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Havin' Fun on AM

By Steve VanSickle, WB2HPR

Single Side Band may be the most popular voice mode for most hams, but there's still a lot of life using straight AM and that was once again proven during the 2023 AM Rally! This annual event -- which ran from Saturday, February 4th through Monday, February 6th -- is held to celebrate the first voice communication systems using Amplitude Modulation, better known as AM. During this event, hams all over the world make contacts with other AMer's -- from 160 through 2 meters.

As most hams know, AM is the basis for Single Sideband communication -- it transmits voice by removing the carrier and one side band -- hence Single Side Band, or SSB. Because of its efficient use of spectrum and power, SSB has largely replaced AM as the "go-to" voice communication mode on HF -- and it is the most widely used mode on HF today.

There are, however, a significant number of hams who continue to use AM on a very regular basis. Equipment used for AM ranges from home-brew to the latest Class E solid state gear. It's featured on most current production all-mode transceivers as well as "boat anchor" classics from the 1940's on. Also, many vintage AM commercial broadcast transmitters have been converted to ham frequencies, re-purposing them to additional years of useful service. Likewise, military surplus equipment often finds its way into Amateur use. EGARA is currently renovating the old WABY transmitter it acquired last fall to 80 meters with hopes it will be operational for next year's AM Rally. There's an update on the project on page 2.



The Author's AM Station

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The official results for 2023 have not been tallied yet, but the bands were very active with numerous AM stations heard from the U.S., Canada, and overseas. This author was pleased to have contacted over 20 other AM stations on the East coast -- and as far West as Michigan. The rig used was a 1950's Johnson Viking II. During last year's Rally, there were some 200 participants, and this year's band activity would hint at even greater participation.

If you didn't get to operate during this year's AM Rally, don't despair -- you can test your equipment and skill by operating on several of the popular AM frequencies. AM operators often QSO on 3875, 3885, or in the vicinity of 7290 on the 80/40 meter bands. There are also several AM nets, with some of the more popular nets conducted on Saturdays and Sundays -- often in the morning. You can find more information on these and other operating events by searching the Internet using the search terms "AM Rally" and "AM Fone". You don't have to own an old dedicated AM "boat anchor" rig to operate. With a modern multi-mode transceiver, you too can join in the fun of operating AM.

I hope to hear your AM signals on the bands!

Club's AM Transmitter Project Makes Progress

By Steve VanSickle, WB2HPR

As you may recall, an intrepid group of EGARA volunteers successfully re-located the former WABY AM transmitter -- a CCA 1000-D -- from its Albany location to the home of club Board member Steve Van Sickle, WB2HPR. This transmitter was designed and built by CCA Electronics Corporation for continuous AM broadcast service on 1400 khz with 1,000 watts output. The transmitter served the Capital District region for over 40 years following its original installation in 1974. The club's goal was to save this 1,200 pound classic broadcast transmitter from the recycling heap and convert it for amateur use.

Since its acquisition last November, work has been underway to inventory the various parts, locate proper wiring schematics and documentation, and to evaluate its suitability of conversion to the amateur AM frequencies. As a part of this process, a thorough cleaning and reassembly of components began. Also, testing of components and sub-assemblies was begun and continues. Some of these components have been replaced because the original parts were no longer within the manufacturer's tolerance. Given the age of the transmitter, this is normal due to years of usage and changes brought about by high internal temperatures generated by the tube technology employed in its design.

In addition, there were corrections to repairs and modifications made during the transmitter's service at WABY. Work on this project is being performed a little at a time and methodically, beginning with its thorough cleaning. Progress has been made from section to section, checking for damaged wiring, corrosion, and loose or missing hardware. To aid in moving the transmitter's massive cabinet, heavy-duty casters were added to ease the restoration process. Thanks to Tom Scorsone, KC2FCP, for his assistance getting the casters bolted on.

Currently, the final amplifier RF cage is now clean, and an adapter has been fabricated to allow use of UHF style plugs for connection to the antenna system. The large and heavy high-voltage transformer, chokes and modulation transformer have been cleaned, painted and re-installed as well. The unit's blower fan was removed for cleaning and overhaul, motor bearings re-packed and re-lubricated, then checked for proper operation and reinstalled. Adapter plates were fabricated, allowing existing replacement filter capacitors to be secured with their original mounting hardware. In addition, the audio feedback network ladders were removed, cleaned, and all of the resistors replaced -- with the ladders now re-installed.



The CCA 1000-D before its removal from the old WABY studio/transmitter site in Colonie



Power Supply Section Before -- and After Restoration

Numerous power resistors are now being checked and measured, before work on the exciter and low-level modulation stage. After that, work will begin on the control and overload protection circuitry -- again taking a methodical module-by-module approach. Also, many unmarked wires are being traced to determine their function. So, there is much work still to do in order to restore this equipment to safe and reliable operating condition.

The CCA 1000-D requires line level audio input for modulation. The club is most fortunate to have received another timely donation from Al Plouff, KB2MVP, who has supplied a pair of Shure M67 preamp/mixers. These will be combined with a 31 band audio equalizer and a compressor/limiter to supply the needed line-level audio to operate in AM voice mode.

It is hoped that it will be restored and converted to amateur AM service by the time of the next-year's AM Rally, allowing EGARA members to experience AM operation using a piece of classic broadcast equipment. Stay tuned for future updates!

Club Briefs...

EGARA has renewed its annual liability insurance policy through ARRL. The coverage includes:

Equipment Insurance

Insurance for Ham Radio club affiliated equipment on a replacement cost basis. Coverage is all risk with few exclusions.

Computers & Related Equipment

Insures computers and all related items with coverage tailored for these electronic devices.

Liability Insurance

Club Liability Insurance coverage for buildings and property used by the club

Non-Owned Auto Coverage

Non-Owned & Hired auto liability covers bodily injury and property damage caused by a vehicle hired by the club (including rented or borrowed vehicles) or caused by non-owned vehicles (vehicles owned by others, including vehicles owned by club members or volunteers). Coverage takes effect if there is an auto accident and the Club is sued.

Website Update:

The URL address registration for the club's website -- *www.EGARA.club* -- was moved to a new Internet registrar in February to take advantage of the better support offered by Squarespace. The cost was approximately \$14 for one year -- the same as the previous registration service.

The change did result in the club's site being unavailable for several days as Internet Domain Name System (DNS) servers caught up with the change throughout the world.

These servers translates human readable domain names such as *www.EGARA.club* to machine readable IP addresses (for example, 34.149.87.45). They then take your browser to the online computer that actually hosts the website you are looking to reach.



In the case of EGARA, the website itself remains hosted by WIX.com, the company which provides the tools needed to create and edit the club's website, and which also "hosts" the site on its computers. In addition to making updates to the website convenient and easy, WIX also backs up the site regularly and makes sure it has the latest safeguards in place to thwart hackers and attackers. In addition, it provides email forwarding when messages come in through the website and it provides analytical information on website visitors and their locations. Other data made available includes what information and pages are accessed on the club's site.

YOUR MEMBERSHIP MATTERS

Club elections are next month.... make sure you're a paid-up member so you can cast your vote!

Dues remain at just \$15 for individuals and \$25 for families.

Pay your dues during any club meeting or online through the club's website at www.EGARA.club.

If you've already paid... thank you!

Hamfest Season Returns to Region

The 2023 Hamfest season begins this month with the annual Swap Fest held by the Saratoga County Amateur Radio Association set for Saturday, March 18, 2023. As in the past, it will be held at the Solar Building, 50 West High Street in Ballston Spa. Doors open at 7 am and a VE test session will be held at noon. Talk-in - 147.00 or 147.24 (PL = 91.5).

On April 15th, the Warren County Radio Club will hold its first annual Swap Meet from 8 am until noon at the Queensbury High School located at 409 Aviation Road, just off exit 19 of the Northway. Admission is \$5 and will go toward door prizes. Talk-in will be on 146.730 (PL = 100) and on 147.120 (PL = 123). For information, contact swap@2wcr.org.

EGARA's annual Hamfest will be held Saturday, June 3rd at the East Greenbush Town Park from 8 am to 1 pm.



Intro to Oscilloscopes is March Meeting Presentation



An oscilloscope can be an invaluable tool for troubleshooting electronic gear. So, if you've ever wondered about how they work and how to use one, make sure you attend the club's monthly meeting on March 8th.

Steve VanSickle, WB2HPR, will present an overview of oscilloscope basics to help get you familiarized with how they can help you find problems with your gear, as well as how they can be used to make sure its operating properly and at peak efficiency.

Officers will provide updates on club news and activities... and refreshments will be served. Club members will also have a chance to update everyone on what they've been up to lately.

So come on out and leave your cabin fever behind!

On the Beam

News & Notes

EGARA Gains New Members

Two new members recently joined the club, bringing the club roster to 79.

Patrick Negus, KD2ZQR, is a Cohoes resident who holds a General class ticket and joined with a family membership. He's also a member of ARRL. Patrick is an active DXer and recently made SSB contacts with stations in Sweden and Russia according to his logbook on QRZ.

Also joining EGARA recently was Gregory Shields, KD2RBN, of Albany. Greg earned his Technician license in 2018.

Please welcome both to our growing EGARA family!



Amateur Radio on the International Space Station Seeking Contact Proposals



The Amateur Radio on the International Space Station (ARISS) program is seeking formal and informal educational institutions and organizations, either individually or working together, to host an amateur radio contact with a crew member on board the International Space Station (ISS).

ARISS anticipates the contact will be held between January 1, 2024, and June 30, 2024. Crew scheduling and ISS orbits will determine the exact contact dates. To maximize these radio contact opportunities, ARISS is looking for organizations that will draw large numbers of participants and integrate the radio contact into a well-developed education plan.

The deadline to submit a proposal is March 31, 2023. Proposal information and more details, such as expectations, proposal guidelines, and the proposal form, can be found at <https://www.ariss.org/apply-to-host-an-ariss-contact.html>.

An ARISS introductory webinar will be held March 1, 2023, at 8:00 PM EST. The Eventbrite link to sign up for the free webinar is <https://www.eventbrite.com/e/ariss-proposal-webinar-for-spring-2023-proposal-window-registration-515706320487>.

ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. The United States sponsors are ARRL, the Radio Amateur Satellite Corporation (AMSAT), Amateur Radio Digital Communications (ARDC), NASA's Space Communications and Navigation program (SCaN), and the ISS National Lab Space Station Explorers (SSE).

EGARA February Meeting Minutes

- The February meeting of the EGARA was called to order by V.P. Walt Snyder, N2WJR at 7:00.PM. 22 members attended at the Masonic Temple
- V P Walt Snyder, N2WJR, welcomed everyone, followed by a round-robin introduction.
- Jock Elliott, KB2GOM, Net Control Operator for the Capital District Commuter Net gave a presentation on its history and activities. He was assisted by Fred Halley, W2EMS.
- The commuter net meets on a daily basis on several repeaters - mainly the 146.940 repeater, which is owned and maintained by Bob Isby, K2RHI. The Net also monitors other frequencies through the use of numerous base stations and scanners. Amateurs are encouraged to check in, with or without emergency traffic. When checking in, the location of a reported incident is vitally important, as well as the nature of the report. Thanks to the many hours and years of duty, the net continues to provide an efficient means of reporting road conditions to local authorities via net control.
- After the presentation, a short business meeting was led by President Bryan Jackson, W2RBJ. There will be a VE session at the East Greenbush Town Library on March 4th at 11:15 AM. Also, winter Field Day results have been compiled and are being forwarded to the WFDA organization. The rental for the annual hamfest at the Town Park has been paid. Annual liability insurance premiums have been paid.
- Warren County ARC is sponsoring a swap meet at the Queensbury High School on April 15th at 8 AM. The annual mini hamfest at the Solar Building is sponsored by the Saratoga ARC on March 18th.
- Items for the Buy/Sell/Swap listings can be sent to Bryan Jackson for inclusion in the club newsletter, Sidebands. A trip to the ARRL HQ or the Vintage Radio Museum is being considered. Steve VanSickle, WB2HPR, gave an update on the repairs to the WABY transmitter.
- Refreshments were enjoyed by the membership. The meeting was adjourned at 8:05 PM.
- Submitted by board member Steve VanSickle, WB2HPR, on behalf of Secretary Dave Smith, WA2WAP

Git 'Er Done! Upgrade Your Ticket at the VE Session March 4th

Tired of being limited by your Tech or General license? Get yourself upgraded at EGARA's next FCC license test session on Saturday, March 4th at the East Greenbush Community Library. The session will begin promptly at 11:15 a.m. and all exams for all license classes -- Technician, General and Amateur Extra -- will be given.

Remember, test applicants **MUST** have an FCC Registration Number **BEFORE** taking their test. It is available at no charge by visiting: <https://www.fcc.gov/new-users-guide-getting-started-universal-licensing-system-uls>.

The test fee is \$15 and applicants must also bring a valid ID. Amateur license holders who are looking to upgrade must also bring a copy of their current license in order to get credit for successful completion of previous exam elements. Complete exam information and requirements can be found on the EGARA website at:

www.EGARA.club/ve-exams-sessions

The History of Ham Radio: Rare International Sport

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)

The Transcons, Transatlantics, relay speed record attempts, short wave tests, and the other group-oriented on-air events all owed their popularity to shared goals and objectives, but they were also simply fun to operate and involved an element of competition. The festive atmosphere generated by all the radio bugs coming on the air at once was not lost on the organizers who named these events parties.

Described as a "worldwide contact contest" the ARRL planned an International Relay Party for spring, to run from 0000 GMT 9 May to 0000 GMT 23 May 1927. True to recent tradition, this one was designed to both be fun and provide useful information about who was capable of message handling internationally. Each station in the US and Canada would transmit prewritten messages provided by the ARRL to as many foreign countries as possible, but only one to each country. Each foreign amateur who received one was then required to compose a reply of eight or more words and send it to a US or Canadian station other than the one from which it was received. Thus, a US or Canadian station could send a message to only one station in each country, and receive only one reply from any single station, as long as it was not a reply to his own message. Operation could be on any amateur band.

Passing messages during the event determined a contest score. For US and Canadian stations, sent messages counted one point and received ones counted three. In reverse fashion for foreign participants, received messages from the US and Canada counted one point and replies counted three. This asymmetry seemed to emphasize the handling of replies, perhaps regarded as more difficult, or needing extra encouragement. An entry consisted of copies of all messages sent and received along with information as to time, date, wavelength and call sign of the worked station for each message. No deadline for submission was specified; the rules stated simply that they should be mailed promptly at the conclusion of the contest. American and Canadian participants must register ahead of time by sending a QSL card to Headquarters. They then would receive a list of assigned messages just before the start of the contest. They could choose messages at random from this list to send to each station they contacted.

The event ran as scheduled and was considered a success; participation was quite enthusiastic. But this was a new style of operating and the organizers failed to realize how ponderous the entry requirements really were. Collecting copies of all the messages, two of each in fact, from a worldwide group of participants and then checking them all was more time consuming than they anticipated. Patience began to run short as the summer wore on and the League was bombarded with letters from partygoers asking about their standings in the results.

They were finally rewarded in October QST in which Assistant Communications Manager Lawrence Jones published the full results. Everyone "enjoyed the party more than any other one that has ever been held," reported Jones. "Comments like 'The whole test was a wow,' and 'The tests surely were the berries,' are to be found in practically every report," he wrote.

One of the first lessons from the experience was that the rule limiting US and Canadian stations to sending only one message per foreign country put a severe, unnecessary damper on activity. It resulted in foreign stations holding onto their reply messages until they could find a station that could send them a new one in return. But North American stations could receive more than one message from a single country, as long as they were from different stations. So the only way a North American ham could distinguish himself from competitors would be to receive multiple messages from any single country while originating only one. Thus, the objective for US and Canadian participants logically contradicted the objective of those in the other countries!

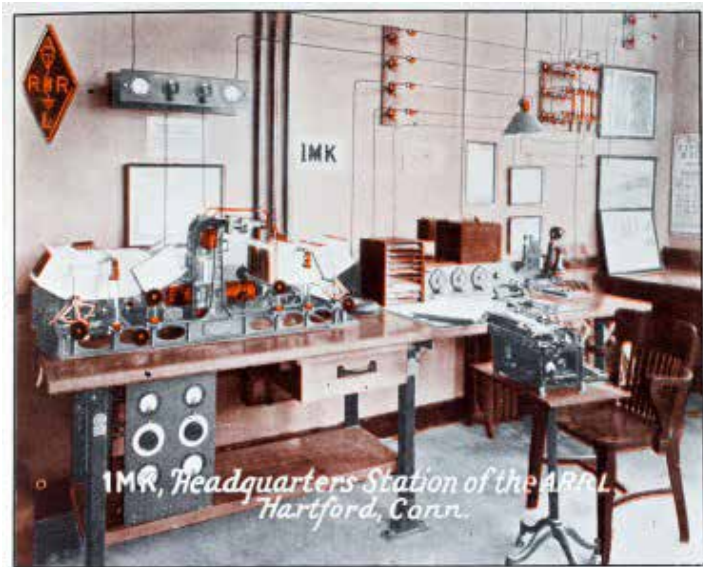


Cartoon from
October 1927 QST.

The History of Ham Radio...

A dozen certificates for Official Foreign Contact Station were issued to amateurs who amassed the most points with a single country and thus demonstrated that their station was the most reliable for handling traffic into that particular country. 2AHM took the top spot in overall score with 90 points and a certificate for Great Britain with sixteen points (one message sent, five received). Don Wallace of 6AM was the only one to take two certificates, one each for New Zealand and China. And 4IZ got one for being the only contact with Spain—a one-point certificate winner.

Despite many countries being active in the contest, only twelve certificates were issued to North American participants because there were lots of tie scores, including many multi-way ties—not surprising given the inconsistency in the rules. Among these were a 16-way tie for Austria, 28-way for Costa Rica, and 35 for Puerto Rico! But since a tie did not indicate that any one station was most reliable to a given country, the organizers decided that no certificate was due at all. And besides, they judged sending all those extra certificates to be “impossible.” Clearly there was still much to figure out concerning this contesting business.



**ARRL Headquarters station 1MK,
from the cover of June 1928 QST.**

Among foreign entries the scores were a good bit higher because the structure of the rules favored them; eighteen certificates were awarded. 3AG in Chile had the top score with 232 points. As with the US and Canada stations, foreign tie scorers were not awarded certificates. Australia produced the most entries of any foreign country.

The HQ staffers were not eligible for awards, but operated from their own stations nonetheless. Before the contest they designed their own unique certificate, signed by all of them, to be awarded to the high scorer in their group and neatly framed by the low scorer. 1BDI ended up getting the certificate with 1KP doing the framing.

Even with all the complications, the contest or on-air party concept had proved to be very popular. Later that year, responses to a questionnaire on various subjects indicated overwhelming support for another International Relay Party.

In response, ARRL Communications Manager F. E. Handy announced that the next ones would be held in February 1928 with some changes to the rules to fix the problems caused by the one-per-country limit on originated messages.

Prizes donated by radio manufacturers would go to high scorers in a number of categories, both within the US and worldwide localities. The definition of international localities was determined by the current list of IARU intermediates, more like the role of prefixes today.

As before, entrants from the US and Canada were required to register ahead of time and received test messages to be sent, each of which carried a serial number and distinguishing letter group. This time, a US or Canada station could send and receive a message only once with each foreign station—much more reasonable than the one-per-country rule. A reply message of at least ten words of five characters each must then be sent to a station different from the one who originated the test message, and would carry a serial number matching the message to which it replied.

This change meant that stations around the world would be trying to work as many US and Canadian stations as possible. The two-week-long contest would run from Sunday evening at 0000 GMT 6 February to 0000 GMT 16 February 1928, and the closing date for registering to enter would be 1 February.

Among its stated objectives were to “promote international fellowship” and “create opportunities for making new records.” It also offered a chance to “win valuable apparatus prizes at the same time you engage in two weeks of rare international sport.”

-continued on page 9-

The History of Ham Radio...

Aside from framing the whole event as a friendly competition, its formatted exchanges were designed specifically to foster a spirit of collaboration since it would take two stations with messages going in both directions to complete a valid exchange. Something taken for granted in today's contests took careful consideration at the dawn of international amateur radio.

"We already hear of plans being made in some quarters," commented Handy, "for 'signing on' a friend as extra op to keep the station on the air more hours per day than otherwise possible." The concept of multi-operator as a separate entry class was as yet to be considered, and Handy seemed to question the ethics of collaboration of any kind. Furthermore, he continued, "Another individual is scheming to use an automatic transmitter to help him win. A third is entering two stations to better his chances of winning." His comments foreshadowed computer use decades later (although he never elaborated on precisely how the purported automation would be accomplished) and multi-multi operation. But the organizers' view held that a station was a station, and—completely describing the philosophy of competition at the time—Handy wrote,

"The opportunities for getting a friend to help as op, for tuning the station to the highest degree of efficiency for different useful waves, for working up schedules in advance of the tests, are equal for everyone or as nearly so as we can make them at any rate. Frankly, we must admit we can't get the viewpoint of the man who surrounds himself with unfair advantages to assure success. We believe in competing fairly or not at all. Every participant is on his honor as a gentleman to abide by the spirit as well as the letter of the rules of the contest."

Beyond the honor system, the organizers backed this principle by considering precisely what might constitute violations of the rules' spirit. In particular, if one entrant accepted and claimed credit for more than 5% of the total number of reply messages sent to a specific originating station (i.e., containing the serial number for that station), it would be considered "prima facie evidence of either the operation of agreements between contestants or at any rate of unfair means of point-winning thru closely following the operations of particular contestants to too great an extent." The 5% rule resulted from analysis of the logs of the previous contest showing evidence of such collusion.

Individuals from several ARRL headquarters departments were assembled to form an ad-hoc awards committee that would officiate, rule on irregularities, and decide on disqualifications. They would be assisted by a team of non-participating on-air observers, appointed just before the start of the contest. Three independent observer reports of out-of-band ("off wave") operation would automatically disqualify a participant. One station arranging a sked for another to handle messages would be considered unsportsmanlike and would likely lose all points obtained this way or might even be disqualified.

League officials approached the radio industry for partial sponsorship; many of their executives were also hams. Readily embracing the idea, a diverse collection of equipment and parts manufacturers donated their products as contest prizes. Just a few weeks before the event, a nearly complete list of donated prizes for the next party totaled between \$4,000 and \$4,500 (about \$60,000 in 2014). The ARRL Communications Department planned to wait until the end of the contest to determine exactly how many prize groups there would be—Handy anticipated between fifty and sixty—which would depend on the level of participation and the number of localities taking part. There would also be a grand prize for each highest scorer in the US and in Canada, prizes for the other twenty-five highest scorers in the US and Canada taken together, and prizes for the US or Canada stations that were the only ones to contact a particular foreign country.

At the high end of the prize collection was an EIO Orthosonic six-tube broadcast receiver, worth \$275, described as "balanced circuit, single control, extremely selective, illuminated scale, cabinet of genuine mahogany with walnut inlay, escutcheon plate of dull gold with knobs to match." At the low end, was a Crosley Bandbox model 601 receiver worth \$55. There were also prizes of valuable parts such as an E. F. Johnson "150-mmF type B ball-bearing transmitting condenser with etched scale, pointer, handle and locking device," worth \$49.50, a Hammarlund 29-inch-long, 3-inch diameter coil worth \$8, and accessories such as a Bunnell "Gold Bug" key worth \$13.50.

Illustrating the as-yet scant familiarity with the characteristics of the new shortwave bands, Handy baited the participants to push on down in wavelength, writing, "From what we hear, some of the fellows with UX210 transmitters are planning to run rings around the high-powered 40-meter stations by using 20 meters, where power is a minor consideration."

*Looking for Great Deals?
Get Them From a EGARA Hamfest Sponsor!*



The History of Ham Radio...

This time the results took roughly six months to be published, faster than most computer-assisted contests today (at least in actual print as opposed to on-line reports). 1ASF was the US winner with 305 points, reportedly using “a fifty-watt transmitter and no extra operators,” nc1AR won in Canada with 105 points, and 25 other stations won prizes, all in the US. First place in each of thirty-five participating foreign localities also received a prize. Those entries all had higher scores than the North American ones, with British 5BY on top at 573, Belgian 4AU reporting 486, and 4SA in Puerto Rico claiming 405.

With ARRL headquarters station 1MK watching the operations along with Official Observers, several stations heard operating outside the band limits were disqualified. All of them were named in the QST summary; how embarrassing. Some would have placed high in the rankings had they been more careful. Doubly embarrassing!

The International Relay Party would evolve into the ARRL International DX Contest. More about that in a later story.



A
BLAST
FROM
THE
PAST!

Dialogue Between Automakers and AM Advocates Continues Some Vehicles Now Exclude AM Radios to Avoid Dealing with Cost... and RFI

By Elle Kehres, Radio World



A letter from automakers was recently received by U.S. Senator Ed Markey's request to maintain broadcast AM radio as a feature in electric and other future vehicles. The auto industry's response, however, isn't exactly hopeful for the senior band, which in turn has spurred more concerns about the potential threat to public safety if AM is dismissed. Some automakers, such as Tesla, already leave AM reception out of their car radios because today's heavy reliance on electronics can create large amounts of radio frequency interference (RFI). The trend also does not bode well for Amateur Radio operators who install HF rigs in their vehicles.

Markey wrote to all the big automakers: Ford, General Motors, Stellantis, BMW and Kia among them. He asked for a thorough accounting of where AM radio receivers stand in the view of automakers, and to inform him of any plans to discontinue access to AM in new cars.

"As the United States works to meet President Biden's goal of 50 percent electric vehicle sales by 2030, we urge your company to maintain broadcast AM radio in its vehicles to ensure that consumers have access to critical emergency response information," said Markey in his letter.

The auto industry responded via the Alliance for Automotive Innovation. Formed in 2020, the Washington-based trade association representing all of the major automakers says it "is committed to a cleaner, safer and smarter personal transportation future," according to its website.

The alliance's response to Markey, however, appears to be a resounding non-endorsement of AM radio, and points to other methods of emergency alerting over AM.

Markey issued another statement on Feb. 24, further advocating for the senior band:

"Americans rely on AM radio not only for news, weather, and sports, but as a critical lifeline to information during emergencies and natural disasters. I've made clear to automakers that the removal of AM radio from vehicles can create a serious risk to public safety, and I will continue to engage with the auto industry to ensure that as our electric vehicle revolution speeds up, AM radio does not disappear along with internal combustion engines."

In its own statement a day earlier, the Alliance for Automotive Innovation says it and its members are committed to maintaining consumer access to vital safety information:

"As part of this effort, we have been meeting with the National Association of Broadcasters (NAB) and are in the preliminary stages of engaging FEMA to understand better how consumers can continue to access emergency broadcast information both inside and outside the vehicle."

In another statement, the National Association of Broadcaster's senior vice president of communications, Alex Siciliano, also weighed in on the matter:

"We appreciate that the industry is being responsive to Sen. Markey as many policymakers have voiced concerns about removing AM radio from newly manufactured vehicles," said Siciliano. *"We have engaged in an ongoing and productive dialogue with the alliance since this letter was written in December, and we'll continue to facilitate this dialogue between key stakeholders. As the backbone of the nation's Emergency Alert System (EAS), AM radio plays a critical role in informing Americans and keeping them safe when disaster strikes."*

Meanwhile, BMW offers no AM in the i4, iX, and i7 electric cars, according to BMW product and technology spokesman Alexander Schmuck. "We do offer FM, HD Radio, Sirius XM Satellite as well as Apple CarPlay and Android Auto. If a customer wants to listen to an AM radio station, he or she can elect to do so via services such as TuneIn and connect/play them directly via Apple CarPlay or Android Auto through the car's speaker system," Schmuck said.

Amateur Radio Digital Communications (ARDC) Releases Annual Report Detailing Grants Made for Amateur Radio Projects.



In 2022, overall, ARDC approved nearly \$6.7 million in grants, and distributed nearly \$7.7 million.

ARDC's 2022 grants were distributed in four categories: Amateur Radio, Education, Scholarships, and Research & Development. Below is a list of the total grant amounts distributed in each category.

- Amateur Radio \$2,145,686
- Education \$2,326,744
- Scholarships \$1,561,548
- Research & Development \$2,402,293

In 2022, international grant making was expanded to 13% of funded projects, which was an increase from 9% in 2020, and is an area where ARDC is aiming for additional growth in 2023.

ARDC made 47 grants to amateur radio in 2022, which accounts for almost half of the total projects funded.

These included nine college amateur radio club projects and 33 community amateur radio club projects which involve network build outs, equipment upgrades, and repairs to old equipment.

Communications vehicles were commonly applied for, meaning that they were more competitive and difficult to obtain funding for. Clubs often share that these projects re-energize their membership and activities.

ARDC reviewers focused on selecting projects with strong outreach plans or opportunities to bring new people into the hobby. Projects with unique approaches and ones that aimed for big impacts stood out from the crowd. At the same time, funds were available for bread-and-butter club projects in order to continue supporting typical groups enjoying the hobby.

An example of a stand-out project is the one proposed by Bay Area Mesh (BAM). BAM's goal is "to install a resilient, high-speed, wireless network throughout San Francisco and the greater Bay Area." The network would be used by responders, volunteers, and served agencies during disasters, emergencies, and large community events.

ARDC noted in the awarding of the grant, "They're building this network using inexpensive, commercial-grade Wi-Fi equipment, running open-source software developed by the Amateur Radio Emergency Data Network (AREDN)." Using AREDN software allows BAM volunteers to set up a node with minimal expertise and effort. Advanced network technology is not needed because the software configures the network automatically.

Scholarships continue to be a focus for ARDC. In 2023, ARDC is funding 95 scholarships, bringing the all-time ARDC scholar total to 313. The ARRL Foundation was the biggest beneficiary, with a grant of \$500,000. And, in keeping with their goal of reaching underserved groups, scholarship programs were also funded for the Society of Women Engineers and OMIK (a multicultural amateur radio organization), among others.

ARDC is a private foundation that exists to support amateur radio and digital communication science and technology.

The mission of ARDC is to support, promote, and enhance digital communication and broader communication science and technology, and to promote amateur radio, scientific research, experimentation, education, development, open access, and innovation in information and communication technology.

CALENDAR

March 4, 2023 - 11:15 am - VE FCC License Test Session, East Greenbush Library - Contact: W2RBJ@Outlook.com

March 8, 2023 - 7 pm - Monthly Club Meeting, East Greenbush Masonic Lodge, Topic: Intro to Oscilloscopes

June 3, 2023 - 2023 Hamfest, East Greenbush Town Park, 8 am to 1 pm.

Pro Tip: Finding Lifted Solder Pads and Broken Traces

Troubleshooting a failed circuit board?

First, clean the board. Use a soft-bristle toothbrush and 99% Isopropyl alcohol or a commercial flux cleaner. Flux deposits can hide bad joints, so you should clean the board before you inspect it.

Then look at the solder joints from an angle. Not from top down, but from 45 degrees or so. Look for corners that are standing up from the board.

See anything wrong?

Repairing a lifted solder pad, with broken trace...

The easiest way to repair this sort of problem is to remove the component whose pad has lifted, and install a replacement part whose leads have not yet been trimmed.

Then use those long leads to bend them toward the next solder pad on the same trace. Solder this leg in both places -- both to the lifted pad, and to the next pad on the same trace, for stability.



For Sale...

- MFJ - 941D versa tuner (2 available) \$25 each
 - Voltmeter kit \$5
- Contact Don, KB2CDX at: ddm653@gmail.com

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- KENWOOD TS 520, \$225.
- Contact Tom, KC2FCP at kc2fcp@nycap.rr.com

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- MFJ-9575, 10 watt 75 meter LSB transceiver
 - DX Engineering, 200 watt 75 meter bandpass filter
 - TEN-TEC 1209, 2 meter to 6 meter transverter
 - TEN-TEC 1210 10 meter to 6 meter transverter

Make offers for any above
 Contact: John Hackert, WA2JAE (518) 381-4847, Email:
 Wa2jae@Arrl.net or John.hackert@Reagan.com

Looking to Buy...

- Legal limit Tuner

Contact Justin, KG2RG, at 518 542-1342 or
 email: kg2rg@hotmail.com

Sell your unused gear with a free ad in Sidebands!

Send details to:
 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.