gazing into the future, as spring time rolls by, there will be the annual field day, the EGARA hamfest, the annual summer cruise and other activities –- just some of the ways for you to be involved in your club. I hope that you enjoy being a member of EGARA, and that you find time to share your enthusiasm by being a radio-active EGARA volunteer. I look forward to a great year ahead as we emerge from the COVID pandemic and begin to some light at the end of the proverbial tunnel. I look forward to seeing each and every member at our monthly meetings. While you're at it, bring along a friend and introduce them to a great group of hams.

There's a lot in store for 2022! Til next time – stay warm, stay well – we'll look (or listen) for you on the air! 73.

Pay Your 2022 EGARA Dues The Quick and Easy Way!

www.egara.club/pay-dues

CALENDAR

February 9, 2022 - 7 pm - Regular monthly club meeting. Masonic Lodge, 710 Columbia Turnpike, East Greenbush, NY.

February 20, 2022 - EGARA Special Event Station commemorating WGY's 100th anniversary

Pro Tip: Chasing SWR?

Should You Chase SWR?

To a point, absolutely! Should you stress out about it if you can not get a perfect 1:1 match? ABSOLUTELY NOT! Get it as close as you can or to what you consider to be an acceptable SWR and just go enjoy your radio!

So what is acceptable SWR? That depends on you. For many experienced hams anything from 1.10:1 – 1.25:1 is acceptable... the sweet spot.

You will have minor loss if it is not a perfect 1:1, but who cares??? Get it close and go play radio. Trying to get it perfect is only going to frustrate you. Don't do that!

So, why do people think they can blow up their rigs or linear amplifiers when there is a high SWR on the antenna? ***Because that can happen, but it is not due to the reflected power!*** There is a totally different reason.

A high SWR on an antenna probably means that the antenna is not tuned to the frequency that is being used. This, in turn, means that the antenna has some inductive or capacitive reactance that is de-tuning the final amplifier. De-tuned final amplifiers draw far too much current and can burn up.

The rig or linear amplifier will have to be re-tuned to avoid creating too much heat. Many linears and nearly all tube amplifiers have tuning knobs that allow you to "dip the plate current" or adjust the SWR with a tuner.

Transistor rigs usually do not have any tuning adjustments. To avoid the extra heat created when running a de-tuned amplifier, there is a protection circuit that will significantly reduce the output power if the SWR is high.

For Sale...

- **Heathkit DX 35** with VFO and PTT, $150
- **Heathkit DX 60** with VFO and PTT, $150
- **Kenwood 520** Transceiver $225.00

Contact Tom at kc2fcp@nycap.rr.com

- **Comet CHA-250BX 80-6M vertical antenna.** Highly rated for DX work, no ground radial design and no tuner needed. Handles 250 watts. Great ii you have limited space. Sells for $429.00 new. Selling for $100.00.

Contact Bryan at W2RBJ@outlook.com.

- **VIBROPLEX "Bug" semi-automatic key.** Original "PRESENTATION" Model with Gold Plated baseplate escutcheon. Beautiful heavily chromed upper parts, bright red finger pieces, jeweled bearings. Lists for $350 but you can own this beauty for only $250 plus postage. In absolutely beautiful condition, this dazzling example of Vibroplex engineering will be supplied in a unique hard-shell protective carrying case.

Contact Steve at: (518) 326-0902 or stevewb2hpr@gmail.com

- **Connect Systems CS 800d** 2m /440 analog/digital DMR mobile asking $150.00
- **BCA-300** duel band 2m/440 mag mount antenna sam define connector asking $20.00
- **HYS duel band antenna** 2m/440 nmo mag mount 20' tall asking $20.00

Contact Walt at: n2wjr07@gmail.com

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.