

CAARA NEWS



Cape Ann Amateur Radio Association
Gloucester, Massachusetts
FEBRUARY- 2024 EDITION



PRESIDENT'S COLUMN

by Brandon- NQ1W

Dear Members,

I was pleased to see many of you at the 2024 Winter Field Day event on Saturday January 27th. We socialized, ate pizza, and worked some stations on both the Voice Station setup on our beam and the new technician's model digital station on a vertical. We chatted with participants on PSK and CW modes and made a ton of SSB contacts. My son Elliot and I even did soldering and electronics building during the event! Normally most members participate at home for winter field day, but it was a fun change of pace to have it at the clubhouse. Thanks to all who came for the fun day!

This month for our members' meeting presentation, we will be welcoming guest speaker Phil Temples K9HI, our ARRL New England Division Vice Director, to speak about the important issues related to new hams getting licensed and incentives we can deploy to retain our newly licensed technicians. Phil has begun a project that CAARA will participate in that provides rewards to both new hams and the Elmers that help matriculate them. It should be an insightful talk, and I hope you can all attend.

As we look forward to warmer weather and the Spring, CAARA is seeking volunteers for our special events committee to organize and run emergency communications stations for public events like Cape Ann road races and the Gloucester Parade of Horribles. These events are both an important service we provide to Cape Ann community. Fred WA1ESU and Chris W1TAT, who have done a great job leading this committee, are looking to hand off some of the responsibilities for email communications, race materials preparation, and participant coordination for this season. If that sounds like something you are interested in or want more information, please reach



out to me ASAP via info@caara.net so we can start the season ready to go.

Finally, I want to continue to thank you for your patience as we get the primary 2m repeater repaired. Larry and Jon have done a terrific job of standing up the temporary repeater at the clubhouse and for managing the repair work up at the repeater site. We should have more updates to share on this at the February members meeting. We also thank our radio comrades at the North Shore Radio Association for the continued use of their repeater for both our weekly club net and the MWF 6pm Net while we get our long term 2m repeater situation sorted. NSRA and our net operators have done a great job keeping things running smoothly during our maintenance.

I hope to see you at the February members' meeting. Please also note that March is the deadline for dues to keep your membership up to date and in good standing. It is members like you who make all the work we do at CAARA for our community possible. Thank you!

Regards,

Brandon Hockle NQ1W
President CAARA

THE EMCOMM MINUTE

By Dean- KB1PGH

So do you see the picture of the RF gain control. Please take a good look at it because it is the most abused control on any amateur radio out there. You know why? It is because a lot of hams like to turn it up all the way and leave it there which is technically not the correct way to operate your RF gain. So you think that by leaving your RF gain all the way up that you will be able to hear more stations, the real truth is everything you think you know is wrong. Please let me explain. So we all know that the RF gain control operates the receive



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It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to CAARA members, and space is available. Material is accepted on a first come, first serve basis. Articles and other materials may be submitted by internet to Jon at jpcrockport@gmail.com . If possible, material should be in Word format. Material may also be submitted as hard copy to Jon-K1TP or any Club Officer.

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Welcome to CAARA:

CAARA, an ARRL affiliated club, operates the 2 meter W1GLO repeater on 145.130 MHz with antennas located on the ATT cell tower in the Blackburn Industrial Complex in Gloucester Massachusetts. It has an average effective radius of 60 miles, and serves Eastern Massachusetts, Cape Cod, Rhode Island, Southern New Hampshire, and maritime mobile stations.

CAARA also operates the W1GLO repeater on 224.900 located at the CAARA clubhouse.

The 443.700 repeater is now on the ATT cell tower in the Blackburn Industrial Complex with greatly enhanced performance running in fusion mode and linked to 10 other repeaters in the New England area.

The Association is one of the few amateur radioclubs that has its own clubhouse. Located at 6 S tanwood Street in Gloucester, with a variety of HF stations with beam, vertical, or G5RV antennas.

Amateur radio exams are held on REQUEST at the CAARA clubhouse. Anyone who is considering a new license or an upgrade, is welcome to test with us. Currently pre-registration is necessary. Contact the head of our VE team Bill Poulin- WZ1L if you have any questions about monthly testing.

Monthly member meetings are held on the second Saturday of each month at noon except for July and August.

Each Sunday evening at 9:00 PM, the club operates a 2 meter fm net on 145.130. This is an open and informal net which disseminates club news and prepares operators for emergency communications work. All are invited to check into the net as club membership is not a requirement.

The club is open most Tuesday's from 5- 8PM for CAARA members and interested parties to stop by and socialize, as well as use the extensive collection of ham radio gear.

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amplifier stage of your rig. The real truth is that every modern day HF transceiver out there today is more than sensitive enough to hear HF signals, maybe even too sensitive

at that. The only band that it may help to turn your RF gain all the way up is 10 meters and it can be of use on 6 meters.

I beg you don't even think of turning your rigs RF amplifier on on anything below 10 meters. It's not worth it. Actually if you want to hear more signals get a better antenna and get rid of all the local RFI and EMI interference before it gets into your rigs antenna and electrical cables but that story is for another article. Actually the best way to use your rigs RF gain control is to think of it like a volume control. The best way to maximize your HF rigs dynamic range is to turn your rigs RF gain down. For example.

Try this trick. Go to a quiet part of whatever band your on and turn your RF gain all the way down. Then slowly turn it to the point where the band noise just starts to activate your rigs AGC. You will be able to see your signal meter just start to move a bit. Now you should be all set to hear weak signals, especially if they are near strong ones.

That's what dynamic range is. The ability of your radio to hear weak signals that are 2 KHZ close to really strong signals. You see a rig with poor dynamic range or with a rig with too much RF gain, the strong signals desensitize the receive of nearby weak ones. A rule of thumb is to get a rig with a dynamic range of at least 80 db on SSB.

For example my Yaesu FT 710 has a RMDR of 107 db. So RMDR is reciprocal mixing dynamic range-its a different way of measuring dynamic range in today's SDR radios. By the way, if you want to see where your HF rig stands on dynamic range take a look at the list of HF rigs from best to worst on <http://www.sherweng.com>. It's really interesting. Ok, so

the second benefit of using your RF gain properly is minimizing intermodulation distortion in your rigs receive circuits. So intermodulation distortion is when you have too much RF amplification and your rigs receive circuits will start to create random phantom signals which will mask out the real signals near them. So for example my Yaesu FT 710 has a "IPO" feature as an option instead of using the amplifiers. Others will call it a "3rd order intercept point". That point is where you can turn the RF gain up just enough to receive the real signals without causing intermodulation distortion. The third benefit of using your RF gain properly instead of turning it all the way up is that it helps your digital noise reduction circuits process and eliminate the atmospheric

noise before you hear the signal. When there is less of a noise floor there is a better signal to noise ratio so you will be able to hear the weaker stations better through your rigs DNR.

It's all about a better signal to noise ratio in your RF circuits. So I please ask for you to give it a try, everything you think you know is wrong when it comes to RF gain control to hear weak signals. Turning the RF gain knob up to 11 like they did on the amp the movie *Spinal Tap* won't help you. You have to get the noise floor lower and the signal to noise ratio better so turn that RF gain down on the HF bands. The only place you really need it is 6 meters. I must say though. The RF gain will not help you if you have too much electrical or EMI noise coming

through your antenna or electrical lines and if you have a lousy antenna. Don't forget to do your homework and look for a rig with excellent dynamic range on the Rob Sherwood website that I talked about earlier before you buy.

Geez, I almost forgot-Don't forget that you have a noise blanker circuit in your rig which can help in some cases to lower noises in the RF stage such as pulse type man made noise. Plus you can use your DSP in your rig to create a smaller pass band or to shift the passband to eliminate the affects of stronger signals next to weaker ones. Maybe try a pair of headphones as well. Your brain can do a great job as an external DSP audio filter to hear weak signals. Well good luck on hearing the weak signals and don't abuse that RF gain control!

• 73 Dean



Phil Temples, K9HI, will present on Project ASCEND ("Amateurs Supporting a Collaborative Environment for New ham Development").

Amateur radio is facing an existential crisis. It's been estimated that only two in ten newly licensed amateurs are still active after one year. These amateurs continue to exist in the FCC database, but they are amateurs in the statistical sense only. Leaders in the amateur radio community have long attributed the lack of mentoring as the primary reason we are failing to grow as a hobby-service. Is it therefore imperative that we:

reach amateurs who have left the hobby and provide incentives to reconnect them to amateur radio and advance their skills identify active amateurs who are willing and able to serve in mentorship roles and provide them with the tools to accomplish this difficult but rewarding task.

Part of the first step involves outreach to lapsed amateurs so that they might be re-connected and begin to "ascend" the ladder of their amateur radio careers. This will go a long way to ensure that amateur radio remains a healthy and vibrant pursuit.

Project ASCEND ("ASCEND") is a comprehensive program designed to advance the Amateur Radio experience for Technician Class amateur and provide the needed mentoring and connection with the active ham community. It is a multi-faceted, high-touch program that leverages the time-honored tradition of mentoring – but with the goal to support and nurture hundreds to thousands of new and inactive hams.

ASCEND is a collaborative effort with FEMARA and the Northeast HamXposition ("Convention"), along with various radio clubs and individuals throughout New England.

Phil Temples, K9HI, has been a licensed amateur for fifty-four years. He is currently on the FEMARA General Committee and heads its Marketing & Promotions Committee. Phil is a life member of QCWA and ARRL, and has served the ARRL in various capacities over the years, including: Public Information Coordinator, Affiliated Club Coordinator, Assistant Section Manager and four terms as Section Manager. He is a Volunteer Examiner for several VECs. For over a decade, Phil was a volunteer instructor at the Courage Kenny Handiham Program based in the Twin Cities. K9HI currently serves as ARRL Vice Director for the New England Division.



Amateur Radio Newslines Report

A GUYANA DREAM NO LONGER DEFERRED

NEIL/ANCHOR: We begin this week with an important callsign 8R7X: You'll be hearing it on the air as a quartet of youthful DXpeditioners prepares - at long last - for adventure and QSOs in Guyana. John Williams VK4JJW has that story.

JOHN: The antennas are packed, other equipment is being tested and four young friends - Philipp Springer, DK6SP, Jamie Williams MØSDV, Sven Lovric, DJ4MX and Tomi Varro HA8RT -- are ready to depart for their journey to Guyana where they will activate 8R7X from the 14th to the 24th of February. It's a shared dream long deferred by pandemic travel restrictions but now with that behind them, this youthful quartet of seasoned DXpeditioners is prepared for the challenges of operating from their temporary South American QTH.

A statement on the team's website expresses their excitement and adds that their recently issued callsign has a prefix that has never before been used. The four will continue to update their website and to keep DXers informed via social media channels as the date gets closer. They will be operating CW, SSB, FT8 and RTTY on the HF bands.

If you want to follow their progress, see the team website listed in the text version of this week's newscast at arnewslines.org

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ARRL DEFERS CONFLICT OF INTEREST VOTE; OKS FREE STUDENT MEMBERSHIP

NEIL/ANCHOR: The ARRL has announced some changes to its membership policy and is offering full-time students who are 21 years of age or younger a free Associate membership in place of paying the current \$30 annual fee. The ARRL has also reintroduced Life Membership and a 70+ Life Membership, for hams 70 and older, on a revenue-neutral basis. Life Membership was suspended last year.

The changes were announced in an ARRL Member Bulletin released within 24 hours of the conclusion of the ARRL board meeting, held January 19th and 20th.

The ARRL also reported that the board has decided to defer to another time any proposed revisions to its Conflict of Interest Policy, a proposed change to Bylaw 46 discussed at the January meeting. By unanimous vote, the ARRL has established a committee to review ethics guidelines and standards and to review Bylaw 46 further, in addition to Bylaw 42, which applies to the Ethics and Elections Committee.

The ARRL bulletin directed members to their website, where the league expected to post the complete minutes of the board's annual meeting.

(ARRL MEMBER BULLETIN)

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SILENT KEY: DAVE MILLS, W3HCF, CREATOR OF NTP

NEIL/ANCHOR: The creator of the protocol that eventually came to govern synchronized timekeeping on billions of devices around the planet has become a Silent Key. Sel Embee KB3TZD tells us about him.

SEL: Computer scientist and unstoppable tinkerer Dave Mills, W3HCF, was a professor at the University of Delaware when he first tackled the question of how to synchronize the time on billions of devices around the world, including computers, switches, satellites, servers and clocks.

He ultimately addressed this question through the development of Network Time Protocol, or NTP, which he introduced to the world as the internet began emerging as a global force.

Dave became a Silent Key on the 17th of January, according to various postings. A fellow in the Institute of Electrical and Electronics Engineers, he was a recipient of the IEEE (Eye Triple E) 2013 Internet Award.

A university professor for 22 years, Dave carved out a long career with an emphasis on making his work accessible to individuals with low vision, a condition he developed as a result of glaucoma at a young age. A September 2022 profile in the New Yorker Magazine recalled Dave's earliest work at COMSAT where he worked on ARPANET, viewed as the precursor to the internet. The article noted that in his earlier work at the University of Edinburgh, he authored programs to decode telegraph signals sent over shortwave and studied how clocks functioned in a power grid.

He eventually turned his attention toward timekeeping and the UTC, the international civil time used by amateur radio operators and others around the world.

Friends and colleagues shared their memories in postings on various websites and reflectors. A post on the internet society mailing list from Karl Auerbach declared mournfully: [quote] "Oh my, we have lost Father Time." [endquote]

Dave was 85.

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SILENT KEY: NOTED SOTA CHASER, BOB WARDEN, KU4R

NEIL/ANCHOR: The Summits on the Air community is grieving the loss of a ham whose valued support was evident in their logs: He was an avid SOTA chaser, a high scorer in the SOTA scheme and a frequent contact in the logs of many. We hear about him from Kevin Trotman N5PRE.

KEVIN: SOTA enthusiasts have shared the news on the SOTA Reflector that Bob Warden, KU4R, a well-known and high-scoring SOTA chaser from Tennessee, has become a Silent Key. According to one post, Bob recently qualified for a certificate for earning 50,000 chaser points. At the time of his death on the 19th of January, he had a total of 61,408 points. The activators all agreed that Bob was a formidable presence in their logs whenever they climbed the summits and called CQ. One activator, Paula, K9IR, noted that she logged 104 contacts with him over the years and he answered her call in nearly 30 percent of her activations. Another activator, Matt, KQ4CCP, shared that Bob was a contact when he did his first SOTA activation on 2 meters and eventually became his top chaser.

Licensed in 1978, Bob wrote on the site pnwSOTA.org that he spent his first 35 years operating VHF/UHF and made some EME contacts as well and became interested in SOTA chasing much later. He also enjoyed rag chewing and CW.

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HAMS GET CREDIT FOR ADVANCING THE INFORMATION AGE

NEIL/ANCHOR: Could hams somehow be responsible for the evolution of the Information Age? A recent magazine article says it's very likely indeed. We hear more about this from Andy Morrison K9AWM.

ANDY: Radio and TV broadcasting, mobile communications and other elements of the so-called wireless revolution can have all their roots traced back to amateur radio, according to a recent article in the IEEE Communications Magazine, IEEE Xplore. The article, which is in Volume 61, Issue 11, credits amateur radio inventiveness that was incubated in the earliest amateur radio clubs growing on college campuses in the early 20th Century. It singles out the Wireless Telegraph Club on Columbia University's New York City campus,

noting the student members' propensity for wireless experimentation -- and singles out one club member, Edwin Howard Armstrong, considered the father of FM radio. At the same time that ham clubs were springing up on other US college campuses, societies for wireless enthusiasts were being born in Australia, the UK and elsewhere in the world. The article traces how the advent of FM led to the development of mobile phones and how amateurs' bottomless curiosity continues to be the driving spirit behind more and more inventive ways of communicating.

The article was written by Theodore Rappaport, N9NB, of New York University's Wireless Research Center. It is the second in a series of three articles being published by the IEEE. The previous article on the subject was published in October 2022 in Volume 60, Issue 10.

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LATEST MISSION TO BOARD ISS HAS ALL-HAM CREW

NEIL/ANCHOR: An international crew of amateur radio operators is aboard the International Space Station in the latest commercial mission to be launched from Kennedy Space Center. The crew of Axiom Mission 3 consists of retired NASA astronaut Michael López-Alegría, KE5GTK, Italian co-pilot Walter Villadei, IUØRWB, Turkish mission specialists Alper Gezeravci, KJ5DIY, and Marcus Wandt of Sweden, KJ5COO. They arrived at the ISS on Saturday, January 20th, two days after their launch, and were welcomed by the seven crew members, most of whom are also licensed hams.

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RACING EVENTS SEEN AS SHOWCASE FOR AMATEUR RADIO

NEIL/ANCHOR: There are no prizes, no awards, no certificates - really nothing except bragging rights - in a newly organized program that focuses instead on activations at racing events - any kind of racing events. Jack Parker W8ISH tells us about Racing on the Air.

JACK: On your mark, get set, get on the air! That's the message delivered this month by organizers of Races on the Air, a program that is purely for fun, not for points. Hams are being encouraged to activate from any type of formal race, whether the competitors are bicycles, horses, boats, airplanes, cars - even off-road motorsport. The objective is to show amateur radio in action and to increase its visibility at places where the public gathers. Callers simply use "CQ ROTA" or "CQ Racing on the Air" to attract attention to whoever is on the bands. Attracting attention at the event itself is as easy as finding a place to set up.

The Racing on the Air forum on the WorldWide DX Radio site has all the details at worldwidedx dot com (worldwidedx.com). Even locations such as the Indianapolis Motor Speedway, which already has an association with ham radio activations, are eligible to participate. The ROTA organizers ask only that hams post the details of their planned activation, including modes and frequencies, and then upload the log afterward to the website. Ladies and gentlemen, start your rigs.

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HAMS DONATE RADIOS TO HUMANITARIAN EFFORT IN UKRAINE

NEIL/ANCHOR: In Albuquerque, New Mexico, mobile radios and instructions to build antennas are part of a donation program for a humanitarian effort. We hear about that from Ralph Squillace KK6ITB.

RALPH: A donation of 14 mobile radios and simple designs for homebrew antennas have gone the distance from Albuquerque, New Mexico, to a humanitarian organization providing social support and medical care to displaced families in Ukraine. The radios and the plans for antenna construction are a project of the Bosque Amateur Radio Club, N5BRC. When Joseph Nichols, the founder of Care4Ukraine.org, asked his brother Art Nichols, KI5GOL, if the hams could assist with the volunteers' communication needs as they address the sheltering, educational and social concerns of the families, Art decided to approach the club for ideas. Bill Kent, N5UJC, Larry Elkin,

NY5L, Terry Zipes, W4RCN and club president, Jerry Aceto, K6LIE, have since established BARCnetUA, the program by which the hams are providing assistance.

Club members have donated \$700 to the effort, which paid for the 14 handheld radios. Art told the Albuquerque Journal that by using the club's simple plans, the organization's volunteer team has been able to build and use 65 antennas.

Joseph Nichols, a former biomedical equipment engineer now living in Ukraine, writes on the GoFundMe page of Care4Ukraine that the hams' gifts have permitted the installation of small micro-networks of solar-powered radio equipment used by volunteers in rural areas for emergency, non-military purposes. He said that the equipment is shared freely with other volunteer aid groups as well.

This is Ralph Squillace KK6ITB.

(ALBUQUERQUE JOURNAL)

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FCC WEBINAR WILL GIVE OVERVIEW OF EXPERIMENTAL LICENSES

NEIL/ANCHOR: The heart and soul of the process by which new technologies are developed and launched is often the experimental license which, in the US, is issued by the FCC. The agency is hosting a webinar so researchers and experimenters can learn more about how to put their tinkering on the air - legally. Stephen Kinford N8WB has that story.

STEPHEN: The Federal Communications Commission will be presenting a step-by-step guide to its rules, policies and procedures for anyone seeking an experimental license. Different kinds of these licenses are available. They enable eligible license-holders to conduct research and testing while safeguarding other users of the spectrum against harmful interference. The webinar will be held on the 7th of February at 1 p.m. Eastern Time over Zoom and requires registration to participate. It will be led by Martin Doczkat, chief of the Electromagnetic Compatibility Division in the FCC's Office of Engineering and Technology. Experimental licenses may be issued to individuals, hospitals, universities and other applicants.**

RSGB NEEDS VOLUNTEERS TO DO YOUTH OUTREACH

NEIL/ANCHOR: The Radio Society of Great Britain is looking for volunteers who are at least 26 years old to reach out to youngsters about amateur radio. Jeremy Boot G4NJH has that story.

JEREMY: Deepening its commitment to engaging more young people in amateur radio, the Radio Society of Great Britain is looking for prospective volunteer Youth Country Representatives, particularly in Wales and Northern Ireland. The representatives would be involved in direct outreach to youngsters at schools, in youth clubs and in the Scouts, Guides and Cadets. They would also participate in larger activities such as British Science Week and YOTA Month. Representatives also maintain a presence at RSGB activities.

Licensed amateurs who are interested in being a part of the next generation in radio should apply no later than the 16th of February. Visit [rsgb dot org stroke volunteers \(rsgb.org/volunteers\)](http://rsgb.org/volunteers) for details.

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WORLD OF DX

In the World of DX, listen for Willy, ON4AVT operating as 6W7/ON4AVT from Warang, Senegal from the 3rd of February until the 16th of April. He is expected to operate mostly FT8 on 80-10 metres. He will also be operating through the QO-100 satellite. See QRZ.com for QSL details.

Herve, F5HRY, is active from Marie Galante island, Guadeloupe as FG/F5HRY until the 2nd of February. Listen for him on 80-10m, using CW and SSB. See QRZ.com for QSL details.

Bernhard, DL2GAC, will be active again as H44MS from Malaita, IOTA Number OC-047, in the Solomon Islands. He expects to be on the air around the 10th of February and will be active every day on 160-6 metres until the 25th of April. See QRZ.com for QSL details.

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KICKER: WHEN RADIO REQUIRED A LICENSE TO LISTEN

NEIL/ANCHOR: In this final story, we look at the privilege of having a radio license: Ours allows us to transmit -- but imagine a time when you needed a license simply to listen. Ed Durrant DD5LP tells us about a ham radio event that recalls that moment in history.

ED: Special event stations are on the air throughout Germany calling QRZ and using the callsign suffix "100FK". Their operation marks 100 years since the establishment of the German Radio Cartel, 10 associations who worked together to train interested radio hobbyists to be able to take the receiver licence tests run by the German Government which allowed them to listen to the few AM broadcast stations who were just starting up. The creation of the "Deutschen Funk Kartell" on the 24th of January, 1924, marked the dawn of early radio in Germany and their efforts raised the number of listeners to a million in just 18 months. The mandated test and licence to simply listen to a radio was the precursor to the amateur radio transmission licence later.

Now it's your turn to listen (this time without a licence to listen) -- from anywhere in the world. These stations will be commemorating the start of radio, one century ago and plan to be on the air through to the 31st of May. For details, visit one hundred EFF KAY dot Dee Eee. (100FK.DE)

Fortunately, hams have the licence not just to listen - but to respond as well.

This is Ed Durrant DD5LP.

Dr. Philip Erickson, W1PJE, New Director of MIT Haystack Observatory

ARRL Member and active radio amateur Dr. Philip Erickson, W1PJE, is the new director of the Massachusetts Institute of Technology (MIT) Haystack Observatory.

The prestigious scientific appointment is the continuation of a radio interest that began in his youth. "I started as a shortwave listener in the mid-1970's as a middle school student. So, in some sense, I was always fooling with antennas in the back yard and trying to understand why signals got to me at different times -- why were they different in the day and at night? What was the farthest place I could hear, or the closest place?"

That early interest led him to an electrical engineering degree and ultimately, a doctorate in space plasma physics from Cornell University that he earned in 1998. Erickson was first licensed as a ham only about 10 years ago, but he says the professional hardware he worked with daily scratched the itch until he could gain amateur privileges. Erickson enjoys homebrewing gear, learning from the foundations of vintage equipment, and using amateur radio in the scientific space. "An intense interest to me that crosses the boundary of what I do professionally and what I do as a radio amateur is what's happening with the HamSCI Collective... Can you use the observations that are already being made in the process of conducting the hobby and extract information from them? It turns out you can -- there's a lot of ionospheric information buried in there," he said.

The mission of the Haystack Observatory is to develop technology for radio science applications, to study the structure of our galaxy and the larger universe, to advance scientific knowledge of our planet and its space

environment, and to contribute to the education of future scientists and engineers, according to MIT. The facility is home to research projects that span spectrum from VLF to 388 GHz.

"We are almost a completely radio and radar observatory... We have a geospace group, which is most-closely associated with ARRL type ideas: the dynamics of the ionosphere and neutral part of the atmosphere, all the way out into near-Earth space. We are an observational group, so we use a bunch of different tools -- radars, radios, sometimes data from satellites, and mostly data from ground-based observations."

Erickson enjoys explaining to the uninitiated that amateur radio is not only still an active hobby, but that it is an important space for discovery. "You learn a lot about many different aspects of technical and science work [in ham radio]," he said.

While his day job keeps him on the edge of radio technology, Erickson is glad to see amateur radio is keeping pace. He says the coding of WSJT-X digital weak-signal modes such as FT8 and WSPR created by Dr. Joe Taylor, K1JT, are more advanced than most hams realize.

"If you were to go to an electrical engineering class, that's what you would see as the edge of how to pack information into a very small bandwidth. I enjoy pointing that out to people."

FCC To Illinois Owner: Pay Up Or Give Up Your Licenses

The owner of an Illinois AM and a Missouri FM may lose his licenses for both over tens of thousands in unpaid regulatory fees to the FCC. Daniel Stratemeyer's debts date back to fiscal years 2010, 2012, and 2013 to a total of \$24,949.70 with interest and penalties.

Stratemeyer owes \$13,121.32 for WRIK-AM in Brookport, IL, and \$11,828.38 for KZMA in Naylor, MO. The FCC has directed him to either pay the overdue amounts or provide a valid reason for their waiver or deferment within 60 days. In case of a hearing, Stratemeyer bears the burden of proof and may be responsible for hearing costs if not substantially prevailing.

Additional charges will continue to accrue on these debts until they are paid in full. Late payments incur a penalty of 25 percent of the unpaid fee.

The FCC had previously transferred these debts to the United States Department of Treasury for collection, but they were returned to the FCC for further action. An overpayment of \$2,613.03 by Stratemeyer, including Treasury fees, will be applied to the debt upon his request.

Radio pioneers: the enduring role of 'amateurs' in radio astronomy

In the latest Physics World Stories podcast, astrophysicist Emma Chapman is in conversation with host Andrew Glester about the history of radio astronomy. It's a field that has always maintained a do-it-yourself ethic, with valuable contributions from people outside the established academic community.

Chapman, an astrophysicist at the University of Nottingham in the UK is the author of the popular-science book *First Light: Switching on Stars at the Dawn of Time*. Alongside her research, Chapman regularly visits amateur radio astronomy clubs and admires the technical expertise she encounters among members.

Cold War boom

- Using much of the same technology as radar, radio astronomy evolved rapidly in the post-war period and took on strategic importance during the Space Race. Indeed, the Lovell Telescope at the Jodrell Bank observatory in northern England was the only facility in the Western world that could track Sputnik 1, launched by the Soviet Union in 1957.

Dear Friends of NEAR-Fest!

Our Spring 2024 hamfest, NEAR-Fest XXXV, will be held FOR TWO FULL DAYS, on Thursday April 25th and Friday April 26th 2024. There will be no hamfest activity on Saturday due to an unfortunate scheduling conflict with the Deerfield Fairgrounds. We had originally announced that the event would take place only on Friday but due to popular demand and the cooperation of the Deerfield Fair Association we are pleased to announce this new full two-day schedule.

Our 2024 Fall NEAR-Fest XXXVI is scheduled for October 11th and 12th and will be the same as always for the past eighteen years, on Friday and Saturday.

The gates will open on Thursday morning at 7:00 AM for PREPAID TICKET HOLDERS ONLY so you might want to buy your tickets online well in advance starting February 1st 2024 on our Web site, www.near-fest.com, or in March at the Ham Radio Outlet store in Salem NH and at Ross Hochstrasser's Clock Shop in Whitman MA and get your favorite spot. NEAR-Fest XXXV will end at 3:00 PM on Friday.

Prepaid ticket holders will line up and enter via Gate C as we did in the Fall. They MUST have ALL of their needed tickets and inside parking passes or they will be sent to Gate F. This includes all Campers, RVs, tents, who MUST also have their overnight camping passes as there will be NO tickets or passes sold at Gate C. Anyone needing to buy tickets or parking passes will go to Gate F and will be admitted starting at 8:00AM. Once the line has entered at Gate C it will close and all others entering the grounds will proceed to Gate F.

For this event only admission per person is \$10.00 whether you buy your ticket online or in advance or at the gate. Overnight parking and tent passes are \$15.00 regardless of whether you plug into an electric outlet or not. Campers, RVs and overnight stayers will go directly into the Fairgrounds as we will not be using the campgrounds this time. The cost of the pass for RVs, Campers, Motorhomes, etc, is \$30.00. All vehicles that remain in the Fairgrounds overnight (after 9:00 PM) will require an overnight parking pass in addition to an inside parking pass for Friday.

Everyone over 21 will need an admission ticket except unlicensed spouses, active duty military, full-time students (with ID) and other valid pass holders.

If you buy something big and heavy in the flea market one of our volunteer staff members will be glad to transport it and you to your vehicle at no charge as we have been doing for many years. As always inside parking for disabled persons is free of charge and they may use a single person ?mobility device? as well. NEAR-Fest reserves the right to limit the use of golf carts and ?other power driven mobility devices? due to safety concerns and potential liability issues.

Please visit our Web site, www.near-fest.com, or our Facebook page, NearFest NH for any further updates. We apologize for any inconvenience that this modified version of NEAR-Fest may have caused but it is only for this time. We appreciate your indulgence and understanding.

See you at Deerfield!

73,

Mister Mike, W1RC

PS: We have some really good door prizes this time, like two Yaesu FT-891 mobile HF transceivers, one on Thursday and one on Friday. Stay tuned here for more details.

Meet the (ham) company that sells your lost airplane luggage

If you've ever permanently lost a checked bag, your stuff probably ended up for sale at a store in Scottsboro, Alabama.

Imagine this: An airline loses your checked bag. After an extensive search, customer support comes up empty-handed. They compensate you and life goes on.

But life goes on for your suitcase, too. Written off as "unclaimed," it sits in a musty collection depot for 3 months. Eventually, the airline sells it — along with hundreds of other lost suitcases and cargo shipments — to a private company, sight unseen.

The new owner cracks the lock, sifts through your former possessions, and marks them for sale.

A few days later, a retired mechanic named Charlie buys your grandfather's watch for \$150. A 19-year-old line cook acquires your Beats headphones. And a nurse from Florida becomes the proud new owner of the scarf your mom knitted you for Christmas.

This is the bizarre secondary market for lost luggage.

Every year, 4.3B bags are checked by airlines around the world. Around 25m of them (5.7 per 1k bags checked) end up lost or misdirected. The 0.03% of bags that are still not reunited with their owners after 90 days are sold by the airline.

Chances are, they are purchased by a company called Unclaimed Baggage.

Nestled in the small town of Scottsboro, Alabama (pop: 14.7k), Unclaimed Baggage holds the distinction of being "the nation's only retailer of lost luggage." Its massive 40k-sq-ft warehouse holds thousands of treasures lost in transit, ranging from rare instruments to monogrammed engagement rings.



Every now and then, a piece of luggage contains something truly extraordinary, like a suit of armor, an Egyptian artifact, or a camera used in NASA's Space Shuttle program.

What are the ethics of reselling travelers' intimate items? How does the process work? And how did one company come to monopolize this niche market?

The story begins 50 years ago

Back in 1970, a man named Hugo Doyle Owens was at a crossroads.

Born and raised in Scottsboro, Owens had served in the Korean War and returned to his hometown to sell insurance. Between shifts, he spent every waking hour by his ham radio, using radio frequency spectrum to communicate to friends and strangers. At 39, he was restless and looking for his next adventure.

One day, through the radio chatter, he learned that a bus company in Washington, DC, had an enormous stack of unclaimed luggage it was looking to get rid of.

In those days, unclaimed bags were often thrown away or auctioned off to local junk shops. Few saw value in travelers' lost wares. But to Owens, the suitcases — and the intrigue of their contents — were a perfect foundation to build a business on.

So, he borrowed \$300 (~\$2k in 2020 dollars) from his father-in-law and purchased the whole lot.

Doyle Owens with his ham radio, c. 1960s (via Unclaimed Baggage)

On the edge of town, Owens set up an informal storefront, crafted a sign (“Unclaimed Baggage”) by the door, and, with the help of his wife and 2 sons, splayed out his acquired items on card tables. He ran a small ad in the local paper, informing Jackson County deal-seekers of his new venture.

In less than 24 hours, he sold out of inventory and pocketed a tidy profit.

The novelty of sifting through lost luggage soon spread by word-of-mouth and Owen's repeated the process. His boss eventually gave him an ultimatum: Sell insurance, or sell baggage. He quit and set out to turn his side hustle into a full-time job.

By 1978, Owens had struck deals to buy luggage from Eastern Airlines, National Airlines, and Air Florida (now defunct). In constant transit between DC, Miami, Cleveland, and Dallas, he was soon acquiring 3k pieces of luggage per month, with help from a staff of 6 people.

“We never know what's in those suitcases until we open them,” he told the AP that year. “It's like buying a pig in a poke.”

A man marks suitcases at Sydney International Airport in 1985 (Peter Morris/Fairfax Media via Getty Images)

Even the most macabre of items seemed to intrigue his customers: A marble tombstone inscribed with a name and a date of death was purchased by a gentleman who made it into a coffee table. An Amazonian shrunken head (found in a suitcase in the pre-TSA days) found a home with a doctor in Birmingham.

Over the years, the business expanded — largely thanks to a number of secretive, exclusive deals Owens inked with major airlines, hospitality groups, and cargo carriers.

By the time he died in 2016, he'd received 3 keys from 3 different Scottsboro mayors. Everyone in town knew his name. And his one-of-a-kind business had become an internationally recognized tourist destination.

Life at America's only lost luggage store

Today's Unclaimed Baggage is a far cry from the card tables and backroom bus deals of the past.

Since taking over the business in 1995, Owens' son, Bryan, has expanded the store into a 50k-square-foot behemoth. Before COVID, thousands of pieces of luggage — up to 7k unique items — were flowing through the doors every day. The store's dedicated laundry facility, used to clean 70k clothing items per month, is the largest in Alabama.

Last year, more than 1m customers from all over the world flocked to the small town 140 miles northwest of Atlanta to see what kinds of treasures they could forage.

Top: a customer checks out shoes at the Unclaimed Baggage store in Scottsboro, Alabama; bottom: crowds browse the expansive women's clothing section (Unclaimed Baggage)

In the last decade, airlines have invested heavily in RFID chips and central monitoring systems to reduce lost luggage. This isn't just to keep customers happy: The cost of hunting down lost luggage sets airlines back \$2.1B per year in overhead costs. When they can't find your bag, they are liable to compensate you for your loss (up to \$3,500 for domestic flights and \$1,780 for international).

Selling off unclaimed bags allows them to recoup a small portion of these losses.

Unclaimed Baggage purchases not only lost checked bags, but items forgotten in overhead bins and the front flap of the chair (reading glasses are common). They also buy tons of oversized cargo and freight — surfboards, skis, wheelchairs, rugs.

The company is extremely secretive about its “salvage agreements” with airlines and won’t divulge who it partners with, or how much it pays for luggage. But usually, it will fork over a set price per bag or by pay by weight.

Like storage units, these purchases are “blind:” they never know what’s tinside.

When the luggage arrives at the store’s sorting facility by tractor trailer, the company’s 150+ employees follow a procedure:

Items are sorted into 3 general categories: a) resell, b) repurpose/donate, or c) recycle/throw away. Clothing and jewelry are cleaned; electronics are wiped of personal data. Resellable items are appraised for price and authenticated by category experts. The bags have already been screened at the airport, but things often slip through the cracks. Anything of an “illegal nature” (drugs, weapons, unmarked cash) is immediately turned over to the local authorities under lock and key.

Anything deemed to not be family-friendly (sex toys, pornography) is withheld.

Top: a man browses through hundreds of headphones; bottom: watches — some of which are expensive and rare finds — line the glass cases (Unclaimed Baggage)

“There are a lot of frogs before you get to the prince,” Brenda Cantrell, the store’s director, says of the sorting process. “We’re very skilled at getting rid of the frogs. It’s a tedious process that we’ve perfected over the past 50 years.”

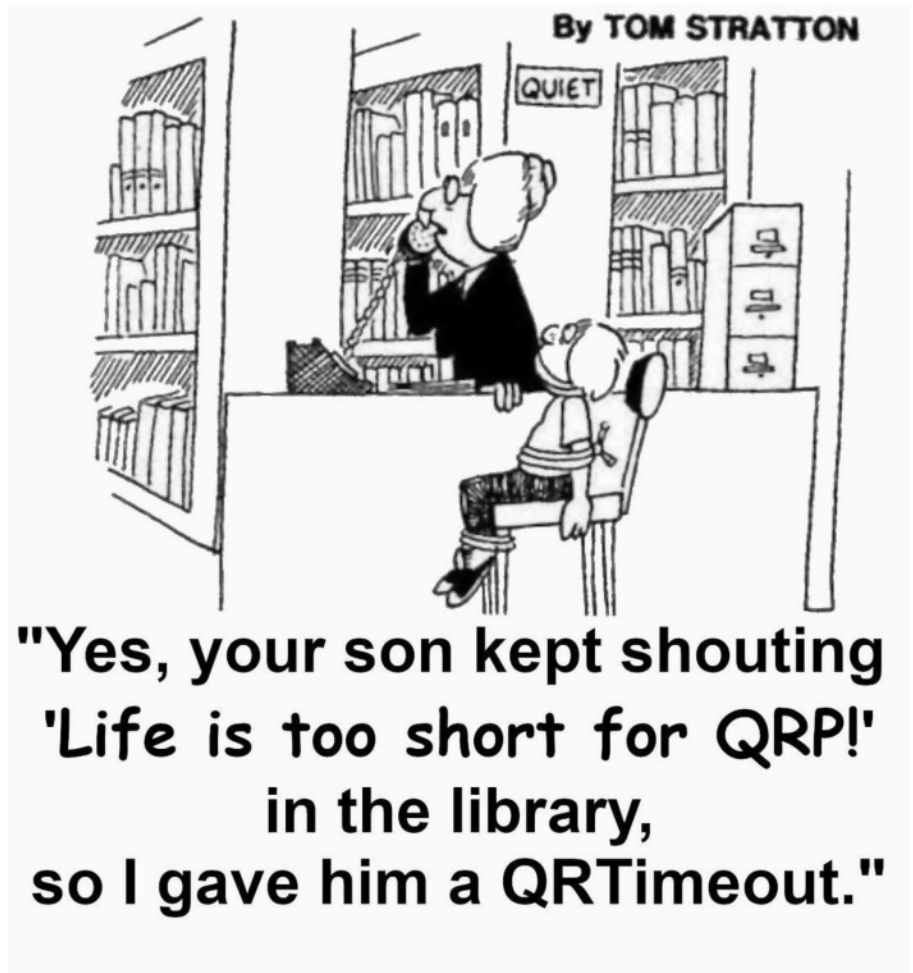
In the end, only about one-third of the items in baggage end up for sale — usually marked down anywhere from 20-80% off list price.

An additional one-third is donated to dozens of charities: wheelchairs go to prisons and veteran groups; strollers go to teen pregnancy centers; some clothes go to homeless shelters.

Weird and wild finds

Cantrell estimates that 60% of the items found in suitcases are clothes or accessories. Headphones, e-readers, and neck pillows are also in abundance.

Perhaps most unfortunately, the store sees a reliable stream of wedding dresses, wedding bands, and engagement rings. (“We don’t know whether those people were going to a wedding or coming home from one,” says Cantrell.)



FOR SALE

- ICOM-7300 for sale; perfect condition, no scratches anywhere, smoke free. Includes power cord, mike, manual, etc. I do not have the original box. Plug-in mod (no solder) allows for spectrum to be displayed. \$800. Email Larry W1MDK at W1MDK@yahoo.com



REMEMBERING Robert “Bob” Quinn WV1A

CAARA member Robert P. Quinn WV1A, 88, of Gloucester, husband of Sheila (Gove) Quinn, passed away on Sunday evening, December 12, 2021, at his home, after a battle with cancer. He was surrounded by his family.

Bob was active in the community, he volunteered for the local cable for 14 years, was a member of the Lyceum Committee and was active with the Rose Baker Center. He belonged to the Lions Club, Cape Ann Sportsmans Club and the local Ham Radio Club. He had a pilots license, owned his own plane, and was an avid sailor. Bob was a veteran of the United States Air Force, achieving the rank of Staff Sergeant. His biggest enjoyment was spending time with his kids, grandchildren and great grandchildren.

Bob ran the CAARA VE Team for years as well as being the club handyman. I remember putting up the first beam with Bob at the Club, no boom truck, just the two of us manhandling the beam up the tower. We also installed the antennas for the repeater on top of the the Applied Engineering building and used them until we moved over to the Cell Tower. Bob was a licensed gun dealer, machinist, and created scrimshaw jewelry....truly an amazing guy. Jon-K1TP



WE NEED YOU!

It's that time of the year again to pay your CAARA annual dues. You should have receive an invoice and you can pay by Paypal or the old school way, a check made out to CAARA and sent to 6 Stanwood Street, Gloucester, MA 01930

The best way is to attend the next meeting and pay your dues in person, it should be a festive meeting!

The Board of Directors meeting starts at 11 am and ends at noon. The lunch at 12 noon followed by the member meeting & social. Feel free to work any of the club stations and ask any questions you may have.