

Sidebands

The Newsletter of the EAST GREENBUSH AMATEUR RADIO ASSOCIATION



www.egara.club

February 2018

President - Tom Scorsone, KC2FCP
Secretary - Steve VanSickle, WB2HPR

Vice-President - Ridge Macdonald, KB2HWL
Treasurer, Webmaster & Newsletter Editor - Bryan Jackson, W2RBJ

ARRL Gets a New Temp CEO as Gallagher Steps Down

ARRL has a new Chief Executive Officer following the previous CEO's decision to call it quits after just two years in the top position. In October, he came to the Capital Region to discuss the many challenges facing the League, including membership erosion and financial pressures.

Taking over temporarily will be ARRL Chief Financial Officer Barry Shelley, N1VXY, replacing Tom Gallagher, NY2RE, who announced in mid-January that he had decided to retire, effective March 2nd. At the annual meeting of the League's Board of Directors on January 19-20, it decided that Shelley will serve until the Board can select a new permanent CEO. Shelly is also expected to serve in an advisory role during the transition. The Board will create a CEO Search Committee to find the League's next leader. In addition, the Board elected current ARRL Comptroller Diane Middleton, KC1BQF, as Chief Financial Officer, to replace Shelley.



Tom Gallagher

At the meeting, incumbent ARRL President Rick Roderick, K5UR, was also re-elected by the Board for a second term. President Roderick, the League's 16th President, received 9 votes, while the only other nominee, New England Director Tom Frenaye, K1KI, received 6 votes.

Gallagher expressed his gratitude to Roderick and the ARRL Board for giving him the opportunity to help guide the organization over the past two years. "It has been my great privilege to serve in this capacity for two years, and I am deeply grateful to the Board and President Rick Roderick, K5UR, for their support and encouragement," Gallagher said.

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January VE Session Produces Six New Licensees and a Winner!

EGARA's January VE Exam session was a home run for all six test applicants that attended, producing five new Technician licensees and one upgrade to an Extra Class ticket. According to EGARA President Tom Scorsone, the applicants either aced their tests or had only one or two questions wrong.

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"It was obvious that they had all studied very hard and knew their stuff before taking the exams," he said. "It's great when everyone does well and passes with ease."

Kevin Espina, KD2OZE, of Albany also won a new Yaesu radio in a raffle held for those who got their Technician Class license. The radio was purchased with the sale proceeds of equipment donated by the family of SK Howard Caudle, W2RSU. Also passing the Technician test was 13 year old Nathan Meier, KD2OZG, of Hillsdale, New York



Kevin Espina, KD2OZE, is presented with a new Yaesu 7900 by Club President Tom Scorsone. He won the raffle that was held among the five who passed their Technician test.

Save the Date! Next Membership Meeting - February 14, 2018 at 7 pm



EGARA Hamfest Gets Sanction Approval from ARRL

EGARA's 15th annual Hamfest has received official sanction status from ARRL. The approval means that the League will support the May 12th event, providing publicity on the ARRL website, as well as ARRL books, publications and gift certificates for the raffles that are held throughout the day.



Club President Tom Scoresone, KC2FCR, received the notification last month by email.

"We're pleased to tell you that Director Lisenco has approved the application of the East Greenbush Amateur Radio Association to hold an ARRL approved hamfest in East Greenbush, NY on May 12, 2018," said the message from Gail Iannone, ARRL's Convention Program Manager.

As in the past, the 2018 Hamfest will be held at the East Greenbush Fire House on Philips Road. The club reserved the facility last summer to ensure it would be available for the event.

"The club's Hamfest continues to get better every year and we look forward to continuing that tradition again this May," said President Scoresone.

Plans for this year's Hamfest include expanding the number of vendors and tailgating opportunities, as well as a range of delicious food offerings and raffle prizes.

Got Cabin Fever? Check Out This February Hamfest!

The Cornerstone Fellowship Radio Club located in Hoosick Falls is sponsoring a Ham SwapFest on Saturday, February 3rd. The event will be held at the Hoosick Falls Central School at 21187 Route 22 in Hoosick Falls.

The swap meet will run from 8 am to 2 pm and include vendors and tailgaters. There will be no charge for either, according to the club.

General Admission is \$1.00, with children under 16 being admitted for free. There will also be door prizes and raffles throughout the day.

Hams will be able to access talk in on 146.655 (K2FCR) 100.0 PL Tone.

For more information you can email hoosickfallshams@yahoo.com or check out the Facebook page "K2FCR Cornerstone Fellowship Radio Club."

Directions to the Hamfest:

From the Troy area, go east on RT-7 / Hoosick Street for 21.3 miles. Turn left onto RT-22 and drive 1.6 miles. Hoosick Falls High School is on the left

This event is sponsored by the Cornerstone Fellowship Radio Club (K2FCR), BaoFeng, Icom Radios, Kenwood, Gigaparts, Ham Radio Outlet, MFJ Electronics, CQ Magazine.

Challenges Bring Changes at ARRL

(continued from page 1)

Gallagher's resignation comes at a time when ARRL is facing many challenges, as Gallagher outlined during his trip to the Capital Region last Fall to meet with area hams. Those challenges include a shrinking number of amateur radio operators and a notable decrease in those choosing to join the League.

"The ARRL is in a transition to a new generation for Amateur Radio. Change doesn't come easy," Roderick said. "Tom helped us in taking that step forward, and for that we are very grateful for his service to the League and to Amateur Radio."

Gallagher, 69, cited recent changes included in the new federal tax law that made it unattractive for him to continue working in Connecticut, where ARRL is headquartered. The Board will evaluate and determine the next steps to take in a search for his replacement.



ARRL CEO Tom Gallagher speaks with area hams during his visit to the local area last October. His focus was on the many challenges facing amateur radio and his plans to meet them.

Among Gallagher's chief accomplishments during his tenure as CEO were creating an enhanced level of professionalism and efficiency in the organization that represents more than 150,000 US Amateur Radio operators. Gallagher also oversaw a significant turnaround in the organization's financial performance.

Licensed in Pennsylvania in 1966 as WA3GRF (later N4GRF in North Carolina), Gallagher is a member of the West Palm Beach Amateur Radio Group. He has described himself as "an incurable HF DXer and inveterate tinkerer" and credits his first visit to the Franklin Institute's Amateur Radio station W3TKQ in 1963 for inspiring his interest in ham radio.

Amateur Radio led to an early career in broadcasting. He was a cameraman and technician with WGBH-TV in Boston, the CBS Television Network, and Metromedia's WIP Radio in Philadelphia.

Gallagher joined ARRL following three decades as an international investment banker and financial services executive. His career has included senior leadership positions with JP Morgan Chase & Co and CIBC Oppenheimer & Co in New York, and with Wachovia Capital Markets in Charlotte, North Carolina.

In other actions at the Board's annual meeting, ARRL First Vice President Greg Widin, K0GW, was declared re-elected without opposition. Incumbent ARRL Second Vice President Brian Mileschosky, N5ZGT, did not stand for re-election, and Pacific Division Director Bob Vallio, W6RGG, was elected to succeed Mileschosky. Vallio received 8 votes to 7 votes for the only other candidate for Second Vice President, Northwestern Division Director Jim Pace. Vallio's election means that incumbent Vice Director Jim Tiemstra, K6JAT, will succeed him as Pacific Division Director, creating a vacancy for Vice Director in that Division, which will be filled by appointment.

Also elected were: Incumbent Vice President for International Affairs Jay Bellows, K0QB, was unopposed for re-election; Incumbent ARRL Treasurer Rick Niswander, K7GM, was also re-elected without opposition.

The Board also chose members for its Executive Committee. Elected to the EC on the first ballot were new Dakota Division Director Matt Holden, K0BBC; Director Frenaye; Roanoke Division Director Jim Boehner, N2ZZ, and Great Lakes Division Director Dale Williams, WA8EFK. Delta Division Director David Norris, K5UZ, was elected on the fourth ballot to fill the remaining slot.

The Board elected Directors Mileschosky, Norris, and Frenaye to new 3-year terms on the ARRL Foundation Board.

(See related opinion piece on the next page by Dan Romanchik, KB6NU)

What the Heck is the ARRL Board Thinking?

By Dan Romanchik, KB6NU

Last month, ARRL president Rick Roderick, K5UR, complained that the ARRL's Board of Directors—a group of hams, some of whom are well-intentioned, but who may have been misled—has been the subject of an organized misinformation campaign. This letter is part of an organized effort to spin some of the awful decisions that the board has made in the past year, including the adoption of the ARRL Policy on Board Governance and Conduct of Members of the Board of Directors and Vice-Directors (aka “Code of Conduct”) and the censure of Southwestern Division Director Dick Norton, N6AA.



Dan Romanchik, KB6NU

Over the past couple of weeks, I've seen similar statements by various directors responding to inquiries from amateurs in their divisions. The words are slightly different, but these responses all seem to come from the same set of talking points, and like most political gobbledygook, the script is meant to obfuscate rather than elucidate. The board's actions speak louder than its words, however. Look at what they've done rather than what they're saying.

For example, Roderick says, “The principal suggestion is that ARRL operates under some “cloak of secrecy.” The criticism is unfair and undeserved,” and in a later paragraph, “The ARRL Board does seek thoughtful, informed input on policy issues concerning Amateur Radio from its roughly 150,000 members.” I would like to ask when the members were asked for “thoughtful, informed input” on the awful ARRL Policy on Board Governance and Conduct of Members of the Board of Directors and Vice Directors? The ARRL Letter of Jan 19, 2017 does not mention that the Code of Conduct will be discussed at this meeting, nor does the published meeting agenda. Nor does my director, Dale Williams, WA8EFK, mention it in his December 2016 “Dale's Tales.” It's awful hard for members to provide input when they don't know what's going to be discussed.

As if to further discount the “cloak of secrecy” argument, Roderick says, “When it [the Code of Conduct] was adopted by the Board a year ago, it was posted for ARRL members to read.” He's right about that, but they certainly didn't go out of their way to draw any attention to it. There was no news item about it, nor is it mentioned in the 2/9/17 ARRL Letter item that discussed what transpired at the board meeting. Nor did WA8EFK inform the GL Division members that he voted for it in his January 2017 message to the Great Lakes Division. So, while the Code of Conduct wasn't entirely cloaked in secrecy, the ARRL certainly didn't go out of its way to inform members that it had been passed or what it contained. Frankly, if I were on the ARRL board, I wouldn't want it publicized either. To be fair, as I've written, I don't disagree with most of the Code of Conduct. It calls for directors to be financially responsible and to treat staff members with respect. Who can argue with that?

What's at issue here are those sections that restrict a director from speaking his or her mind. While those sections may be appropriate for a corporate board of directors or the board of directors of a nonprofit corporation whose board members are appointed, they are not appropriate for a board whose members are elected by the membership.

That brings us to the censure of Dick Norton, N6AA. The ARRL Board's decision to censure was prompted by his alleged violation of that policy. Neither Roderick nor any of the directors who voted for the censure have seen fit to present the evidence, except to say things like, “Unfortunately, it was necessary for the Board to take the highly unusual action of publicly censuring one of its members recently,” and “The vote was 11 to 3, so trust us, what he did was really bad.” They have refused to explain their decision any further, even when the statements in support of Mr. Norton would seem to refute the board's reasoning for the censure. If that's not a cloak of secrecy, I'm not sure what is.

Finally, I'd like to address the proposals to amend the Articles of Incorporation and ARRL By-Laws at the board meeting being held this weekend in Newington. Roderick says, “ARRL member input is welcome on all such subjects. Indeed, the recommended Article and Bylaw changes were not considered to be Board confidential.” If they were not considered to be confidential, why the whining about their publication before the meeting?

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Opinion: Dan Romanchik

Roderick says the proposals are being “mischaracterized or misrepresented,” but offers no explanation for this opinion. I guess any criticism quickly becomes mischaracterizations and misrepresentations instead of thoughtful, informed input in the eyes of the ARRL board.

I don't doubt that the directors are “smart, dedicated radio amateurs” who devote many hours of their own time and try to represent us as best they can. But so are we. I and thousands of other smart, dedicated amateur radio operators personally devote many hours of our own time to promote the hobby and help people have more fun with amateur radio. But I don't see how the Code of Conduct, the censure of N6AA, and other questionable board actions are serving the amateur radio community. I don't think that “the Board absolutely understands that the members are the organization” and that it's the board's “disinformation and lack of candor” that's precipitated this debate.

Time will tell how this all plays out. I do know that these latest board moves have prompted many to not only criticize the ARRL Board, but also get organized and challenge them in upcoming elections. In my mind, that's a good thing.

If this situation angers you as much as it does me, I encourage you to contact your director and make your feelings known. One of my blog readers suggests that your message be “short, non-aggressive, and to the point.”

He suggested the following text for your letter or email:

“Dear [your director's name here]

I am unhappy with both the ARRL Policy on Board Governance and Conduct of Member of the Board of Directors and Vice Directors (aka the “Code of Conduct”) and the N6AA censure.

I want to freely discuss issues with our directors. I want our directors to tell me where they stand, not where the board stands.

I want the directors to be free to express their opinions and to know how they voted.

I want directors to not fear censure.

Therefore, I urge the following immediate actions:

1. Modify the Code of Conduct to allow the above.
2. Revoke the N6AA censure.

73,

[Your name and callsign go here.]”

Dan's ham radio blog is located at <http://www.kb6nu.com>

YOUR MEMBERSHIP MATTERS

It's that time of year again -- club dues are due. It's likely not at the top of your “to do” list, but the investment you make in the club comes back many times over when you consider all the benefits you receive by being a member of EGARA. The list includes:

- *Monthly membership meetings* with topics designed to enhance your knowledge of amateur radio, plus free pizza and refreshments!;
- *Sidebands*, EGARA's monthly E-Newsletter is loaded with club news, interesting articles, helpful tips, a calendar of upcoming events and free classified ads to help you buy, sell and swap gear;
- *Annual Field Day* with a great chance to practice your emergency operating skills, temporary station setup, and more! It's a great learning experience, and a lot of fun;
- *EGARA Club Rewards* program allows you to earn points for gift cards and other rewards;
- *Club Repeaters* available to members to extend the reach of their radios.
- *VE Test Sessions* where you can take FCC exams to upgrade your license;
- *Hamfest!* A chance to meet other hams and find great deals from equipment vendors! Plus, learn about advances in amateur radio, enjoy demonstrations, win prizes and more!
- *Elmers* to help you learn. Senior members of EGARA are a great resource for answering your questions and helping you hone your ham radio skills;
- *Emergency Services* are a foundation of ham radio and EGARA. When emergency communications are needed, EGARA is there to help.

Dues remain the same again this year at \$15 for an individual and \$25 for a family. You can pay your annual dues at club meetings or online at the club website through our secure PayPal portal. If you prefer to mail a check, please send it to: EGARA, c/o Bryan Jackson, Treasurer, 983 Sterling Ridge Drive, Rensselaer, NY 12144.

EGARA January Meeting Minutes

- The regular January meeting was canceled due to the threat of inclement weather.
- The next regularly scheduled meeting will be February 14th at 7 pm at the East Greenbush Masonic Temple.

February EGARA Meeting to Feature ENY Section Manager

ARRL section manager John Fritze, K2QY, is slated to attend the club's membership meeting on February 14th to discuss his job and its duties and responsibilities.

Fritze, a resident of Delmar, was became ARRL Eastern New York Section Manager on June 29. He took the reins of the Eastern New York field organization team following the retirement of Pete Cecere, N2YJZ, of Woodstock, who had served as the ENY SM since March 2001.

Fritze will complete the remaining term of office, which ends on March 31, 2018. ARRL Field Services Manager Dave Patton, NN1N, consulted with ARRL Hudson Division Director Mike Lisenco, N2YBB, in making the appointment of Fritze.

Fritze is also the long time ARES District Emergency Coordinator for the Albany area and a Hudson Division Assistant Director. An ARRL Life Member, Fritze is a past president of the Albany Amateur Radio Association.



John Fritze, center, at EGARA's Christmas Party in December. He will give an overview of his job as ENY Section Manager for ARRL during the club's February meeting.

Ham It Up



On the Beam

News & Notes

Government Shutdown? Not at the FCC

The federal government may have shut down for a few days in January, but the doors stayed open at the FCC. How? Turns out the Commission had stashed some cash to cover the situation.

As the shutdown approached, FCC spokesman Brian Hart said there was funding still available “to remain open and pay staff at least through the close of business on Friday, January 26.” As it turned out, Congress and the President resolved the stalemate well before the week was out.



Had the shutdown continued, it would have had a severe impact on the FCC. Under its recently updated plan for how to cope with a closing of the government, all FCC activity, other than anything necessary to protect life or property, would come to halt. Everything from the review of pending commercial and amateur license applications to answering the phones would be put on hold.

Under a complete federal government shut down, the FCC's official plan says its normal workforce of 1,492 employees would be reduced to a skeleton staff of about 227. That includes the five commissioners whose paychecks aren't tied to the agency's annual congressional appropriation. The same is true for 185 employees whose spectrum auction-related activities also don't come out of the annual budget. Another 13 employees would remain on the job to cover the FCC's 24-hour operations center, building security and to maintain the agency's IT operations. Everyone else, making up about 85% of the FCC's staff, would be furloughed.

World Radio Day Set for February 13th



World Radio Day on February 13th will seek to raise awareness about the importance of radio in all forms. As part of the observance, special event station 4U0R will be active on HF by CW / SSB from Vienna International Center, Austria from February 13 to 20.

Organizers want radio to be recognized as a low cost medium, specifically suited to reach remote communities and vulnerable people. It offers a platform to intervene in the public debate, irrespective of people's educational level. Furthermore, radio has a strong and specific role in emergency communication and disaster relief.

There is also a changing face to radio services which, in the present times of media convergence, are taking up new technological forms, such as broadband, mobiles and tablets. However, it is said that up to a billion people still do not have access to radio today.

On November 3, 2011, the 36th General Conference of UNESCO approved the creation of the World Day of Radio. The initial idea came from the Spanish Academy of Radio four years ago, and the Permanent Delegation of Spain to UNESCO formally present the proposal to UNESCO's Executive Board for approval.

The History of Ham Radio: The Squeak Box

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)

A mong pre-teens, mostly boys took to radio. At its simplest, radio was affordable. Boys could buy or make parts to build simple receivers and even low power spark transmitters. Typically, a kid would hook together a crystal receiver using a metallic mineral such as galena, scraps of used wire and a set of headphones, perhaps the most expensive component. This basic receiver was not much more than a rock, some wire and a telephone receiver. But it was magic! A radio receiver that required no battery, no AC power, no power at all except for the energy of the received radio signals themselves.

Transmitting was only a little more complicated. An old automotive spark coil, dry cell battery, fixed spark gap and key constituted a simple spark transmitter, albeit a broad, noisy, un-tuned one. With a setup like this a kid could communicate with his friends over several city blocks. As this became wildly popular, it also was the bane of the serious urban ham trying to work long distances. A kid using a squeak box, as the simple spark coil transmitter was called, could easily cover up weak signals coming from the next call district or further away. Even today, many hams have experienced the situation when, straining to hear a weak CW signal from far away, a relatively strong station begins transmitting just as the weak distant one is about to send a call sign or signal report or other piece of information crucial to making a complete contact. Imagine doing this with a broad bandwidth receiver and coarse tuning (or none at all).

Marconi's experiments with wireless ignited the imagination of a particular 11-year-old boy in Mt. Vernon, New York like nothing else ever had. The morning papers on 14 December 1901 reported the latest thrill. A transmitter in Cornwall, England had just been heard in Newfoundland by the great man himself using a wire suspended from a kite! For young Irving Vermilya and thousands of his contemporaries, however, transmitting signals across ever greater distances was not what grabbed them. Although exciting, it took engineering skill and financial backing to build powerful transmitters. But even a kid from Mt. Vernon could receive radio signals with some wire and a few relatively inexpensive parts. He knew he absolutely had to be a part of it and pleaded with his two main authorities—his father and the family minister—to help him not just get information and equipment, but to meet Marconi!

Reverend C. H. Tyndal, pastor of the Mt. Vernon Reformed Church, was not a typical clergyman. Drawn to wireless himself, he had closely followed Marconi's work and often talked about it to his congregation. This was unusual enough to warrant column space in the New York Times, which announced his sermon "Wireless Telegraphy and its Spiritual Similitudes" to be delivered on 19 May, complete with a live demonstration. When interviewed, however, Rev. Tyndal said he saw nothing remarkable about the event at all, despite the press interest.

A few months later Tyndal had not only met Marconi, he had been given a code key, a coherer and plans and documents on how to use them, all of which he shared with the boy from his congregation. Backed with some cash from Dad, Irving bought 150 feet of wire from J. H. Bunnell in New York City. A long established source of telegraphy equipment, Bunnell probably had seen few if any customers show up looking for wireless supplies at this point.

Using a crude, uninsulated, multi-wire antenna on a wooden frame and following Marconi's instructions, Irving assembled a receiving station. Excited and overconfident, he invited all his neighbors in to witness his reception of Marconi's signals.

Without tuning ability, a technology yet to be widely adopted, adjusting the length of the antenna wire was the only way to select a wavelength. Most large transmitters at this time operated at wavelengths in the neighborhood of 10,000 meters (a frequency of 30,000 cycles per second as expressed at that time, and in units of hertz many years later). Since his antenna was only 12 feet long he heard nothing.

(continued on next page)

Ham Radio: Beginnings

(continued from page 8)

His embarrassing failure was quite public. Over the course of several hours of silence, his audience went from commenting how “wonderful” it was “what a bright boy Irving is,” to “I don’t believe there is any such thing as wireless telegraphy.”

Undeterred, Vermilya and a group of friends hooked up a private telegraph line between their houses powered by batteries in his basement, and used this system to converse in code and hone their skills. As they built their network they reached a point, with 36 “stations” in the loop, where the batteries were just not sufficient to power it all. To satisfy the new demand he secretly tapped into the power mains atop a telephone pole, hiding the connection from everyone including most of his telegraph group, which included his cousin, the city electrician.

Two years later, with a proper, much longer antenna and some new equipment supplied once again by his minister, Vermilya began to hear signals from the Marconi stations and some ships. But having never learned and used Continental Morse in his local group, he could not understand what they were sending. In 1904 there were as yet only a few amateurs, if any, transmitting signals.

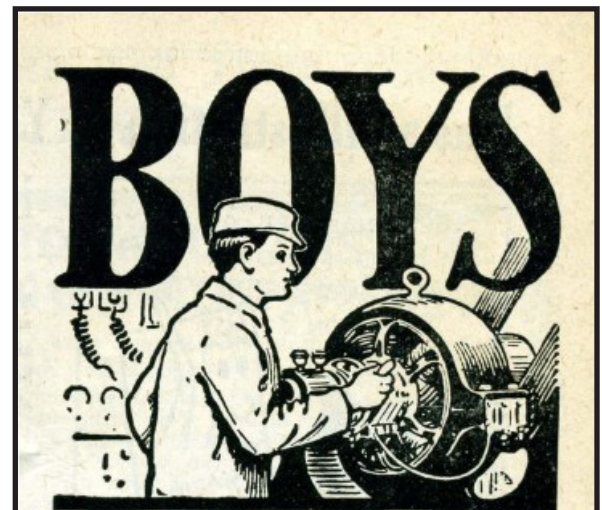
As the years went by, one by one, new acquaintances began to show up on the air, each using a two-letter identifier called a sine—Irving’s was VN, probably short for Van, his nickname. A friendly competition with another enthusiast, George Cannon, located a few blocks away in Mt. Vernon, escalated in stages until both of them were operating 5 kW spark stations.

VN’s setup consisted of a Clapp-Eastham transformer pulling 53 amps from the 110-volt power line and a home built rotary spark gap driven by a 250-volt DC motor which, he claimed, he “just hurried ... along a bit by putting 550 volts on it, which somehow or other mysteriously leaked off a trolley wire into my radio shack.”

The two amateurs started a war of sorts with the operators at the Brooklyn Navy Yard (using sine PT) and the United Wireless commercial station (sine NY) in New York, vying for time on the airwaves. No regulations yet existed to give priority to anyone in particular.

Hughes, the operator at United Wireless, while annoyed, was also impressed with the teenager’s skill, and eventually offered him a job as a ship’s wireless operator, at least in part to silence his 5-kW spark. Vermilya eagerly accepted the offer—the beginning of a long career as both amateur and professional.

This progression, driven by undamped enthusiasm, would become a pattern often repeated.



Big Money in Electricity

The electrical industries offer wonderful opportunities to boys with a liking for Electricity. The salaries paid to trained men are large, promotion comes rapidly and, best of all, the work is fascinating.

The discovery and development of new lines (such as wireless telegraphy and telephony), from time to time, promise attractive and paying fields to those who wish to specialize. The *will to do* and *Special Training* will bring success to you.

The International Correspondence Schools can help you to become an expert in electrical work, no matter what branch you like best. Thousands of young men have already won success through I. C. S. help. You can do as well as anybody, *if you try*. Everything is made so clear that you can learn in your spare time, regardless of where you live or what your work. No books to buy.

There’s big money in Electricity. Get after it by marking and mailing the Coupon today. *Finding out costs you nothing.*

INTERNATIONAL CORRESPONDENCE SCHOOLS Box 6130, SCRANTON, PA.

Explain, without obligating me, how I can qualify for the position, or in the subject, before which I mark X.

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|---|--|
| <input type="checkbox"/> ELECTRICAL ENGINEER | <input type="checkbox"/> CHEMICAL ENGINEER |
| <input type="checkbox"/> Electrician | <input type="checkbox"/> SALESMANSHIP |
| <input type="checkbox"/> Electric Wiring | <input type="checkbox"/> ADVERTISING MAN |
| <input type="checkbox"/> Electric Lighting | <input type="checkbox"/> Window Trimmer |
| <input type="checkbox"/> Electric Car Running | <input type="checkbox"/> Show Card Writer |
| <input type="checkbox"/> Heavy Electric Traction | <input type="checkbox"/> Outdoor Sign Painter |
| <input type="checkbox"/> Electrical Draftsman | <input type="checkbox"/> RAILROADER |
| <input type="checkbox"/> Electric Machine Designer | <input type="checkbox"/> ILLUSTRATOR |
| <input type="checkbox"/> Telegraph Expert | <input type="checkbox"/> DESIGNER |
| <input type="checkbox"/> Practical Telephony | <input type="checkbox"/> BOOKKEEPER |
| <input type="checkbox"/> MECHANICAL ENGINEER | <input type="checkbox"/> Stenographer and Typist |
| <input type="checkbox"/> Mechanical Draftsman | <input type="checkbox"/> Cert. Public Accountant |
| <input type="checkbox"/> Machine Shop Practice | <input type="checkbox"/> Railway Accountant |
| <input type="checkbox"/> Gas Engineer | <input type="checkbox"/> Commercial Law |
| <input type="checkbox"/> CIVIL ENGINEER | <input type="checkbox"/> GOOD ENGLISH |
| <input type="checkbox"/> Surveying and Mapping | <input type="checkbox"/> Common School Subjects |
| <input type="checkbox"/> MINE FOREMAN OR ENGINEER | <input type="checkbox"/> CIVIL SERVICE |
| <input type="checkbox"/> Metallurgist or Prospector | <input type="checkbox"/> Railway Mail Clerk |
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| <input type="checkbox"/> ARCHITECT | <input type="checkbox"/> AGRICULTURE <input type="checkbox"/> Spanish |
| <input type="checkbox"/> Architectural Draftsman | <input type="checkbox"/> Navigator <input type="checkbox"/> German |
| <input type="checkbox"/> PLUMBING AND HEATING | <input type="checkbox"/> Poultry Raising <input type="checkbox"/> French |
| <input type="checkbox"/> Sheet Metal Worker | <input type="checkbox"/> Automobiles <input type="checkbox"/> Italian |

Name _____

Present _____

Occupation _____

Street _____

and No. _____

City _____ State _____

If name of Course you want is not in this list, write it below.

A correspondence school ad in December 1916 QST

CALENDAR

February 3, 2018 - Hamfest - Cornerstone Fellowship Radio Club, Hoosick Falls Central School at 21187 Route 22 in Hoosick Falls.

February 14, 2018 - EGARA Monthly Membership Meeting, Masonic Temple, 7 pm.

May 12, 2018 - EGARA Hamfest 2018 - 8 am to 1 pm at the East Greenbush Fire Department.

Pro Tip: When AA = C

AA batteries seem to be everywhere these days. Many of our electronic devices rely on them for power, including TV remotes, clocks, MP3 players and games. So, chances are you have some laying around the house or on your workbench.

But what if you need a C battery? These tend to be used a lot less and you may not keep them on hand -- but sometimes you find a device that needs one. If you don't have one readily available, here's a quick solution to get you by. Simply transform an AA into a C.

Since C batteries are the same height as a AA, the trick is to "bulk up" a AA by wrapping it with strips of newspaper until it's the same size around as a C battery.



Just remember that C cells generally last longer than AA cells made with the same type of material. However, an alkaline AA battery will give about the same service as a carbon-zinc C cell, with each producing roughly 2100 milliamp hours of output.



For Sale

- **Kenwood TS-480 Hf Rig** – 200 w PEP output, w/ manual, cable, and microphone – like new - \$700 obo; Contact: Steve Van Sickle, WB2HPR, by phone at 326-0902.
- **Heathkit DX 35** AM & CW Transmitter with VFO \$ 125. 00. Covers 80 through 10 meters. Power input 65 watts CW, 50 watts. Self-contained power supply. Contact: Tom Scorsone by email at KC2FCP@nycap.rr.com

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The East Greenbush Amateur Radio Association

Organized in 1998, by Bert Bruins, N2FPJ, (Silent Key) 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 the 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.