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New Life for an Old Rig

EGARA has acquired the 1,000 watt AM broadcast transmitter that was once the voice of Albany's WABY radio. The CCA Electronics rig was donated to the club by public broadcaster WAMC, which replaced it some time ago with a new transmitter. The plan is to convert it to the 80 meter band for Amateur use.

"We heard that the transmitter was available and immediately reached out to WAMC's chief engineer, Jessica O'Rourke, to ask if the club could have it," said EGARA President Bryan Jackson, W2RBJ. "The station agreed and was very supportive of our plan to re-purpose it for Amateur use. Jessica has been great to work with and has made things go smoothly."

The transmitter was last used briefly in 2017 while WAMC-AM moved its equipment to a new building adjacent to the station's tower on Braintree Street in Albany. Its owner, Northeast Public Radio, bought the station in 2003 and changed the call sign. It was decided to demolish the original WABY studio and transmitter building which dates to the early 1930s.

The process of moving the transmitter began with an inspection tour to explore the feasibility of the project. Steve VanSickle, WB2HPR, led the team and used his extensive experience with transmitters to make the assessment. After a careful inspection of its components, he determined that the rig could be converted to the ham bands. The transmitter will reside at Steve's home while the conversion is completed.

The transmitter was installed in 1974 when CCA Electronics owned the station. It was the station's main transmitter for at least three decades and later served as a backup. More about the station's history of the station is on page 2.



The former WABY
CCA 1000-D transmitter

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Still Time to Upgrade

Club members and other area hams still have time to register for EGARA's next FCC exam session which will be held November 5th.

The test session will offer all license classes, starting promptly at 10 am at the East Greenbush Masonic Lodge hall located at 710 Columbia Turnpike.

While walk-ins will be admitted, it is suggested that applicants pre-register by sending an email to: W2RBJ@outlook.com.

All applicants must have an FCC issued RFN number and valid email address. The exam fee is \$15. Complete information can be found at:

<https://www.egara.club/ve-exams-sessions>



WABY: An Interesting Past... and Present

The WABY story is a long and interesting one. It was first licensed on August 1, 1930 to W. Neal Parker and Herbert M. Metcalfe as WBGF in Glens Falls, New York, and initially broadcast on 1370 kHz. Two years later, its license was assigned to O. T. Griffin and G. F. Bissel, representatives for the Elmira Star-Gazette, and the call letters became WESG. The newspaper proposed to move the station to Elmira and change its frequency to 1420 kHz. However, this plan was abandoned a few months later, when the newspaper decided to instead lease Cornell University's station in Ithaca, WEAI. The WESG call letters were transferred to the Ithaca operation, and the Glens Falls station changing its call sign to WGLC. The next year WGLC moved to Hudson Falls, New York.

The WABY call sign was first assigned to the station in late 1934 when advertising executive Al Kelert moved the station to Albany. WABY moved to 1400 kHz in 1941 due to the North American Regional Broadcasting Agreement (NARBA) which reallocated the frequencies of many stations across the nation. The station provided a mix of popular music and network programming throughout most of its first 30 years of service and was affiliated at one time with the NBC "Blue" network. It was also co-owned with WOKO for many years and the two stations operated from their deluxe "Radio Centre" on Elk Street in Albany. During their heydays from the 1930s to the 1960s, both stations enjoyed large audiences.

In 1961, the station changed to a high energy top-40 format, but was short-lived as the competition in that format was intense, leaving the format in late 1963. From 1964 to 1971, WABY ran a Middle-of-the-Road format, followed by oldies in 1971, and a return to top-40 in 1973. By 1976, it had changed to all-news, using NBC's "News and Information Service." It then switched to country in 1979 and in 1981, WABY changed to a Christian format until 1982 when it was flipped to adult standards. WABY then spent many years as one of the highest-rated standards stations in the United States, and added an FM simulcast on 94.5 MHz in 1995.

In February 1999, the station was sold to Tele-Media, Inc., which switched the AM side to an all-news format by day with simulcasting of the FM (which itself would flip to adult contemporary that summer) on nights and weekends. This arrangement remained through Tele-Media's ownership of the station. In August 2001, Tele-Media sold WABY to Galaxy Communications.

On April 22, 2002, after 68 years, the WABY calls left 1400 kHz as Galaxy replaced it with WHTR and launched a hot talk simulcast with 93.7 FM. The talk format was short-lived, and in August, 1400 and 93.7 switched to modern rock as WKRD (the 1400 signal retained the WHTR calls).

As a tribute, a Mechanicville, New York station (now WSSV) adopted the WABY call letters from 2002 to 2014. Its owners later moved the call sign to its co-owned station in Watervliet, which ironically broadcasts on 900 AM from the old WABY tower.

Galaxy sold 1400 to Northeast Public Radio (WAMC) in February 2003, giving it the call WAMC-AM and simulcasting it with WAMC-FM, 90.3 Mhz. For a while, the WABY call sign was still displayed on the WAMC tower, which remains on Braintree Street -- the station's location since it originally moved to Albany back in 1934.



**The WABY-WOKO
"Radio Centre" on Elk
Street in Albany**



**WABY's main studio on Braintree Street
in 1974 after the installation of its CCA
transmitter which is in the background**



**The original WABY studio
and transmitter building
which are set for demolition.**

A Fine Fall Day Sailing on the Mighty Hudson

On Saturday, October 22nd, the EGARA crew took to the seas... well, river actually... to enjoy a three hour cruise aboard the 60 foot "Spirit of Albany". Luckily, they didn't get stranded on an uncharted island somewhere...

Captain Dave Williams, N2VLQ, safely navigated the trip from the Port of Albany to Coeymans and back as his passengers enjoyed a pallet of beautiful Fall colors. Those aboard even enjoyed a free lunch, courtesy of the club!

Watch a video of the cruise on YouTube at:
<https://youtu.be/XTKbvzKmurY>



EGARA's motley crew poses at the rail as they prepare to "moon" the unsuspecting passengers aboard the approaching Dutch Apple

Captain Dave at the helm



Russ tries to convince his family that this really IS the magnificent vacation cruise he's always promised to take them on.



Justin grabs a selfie with Yasmin



Bryan takes the helm as the First Mate suddenly realizes why the boat's insurance has just been canceled

Russ seen trying to persuade Steve to join the rest of the crew in voting for Ridge to "walk the plank"



Tips To Keep You On The Air This Winter

By Steve VanSickle, WB2HPR

With Fall now here we begin thinking about the holidays ahead, we need to also consider the condition of our radio stations --- and in particular the condition of our external antenna systems. A ham radio station using all the latest state-of-the-art equipment is worthless without a functioning antenna system. As the cold winter brings its wind, snow and ice, it is especially imperative that wire antennas need to be properly supported and that all connections are secured and electrically insulated.

Proper wire antenna installation is usually achieved by rope supports between masts, trees, buildings, towers, or a combination of these. The type and diameter of supporting rope is crucial to ensuring that our antennas stay secured. Dacron material has proven to be an excellent material for antenna rope. It's available in many diameters, and easily sourced from many ham radio dealers. It has very high tensile strength, high dielectric properties, and is highly resistant to deterioration from the Sun's ultraviolet rays and is also rot resistant.



Ropes should be inspected periodically for any sign of deterioration, including chaffing and fraying. Now is the time to check and replace these supporting ropes before Winter weather sets in.

While you're at it, why not check the condition of end insulators --- the plastic variety (particularly those constructed of white plastic) are particularly susceptible to deterioration from the sun's u/v radiation. Glass and ceramic materials have the greatest longevity, compared with their plastic cousins. Having solid mechanical construction will work wonders toward ensuring that wire antennas remain in good condition while enduring the ravages of the snow, ice, and wind during the harsh weather that's likely during the coming months. It's no fun to be tramping through the ice and snow to make antenna repairs!



Finally, check the condition of electrical connections where the feedline attaches to the antenna wire. These connections need to be free of corrosion and properly insulated in order to prevent the incursion of water, ice, and snow. The coaxial cable should likewise be inspected for cracks, cuts, and abrasions to the outer jacket. A small pinhole leak will allow water to work its way in to the inside of the cable, and cause irreversible damage. Remember, water ALWAYS wins!

Insulation of open wire feeders, such as ladder line or window line, should likewise be checked for similar insulation failures. They will only get worse over time, and a little bit of electrical tape can help to keep them in working order.

These are only a few antenna checks that you can do. So, why not take the time right now to be sure that your station has a reliable antenna system and remains ready to operate throughout the coming cold weather season. Some of these same principles also apply to tower guy lines, masts, fixed and rotatable antennas.

By taking the time to make visual inspections, you can prevent the inconvenience of having antenna troubles this winter -- and being knocked off the air.

Happy holidays, and good DX!

On the Beam

News & Notes

Have You Joined EGARA's Groups.io?



If you're looking for Amateur Radio tips and information, you should join the club's Groups.io site! Once you're a member, you'll receive periodic email notices providing links to a variety of interesting and helpful information about ham radio.

Examples of recent topics include understanding HF propagation, dipole tuning, antennas for small spaces, website for learning Morse Code, soldering tips, HF nets -- and even helpful knots to use when putting antennas up.

To join, go to <https://groups.io/g/egaraclub> and look for the "Apply for Membership" box. Enter your email address and you will receive a return message from the site administrator once your application is received and processed.

Winlink Proficiency Drill Set for November 12th

The EmComm Training Organization (ETO) has set November 12th for its Semi-annual Drill. For over 3 years, the ETO has been training amateur radio operators to be skilled with the use of digital Winlink communications as part of the response to the aftermath of Hurricane Maria. The storm devastated Puerto Rico in 2017, and resulted in the call for competent Winlink operators to help restore communications. To develop proficiency, weekly "Winlink Thursday" exercises have been practiced by more than 800 international operators.

The upcoming semi-annual drill is open to all participants who have or would like to build skills for digital radio messaging -- such as sending attached forms or photos -- essential for emergency communications for any served agency, whether local government, FEMA, or any NGO, including the Amateur Radio Emergency Service (ARES) groups and the Radio Operators of Canada (RAC) Auxiliary Communications Service. The ETO believes this common pathway approach to communications fosters the interoperability that is essential for responding to a national or regional disaster.

The organization recognizes the varied levels of skill with Winlink. To address this, simple and introductory tasks have been designed with a progression to more complicated messaging, ranging from use of Telnet, to VHF gateway messaging and finally to national "peer-to-peer" digital communication on high frequency (HF) bands without the use of the internet infrastructure.

International as well as domestic participants are welcomed to join by visiting the ETO website at:
<https://emcomm-training.org/>

More than 2,000 participants are expected. The scenario is an area-wide natural disaster affecting most communities in North America. The next few weeks of Winlink Thursday exercises will be opportune for those who wish to participate in the larger semi-annual drill. It is anticipated that all participants will be mapped if the tasks are completed appropriately, and an "honor roll" of competent participants be published on the website for those who wish to deploy and become operational.



EGARA October Meeting Minutes

The monthly club meeting was held on October 12th and was called to order at 7:00. 17 members were present;

- The October meeting of the EGARA was called to order at 7:00.PM. 22 people attended at the Masonic Temple. A mini hamfest was held during the meeting.
- President Bryan Jackson, W2RBJ welcomed everyone, followed by a round-robin introduction. A raffle was held, with numerous prizes won.
- Bryan Jackson discussed the possibility of rescuing a surplus AM transmitter. A field trip was planned to study that possibility. (see story page 1)
- A VE session is planned for Saturday, November 5th. Details are on the EGARA website – the tests will be conducted at the Masonic Temple.
- Reports were made by the VP Walter Snyder, N2WJR and Treasurer Don Mayotte, KB2CDX.
- The club is actively searching for several high capacity batteries for field day. Possibilities include retired but still serviceable units pulled from rail service or cell sites.
- There was some discussion of relocating 220 repeater equipment. Details will be announced.
- Pumpkin Patrol will be held again this year. Volunteers may contact Karen Smith, KS2O of the Troy club. Steve Marsh, KC2USX also is another information resource.
- The EGARA cruise on the Hudson returns this year, sailing on October 22nd from the Port of Albany. Capt. Dave Williams, N2VLQ will lead this effort.
- Many interesting items were offered for sale and there were many bargains to be had. Refreshments of pastry, donuts, coffee, and cider were provided for everyone.
- The meeting and mini hamfest was concluded at approximately 8 PM.

Submitted by Steve VanSickle, WB2HPR - Acting Secretary on behalf of Dave Smith, WA2WAP.

Ham Humor



The History of Ham Radio: DX Records & Shortwave Reflections

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)

Summer 1924 brought the first explorers to the four new, shorter wavelength bands that were opened up to amateur use in July. Amateurs anticipated interesting times ahead based on their earlier experimental work that produced the first transatlantic QSOs. Those had been achieved at 100 meters under special licenses for operating below 150 meters, a region the government designated as "reserved" the previous year without explanation.

No one knew how the shorter waves would behave, but hams began to form a vague intuition based on understanding the high-altitude atmospheric layers. A long series of experiments during 1924 by John Reinartz at his experimental station, 1XAM, resulted in five thousand reception reports from five European and eighteen North American receiving stations, and led to some new insights.

Reinartz wrote that when very short waves were used—say, 20 meters or lower—signals became weaker at night rather than stronger, opposite the case for the familiar wavelengths above 100 meters. Also, signals were often stronger at long distances than short ones. Explaining these behaviors he noted the existence of the Heaviside layer, a conductive shell of upper atmosphere that reflects radio signals. It was believed that at lower altitudes air is a conductor in the daytime but becomes an insulator at night, due to the sun ionizing the air in the daylight hours. Therefore, the reflecting layer was at a lower altitude in the daytime than at night. His tests confirmed much of this but also suggested some changes to the theory.

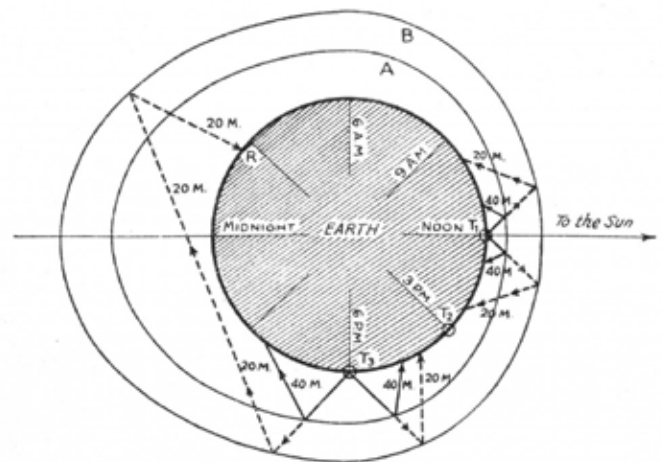
Reinartz noticed there were two sides to the propagation-limiting phenomena. At noon there was a minimum wavelength in the vicinity of 50 meters below which no signals propagated regardless of the power level, falling off in strength within a one-meter change in wavelength. At the opposite extreme, there was a maximum wavelength above which signals would also fall off. Thus there seemed to be a band or window of wavelengths that could get through at mid-day, and the whole window would move upward (in wavelength) as the day wore on.

He also observed that in daylight there was a region near a transmitter where its signals could be easily heard, followed by a broad range of distances in which there was no signal, followed by a much greater distance where signals could again be heard. The second, longer receive distance was, of course, the more interesting one.

This distance tended to be shorter toward the east than toward the west before noon, about the same in both directions at noon, and reverse after noon, following the sun. Also, the wavelength of the window would move lower in the morning, then increase in the afternoon.

His analysis of reception reports also suggested that different frequencies were reflected from layers of different heights at any given time of day. Reinartz speculated that if higher frequencies penetrated further into the reflection layer than lower frequencies, that would account for the frequency dependence on distance. In all of this analysis he was considering only a 45° radiation angle.

Another useful way to view these propagation zones was as concentric rings surrounding a transmitting station. The short, dead, and long zones formed circles around the station at noon, became elongated towards the west in the morning and toward the east in afternoon. Following this logic, the circles were also elongated away from the equator at any particular time of day. Reinartz concluded that if this theory held it should be possible to pick an optimal wavelength on which to best communicate with any given distance on the earth depending on the time of day—an essentially correct view, lacking complications not yet understood.



Reinartz view of reflections and layers

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But he failed to reason that if ever shorter wavelengths penetrated further into the reflecting layer, there might be a wavelength above which they never reflect but shoot right through. He asserted with confidence that 1925 would “see direct international contact on waves below 1 meter.” He also conceded that amateurs were just beginning to probe propagation phenomena and only through continued experiments at short wavelengths could they gain a more thorough understanding.

In “Editor’s Notes” following Reinartz’s article, technical editor R. S. Kruse added ideas about radiation angle and its effects on propagation distance when radio waves travel through a diffuse refracting layer, as opposed to a reflecting one, thus rounding out the theory.

H. A. Joyce of the University of Detroit later proposed to build further upon previous theory by Reinartz and Kruse. He may have been the first to link shortwave reflection to similar refraction and reflection of light from interfaces, such as can be seen in a glass of water, leading to a discussion of the radiation angle of vertical antennas of various lengths. Joyce used simple geometry to approximate the height of the atmospheric reflecting layer by using the radiation angle and the distance of the received station.



Frank Bell, z4AA

As fall turned to winter in late 1924 and DX work accelerated, new records were set at a rapid pace. Word spread and amateurs worldwide were entering the shortwave realm in increasing numbers, not just in the US. “The laurels in this little old game of amateur radio no longer belong to America,” reported Warner.

On 19 October a sheep farmer named Frank D. Bell in Palmerstown South, New Zealand, made contact as z4AA with C. W. Goyder, g2SZ, at Mill Hill School, London for a 90-minute QSO on 92 meters. Six days later, Ralph Slade of Dunedin, New Zealand was in contact with British 2NM, Gerald Marcuse (IARU VP)—an 11,900-mile new distance record.

Several US–NZ QSOs were also made, and would normally have been a big deal, had they not been overshadowed by the UK–NZ contacts. “It is staggering!” exclaimed Warner. “Unless somebody can arrange to get into communication with a ship diametrically opposite his station on the other side of the earth, carefully arranging to achieve the world’s maximum of 12,500 miles, it is very doubtful if this record will ever be exceeded,” he wrote, failing to anticipate long-path propagation.

However, shortly afterward, R. Y. Orbell, z3AA, took a station to sea, sailing from New Zealand to England on an easterly route that took him past Cape Horn into the Atlantic, while in constant contact with home. “Why, if the New Zealanders can follow z3AA across the Atlantic to England they will have succeeded in working around the world in both directions, for the g2SZ–z4AA communication apparently occurred over a line east from Greenwich!” wrote Warner, although how he knew this he did not say. Presumably it was because that was the nighttime path, as the prevailing theory would predict. He added that “anybody willing to outfit a floating shortwave ham station under the Stars and Stripes and send it to the Antipodes of good U.S. stations, please communicate with ARRL Headquarters. There’s a mathematical possibility of exceeding this British–New Zealand DX record by 600 miles and a chance in a million of doing it.”

As 1924 concluded, reports arrived that several new countries had been added to the list of those known to be active on the new amateur bands: Station c1AR in Halifax contacted b4YZ in Belgium for the first contact between North America and that country. c1AR also made the first North American contact with Sweden, working SMZS in Stockholm. Bermuda had an amateur licensing process in the works but was not yet on the air. WJS in Brazil made a first US contact with the Stanford University station, 6OI, in December. There was a first report from British South Africa of receiving US signals there. In India, an amateur received signals from US station 1AAC in QSO with z4AA in New Zealand. 1KC in Northampton, Massachusetts worked GHH1 in Mosul, Mesopotamia for the first contact with Asia since the still-unconfirmed 7HG contact with JUPU a year earlier. He also worked fAIN in Casablanca on Christmas Eve for the first QSO with Morocco. American 2BY worked EAR2 for the first contact with Spain. Denmark joined in, when d7EC contacted u1MY in East Hartford in November, passing several messages. And on it went.

On 8 December, the Haverford College, Pennsylvania, chess team played a game via amateur radio with a team from Oxford that had travelled seventy miles to the home of Marcuse at g2NM. u3OT hosted the Haverford side.

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It was not the first chess game played on the air but was certainly the first international one. (Haverford had previously played chess with a group at the City College of New York.) The two stations tested conditions at various wavelengths finally arriving at sufficient reliability on 85 meters. The game did not conclude but went for 5-1/2 hours and eleven moves for each side at which point the two sides agreed to continue in January. Warner wondered whether “Godley ever thought that just a few years after his memorable visit to England we would be playing 5-1/2-hour chess matches across the puddle.”

International QSOs were now occurring nightly between all continents, all in the wavelength range of 75 to 100 meters, still only a small step beyond the previous year’s work. UK and NZ stations now in regular contact at dawn and dusk, respectively, reported that it was easier than contacting the US and attributed that to “antipodal effects” rather than the as-yet unknown gray line propagation. It also implied that the signals were going via the long path, throwing most commonly held notions of DX limits out the window. This alone should have ended all the talk about antipodes.

“With thus auspicious a curtain-rise, who can say what this season has in store for us? Apparently there is no end to the possibilities. Just think, we haven’t plumbed the shorter-wave bands yet!” wrote Warner.

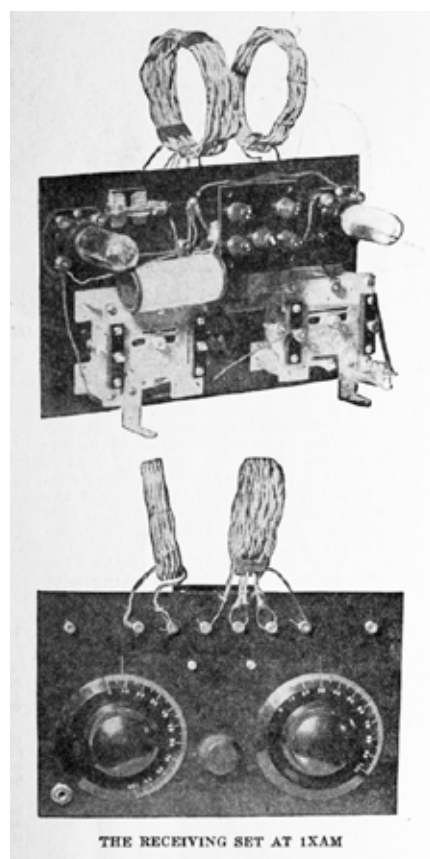
What he referred to as shorter wavelengths were still largely a mystery. Recent tests demonstrated that 220 miles could be covered on 40 meters in daylight—something not possible on any other wavelength, as far as was known, making the band very interesting to experimenters. Referring to 20 and 5 meters as extremely short wavelengths, at this point they were touted as being free from interference and nothing more.

To encourage amateurs to explore the new allocations, the ARRL established awards for experimental operation, one for each new band. The rules emphasized low power operation and limited transmitters to using a single tube rated at five watts. Because directly measuring power was not yet easy to do, the rule was based solely on tube specifications. If you bent the rules you risked burning out an expensive piece of equipment.

The “contest” period (it was called that despite being billed as an experiment) would run nearly four months, from 1 February to 25 May 1925. It was not fully QSO-based as contests are today. Contacts mattered, of course, and counted in the score, but the event was more of a “test” like the transatlantics, where one-way communications were the main objective. Any given transmission would be counted for the contest only when a receiving station confirmed it by letter, telegram or postcard and agreed with the submitted transmission log. An entry consisted of complete logs and confirmations of transmissions, diagrams and photographs of the station, and a notarized sworn affidavit attesting to adherence to the rules! Excessively long CQing or other such calls would disqualify an entrant as would violating any of the rules.

A 40 meter award, the Cooper Cup, was sponsored by J. C. Cooper of Atlanta, and 20 and 5 meter ARRL Cups were sponsored by the League itself. The announcement offered very little description of what would constitute a winning entry, but experimentation was key. Kruse emphasized that, although QST had been publishing information about how to operate below 100 meters, the League had no monopoly on ideas. “The way to get somewhere in this short-wave business is not to trail after someone else but to make a trail of your own,” he wrote.

The 20 meter test results were encouraging despite a general lack of adherence to the schedules. While no nighttime signals got much further than about 100 miles, daylight QSOs were plentiful; among the best were a QSO between Hoffman, 9EK in Madison, Wisconsin, and Reinartz at 1XAM, who worked each other until signals dropped out around 4:40 p.m. Eastern Time. 6AJF had copied the entire QSO from California, too. Since it was about 2-1/2 years past the solar minimum, they may have randomly hit a particularly quiet string of nights for their test. A few days later the pair made contact again, this time decreasing power to a very low level (8.5 and 16 watts).



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Please Support Our EGARA Hamfest Sponsors!

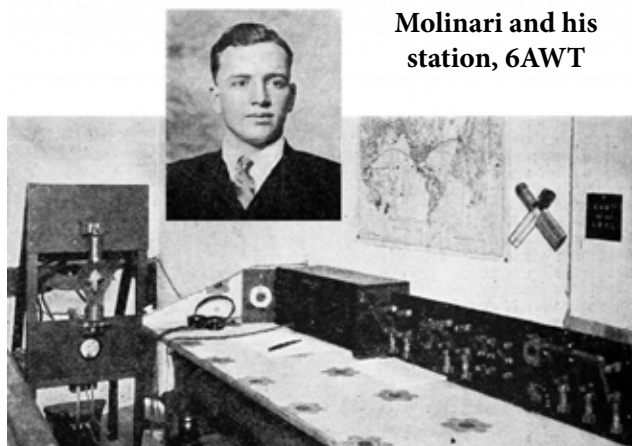


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On the heels of his QSO with 9EK, Reinartz worked 6TS on 20 for fourteen consecutive days. (They worked each other on 40 meters at night on those same days—also something new.) It was all done with standard circuits, no “trickery;” it was just the latest demonstration of the usefulness of the shortwaves. Reinartz was also the first to cross the Atlantic on 20 in a QSO with g5LF.

But as amazed as they were with 20 meters, they did not yet grasp the band’s full potential. While the tests had provided “brilliant proof that 20 meters is one of the most useful waves we have,” they prematurely proclaimed the “utter worthlessness” of the band at night.

William H. Shick, 2MU, had been listening on 40 meters from his Brooklyn home for some time, logging mostly harmonics. On 2 January 1925, he heard 6TS in Santa Monica and thought it was yet another harmonic until 6TS signed his call and added “40 meters” to his identification. (Such was the pervasiveness of harmonic generation.) Using his one-tube Hartley oscillator feeding a 50-foot-long T-antenna strung between the roofs of apartment buildings, 2MU returned the call. The two city-dwellers established contact around 7:00 p.m., the first cross-country QSO on 40 meters.



Molinari and his station, 6AWT

And in February, the first confirmed QSO between the US and Japan took place when 6AWT worked JA2 at the Imperial Naval Academy in Nagasaki. Bartholomew Molinari, owner of 6AWT, was a baker who operated from his home on Union Street in San Francisco. By the end of the year, his station had been heard in multiple countries on all continents and he had worked all forty-eight states. Not due to any special equipment or antennas, his success rather stemmed directly from pushing to ever-shorter wavelengths, brought about in part by necessity. He had originally moved down to concentrate his operation on 80 meters because with fifty broadcast listeners within a six-block radius of his home, he could not use 200 meters lest he be deluged by interference complaints. He later received the 1924 Hoover Cup, following Don Wallace, 9ZT, the year before.

Taking its cue from the various 1924 shortwave tests, the League organized a mid-summer 1925 test to continue the effort with everyone participating worldwide. It was again to be a one-way test, meaning some stations would transmit and others would receive, but no QSOs would be made. This time it would run for three, 48-hour periods, each one devoted to single-band operation on 40, 20, and 5 meters, during 18–19 July, 25–26 July, and 1–2 August, respectively. Transmit schedules would run according to local standard time for each station. A thirty-minute restricted transmit period, a thirty-minute free-for-all period, and a three-hour listening period would rotate in sequence, with six such cycles during each of the two days. As in earlier tests, the restricted periods were reserved for high power stations selected by the League. The organizers urged station owners to provide a continuous watch for the entire period using two or three operators in shifts, so as to get as much experience with propagation as possible around the clock. For similar reasons they advised hams to listen for the same stations during each four-hour time period, noting how each signal changed throughout the day. When transmitting, stations would send a self-assigned code word followed by “test” and the station call sign, all repeated during a thirty-minute transmitting period.

Thousands of stations participated, producing hundreds of logs mailed to ARRL HQ containing data collected on 40 and 20 meters but hardly anything on 5 meters. But because of a lack of standards and equipment for measuring received signal strength, and the fact that many reports were incomplete, the usefulness of the data for empirical analysis was quite limited. In fact, no coherent set of conclusions could be made. Nevertheless, the participation level alone demonstrated that “radio is no longer a strictly winter sport,” remarked ARRL traffic manager Fred Schnell.

After the successful 20-meter transatlantic tests, E. J. Simmonds operating 2OD at Gerrards Cross, Bucks, England, cabled Maclurcan, the well known Australian experimenter at 2CM, asking him to construct equipment for the band. In April 1925 they began testing on 20 meters (coincidentally on the same day the first IARU Congress opened), resulting initially in several receptions of 2CM in England.

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Encouraged, they continued testing for two weeks and finally worked each other on 3 May from 0552 until 0715 GMT when Simmonds had to get ready for work. The next day, they repeated the feat and passed three messages, including one to the English prime minister from his peer in Australia, one to Eccles of RSGB from Maclurcan, and one from Eccles to the Wireless Institute of Australia. Simmonds and Maclurcan were then in regular contact.

Recognizing the reality of what he called the "international era" in amateur radio, Warner's editorial for July 1925 rhetorically asked, "Have we not almost reached the ultimate of amateur accomplishment?" specifically referring to this first daylight amateur QSO between England and Australia—at the antipodes!

Maybe "almost" was his operative word, or maybe each generation redefines "ultimate." Either way the answer would turn out to be "no."

FCC Proposes Record \$34,000 Fine for Alleged Interference and Unau-thorized Transmissions During Idaho Wildfire

The Federal Communications Commission (FCC) has proposed a \$34,000 fine against Jason Frawley of Lewiston, Idaho, for allegedly interfering with radio operations of the U.S. Forest Service during firefighting activities for the Johnson Creek Fire near Elk River in July 2021.

Frawley holds an Extra-class license, WA7CQ, and is the owner/operator of Leader Communications LLC, licensee of eight microwave licenses and one business license. The FCC alleges that "On July 17, 2021, using his amateur hand-held radio, Frawley transmitted five (5) times, and on July 18, 2021, Frawley transmitted three (3) times on frequencies allocated and authorized for government use, apparently causing harmful interference with his apparently unlawful transmissions."

The frequencies with which Frawley is alleged to have interfered were being used to coordinate firefighting crews from the U.S. Forest Service and Idaho Department of Land to fight the 1,000-acre Johnson Creek Fire, including the communications between fire suppressant aircraft and ground crews.

On July 18, 2021, the Johnson Creek fire operations section chief drove to the Elk River airstrip and hanger where Frawley, who had disclosed his location, was found holding a radio. Frawley admitted to transmitting on government frequencies and identifying himself as "comm tech." He argued that he was not trying to cause interference but instead was transmitting to provide information to the fire fighters."[A]t no time was I trying to disturb any other communications or air traffic. I was honestly just giving them information" Frawley wrote in his response to a Letter of Inquiry from FCC.

However, the FCC concluded that "Frawley's admitted unauthorized transmissions on frequencies for which he did not have a license had the potential to cause substantial harm to life and property. "The FCC held that Frawley, by his own admission, apparently willfully and repeatedly violated the Commission's rules when he made eight separate radio transmissions on a frequency for which he did not have a license. The FCC stated that unauthorized transmissions on frequencies licensed to public safety entities using those frequencies to respond to emergencies also constitutes a violation of Section 333 of the Communications Act of 1934

The FCC states that the fine is the largest of its kind proposed. "The Communications Act prohibits such interference with authorized radio communications and the Commission takes very seriously any interference with public safety communications," said the FCC.

FCC Chairwoman Jessica Rosenworcel added, "You can't interfere with public safety communications. Full stop. So today we propose the largest fine of its type for this interference that put fire suppression and public safety itself at risk



Quick Fixes...

Wall warts are everywhere these days. They're used to charge cell phones, run Bluetooth devices and even small laptops.

But, they can also take up a lot of valuable space and they're often are big enough to block other outlets when plugged into power strips.

What to do?

Consider purchasing some super short extension cords! They don't block wall outlets and let you get full use of power strips. They're available for just a few bucks online and will likely make your life easier... especially if you need to plug in several of them at the same location.

The Problem



The Solution



Trying to get a nut and washer on a bolt can sometimes be a pain... especially if you only have two hands. You can try holding them in place with vice grips, but then you risk the chance of damaging the threads.

What to do?

Use a pair of tweezers and a rubber band to pull the tweezers tight against the bolt you're trying to install. It will grip the bolt, but without enough pressure to damage the threads.

The Problem



The Solution



CALENDAR

November 5, 2022 - 10 am - FCC License Exam Session, Masonic Lodge. Tests for all license classes. Reserve by email to: W2RBJ@outlook.com.

November 9, 2022 - 7 pm - Regular monthly EGARA membership meeting.

December 14, 2021 - 7 pm - Annual Christmas Holiday Party, location TBD

Pro Tip: Spreading the Word



Now that back issues of QST are available on the ARRL website you might be thinking of throwing away your past issues. But you can actually use them to spread the word about Amateur Radio and hopefully get some new hams into the hobby.

One way is to bring back issues to your doctor's office on your next visit. Most have reading material in their waiting rooms and someone might find information about ham radio interesting. It might even motivate someone who's always wanted to get involved as an Amateur but never acted on it.

Past copies can also be made available at VE test sessions and given to new hams who've just earned their license. Not only are the articles of potential interest, but also the ads for equipment, as most new hams will likely be looking to acquire gear to get one the air.

Schools may also be a possibility. Middle and high schools have science classes and many now offer courses in technology and computers. Amateur radio encompasses all of those skills, so a quick inquiry to a school's science department might find a good home for those issues of QST that could use a good home.



For Sale...

- MFJ-1982 mp end fed di pole 80-10 1/2 wave 300 watts \$50.00.
- "Go Box" -- Make offer.



Contact Walt at: n2wjr07@gmail.com

- TYT MD-2017 Dual Band DMR Transceiver, Like New, Radio, Battery, Programing Cable, Software and Charger. Also includes a second brand new battery. Very little use. \$130.00
 - BTECH UV-5X3 Tri-Band FM Transceiver, Brand New in the box. Radio, Charger, 2 Antennas, Belt Clip and Earpiece. \$45.00
 - YAESU FT-2900 Programing Cable & Software, Brand New. \$10.00
- Contact John, WB2HZZ, at: radiowizzz@aol.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

Got stuff to sell, swap, or looking to buy?

List it here for FREE!

Email W2RBJ@outlook.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.