CAARA NEWS

Cape Ann Amateur Radio Association
Gloucester, Massachusetts
NOVEMBER- 2025 EDITION

PRESIDENT'S COLUMN
By Brandon- NQ1W

Dear CAARA Members,

As we move into the month of November, I want to take this opportunity to update you on club activities and express my gratitude for your continued support of the Association and your dedication to amateur radio. We have had a very busy October and November is shaping up to be just as exciting.

Club Operations and Budget

I want to extend a sincere thank you to everyone who turned out in October to vote and approve the budget for the upcoming year. Your participation in this process is vital to the long-term sustainability of our association. A key item passed was the formal addition of ongoing funding for the repeater maintenance budget, which ensures the reliability of our critical on-air assets. Even though we are keeping the remainder of the budget similar to previous years, the addition of a specific repeater budget should help ease the pain of funding the inevitable repeater repairs when they are required.

Communication and Online Assets

We are off to a great start with the new Digital Assets and Communication Committee. My thanks go to Director Neil Weisenfeld KC1MYZ for chairing this important committee. We look forward to realizing improved communication and online presence in the future. This effort will be a priority for our club in the next year as we seek to better serve and connect our membership.

CAARA Wins Accessibility Improvement Grant

I am also pleased to announce that CAARA has received a grant from the City of Gloucester's Community Preservation Committee (CPC). This generous award will enable the club to make a significant investment in improving access to the clubhouse for members with mobility issues. This was a substantial undertaking, and I want to formally recognize Director Thomas Stephenson AA1TS and Treasurer Jon Cunningham K1TP for their hard work and dedication throughout the grant application process. We will be sharing more detailed plans for the access improvements in the weeks and months ahead.

Community Service and Education

We recently had the pleasure of hosting Wenham Troop 28 of Scouting America to participate in the 2025 Jamboree on the Air (JOTA). Scouts from the troop were able to successfully make contacts and fulfill all the requirements necessary to earn an event patch and, notably, their Radio merit badges. These badges will be presented at their upcoming winter honors event. This achievement was made possible through the resources of our club and the time and effort of our volunteer members.

Upcoming Events and Net Activity

Please remember to mark your calendar for our next meeting and the presentation by our special guest speaker, Curatorial Director John Leysath of the Hammond Castle Museum. He will be presenting a talk on John Hays Hammond Jr and the work of the Hammond Castle Museum in Gloucester.

Finally, I want to thank all the CAARA members who have been helping to keep our own club nets active and staffed. Additionally, my thanks go to all members who have been reaching out to help and participate in the Radioactive Cape Ann's weekly simplex fishnets on the 2m and 6m bands. This activity is essential for developing and maintaining our skills in emergency readiness, particularly for scenarios where repeater or other communication assets are not available. The

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CAARA Newsletter
Cape Ann Amateur Radio Association
6 Stanwood Street
Gloucester, MA 01930

CAARA Newsletter is a monthly publication of the Cape Ann Amateur Radio Association (CAARA).

Jon Cunningham- K1TP Editor
Dean Burgess- KB1PGH Reporter

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 radio clubs that has its own clubhouse. Located at 6 Stanwood 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 every Wednesday from 10- Noon for CAARA members and interested parties to stop by and socialize, as well as use the extensive collection of ham radio gear.

This newsletter is published under the auspices of the Cape Ann Amateur Radio Association (CAARA), However, all content is the work of individual contributors and may contain ideas, opinions or views not necessarily shared or supported by the CAARA Board of Directors or the membership.

participation has been encouraging, informative, and entertaining for all involved.

I wish everyone a happy fall in radio communications. Please stay tuned for exciting developments concerning the celebration of CAARA's fiftieth year of radio community and volunteer radio service!

73,

Brandon Hockle, NQ1W

President, Cape Ann Amateur Radio Association

THE EMCOMM MINUTE

By Dean- KB1PGH

So lets say you live in a strict HOA or a apartment complex or even a house with a situation where you can`t set up any large ham radio antennas. Well there`s no need to let that stop you from enjoying the ham radio hobby. I myself live in a home where I can`t set up a good HF antenna and there is too much RFI and EMI due to all the local industry and high voltage power lines so I have had to adapt by operating portable for HF. So it is still possible to operate HF and you can easily do that by operating in a mobile environment.

A quick mobile HF set up can also be used for emergency communications as well. So what I did is buy a few hamsticks that will work 2,6,10 and 20 meters and I can swap them out on a mag mount on my cat to whatever band i want to operate. These hamsticks have worked out great for me. All I've had to do is drive to a high point and I have had no problem working the 2 meter and 6 meter local weekly fishnets with good audio reports. Plus I have worked 20 meters to South America on a hamstick no problem.

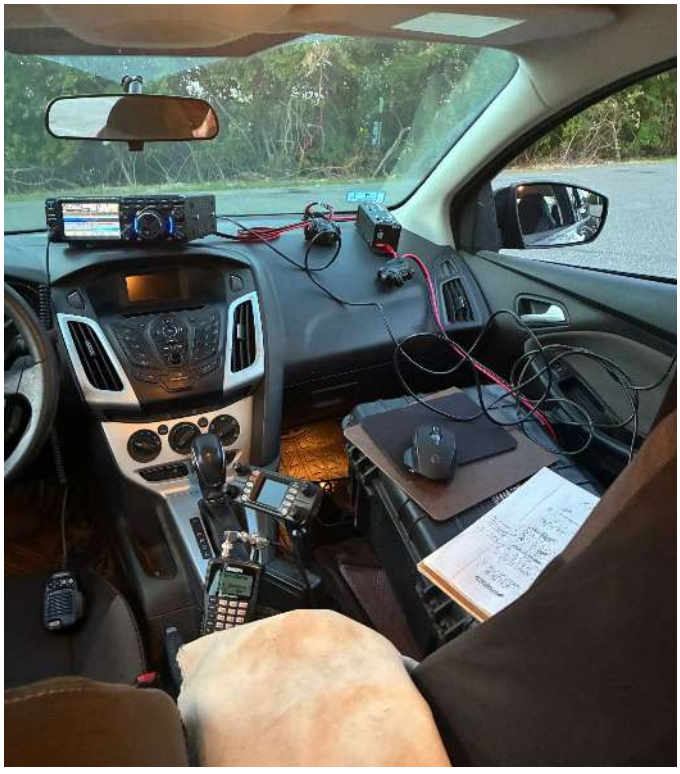
So as you can see in the photo my quick HF mobile set up contains a 100 amp hour deep cycle battery that you can just barely see on the passenger side floor. The battery then goes to a west mountain radio battery booster to bring the voltage to a constant 13.8 volts. Then that feeds power my Yaesu FT 710 .The FT 710 is then plugged into the mag mount on the very top of my car through a cracked window. As you can see in the photo that I have a clip board to operate the mouse for the FT 710 and a notebook to write down the QSO`s . If you look I also can operate UHF and VHF with the Yaesu FTM 300 DR and monitor public safety transmissions with the Uniden Bearcat P 325 P2 handheld digital scanner. So at least with this set up you can operate 6 through 20 meters and VHF/UHF at the same time and it only take 10 minutes to set up. And you can help your chances to QSO`s by driving to highest places and other places where no homes or businesses are around so you can minimize electrical noise. So it may not be the biggest antenna set up around at least this gets you on the air and radio active. One last idea is to look into HF loop antennas as well. While they may be a compromise antenna at least they work.

One other set up I have is a HT and scanner combo which I use for public service activities, emergency communications and as you can see in the photo I take it out on my front porch during the warmer weather and I can operate UHF/VHF and monitor public safety frequencies as well. So as you can see in the photo I have a Yaesu FT 5 DR dual band digital HT as well as a Uniden Bearcat P 325 P2 digital scanner. I have these both stored in a Harbor Freight Apache case so I can safely take them to wherever I want to operate. I highly recommend the Apache cases as the price is reasonable and they come in different sizes. Considering the Yaesu HT and the Uniden scanner cost over $700 combined so as an investment I want them to be safe and last a long time.

So by keeping them in the Apache case I also have a couple back up spare batteries and charger for the HT and for the scanner as well as the operating manuals. I also have room for any connecting cables and better antennas and a couple of cell phone stands I can put the radios on if need be. I also have a handheld microphone and a Nebo flashlight. Even though you can`t see it I have a small Anker power bank to recharge my cell phone if need be out in the field.

So as you can see all is not lost in ham radio if your living situation is less that ideal and even if you do have a home set up this gives you another option to operate out in the field. So moving on to the next topic. Since it is November this is my friendly reminder to you if you have a outdoor antenna set up. We have one month left before the weather really turns cold and snowy so have you checked your outdoor antenna cables and connectors and antennas?

When was the last time you gave them a good look through to make sure you coax cable is not split or bent or cracked? How about the coax connection to the antenna? Is the weatherproof sealant still good? So now is the time to check it all out before there is a foot of snow on the ground and its 10 degrees out and all of a sudden your SWR goes sky high because moisture got inside the coax or you antenna parts fell apart in s snow storm and now you have to wait until spring. So that`s it for this month and 73



Local Ham Radio Operators Help Keep Thruway Safe During Halloween

It's almost Halloween — and that means it's time for the Pumpkin Patrol!

Amateur radio operators — or "Hams," as they like to be called — from the Drumlins Amateur Radio Club in Wayne County and the Skenoh Island Club in Ontario County are teaming up once again with State Police Troop T for the 49th year of this Halloween tradition. These volunteers will be stationed on bridges over the Thruway tonight and Friday night, keeping an eye out for any tricks that could turn dangerous — like vandalism or debris being thrown onto cars. They stay in touch with a central coordinator, who can alert 911 in seconds if anything suspicious pops up.

Drumlins Club President Dave Taylor says Hams all across New York will be out there helping to keep drivers safe — and it's worked: there hasn't been a single serious vandalism incident on the Thruway since the Pumpkin Patrol began nearly five decades ago.

New Book Release: Small Antennas for Small Spaces 3rd Edition

Amateur radio operators love antennas — the bigger the better — but if you don't have acres of property to erect the antenna of your dreams, it doesn't mean you're effectively off the air. Ham radio is still yours to enjoy. It's just a matter of making the right antenna choices to improve your chances of success.

The third edition of ARRL's Small Antennas for Small Spaces by Steve Ford, WB8IMY, is a valuable resource for amateurs who live in apartments, condominiums, or houses on small lots. Filled with practical advice, this book guides you to finding the right antenna design to fit the space you have available.

You'll find ideas and projects that will get you on the air regardless of where you live!

NEXT CLUB MEETING

Saturday, November 8

11AM Board Meeting
Noon Member Meeting with lunch

Going Mad in the Fall

by Curtis- AA3JE

In the fall, I round up all the things with motors, line them up, and change the oils. There is a tractor, a zero turn mower, a pressure washer, a line trimmer, two cars, a leaf vacuum, a log splitter and a few zerk fittings to grease. This used to be easy. 10W-30 in summer, 10W-20 in winter. Then the world went mad.

It started with 5W20, but soon they added 0W20, then 0W8, then 0W30, then 5W30, then DEXOS I, DEXOS II, European Formulas, high milage formulas, advanced formulas, synthetics, synthetic blends, Restore and Protect, Advanced Fuel economy, High Protection, High Milage, Super Racing Formulas, the list became endless.

So when I cleaned the garage I found jugs of fifteen different left-over oils, all half empty. All different weights, all different manufacturers, and I was sure mixing them would make bad things happen.

So off to YouTube, and I found out about the oil wars. Self-appointed experts scrounged up Toyotas with 135,000 miles that had never had the oil changed, and applied various oils and additives intended to restore them to factory new. The problem was that after the clouds of smoke dissipated, each one claimed that the compression was restored, the interior of the engine was sparkling clean, and in some cases the oil filter plugged solid with mobilized tar. Of course, each oil and additive maker was saying the alternatives made by someone else would ruin any engine in ten minutes. My favorite was a mix of diesel oil and Magic Mystery Restorer that seized the test engine in ten minutes.

All I knew for sure was that 40w in the log splitter made it impossible to turn over at -10 Fahrenheit. So I guessed how much oil was in each half-empty jug and made my best guess. I was terrified by the warning from Briggs and Straton that over-filling would destroy any of their engines. This is scary, since the new oils are impossible to see on the dipstick.
The latest rumor is that 0W20 was made to meet CAFÉ standards, knowing it increased wear, and nothing lower than 5W-30 should ever be used.

Right now I am reading on how to make a waste oil burner. At least I can heat the house this winter. Failing that I can use it to lubricate the chain on the chain saws. My wife, wiser than I, suggests not looking at YouTube. Certainly not believing it.

Me, I long for the days of 20W in winter and 30W in summer.

The 33cm (902-928MHz) Band – Part 1

(Maurice, N1UV)

Introduction

The 902MHz amateur radio band (sometimes referred to as 33cm, or in communications' circles, the lower 900MHz band) is a lesser-known-to amateurs' portion of the UHF spectrum that is available to Technician and above amateur radio operators here in the US. The band spans 902 – 928MHz and offers plenty of opportunities for experimentation. Many people have compared working on 33cm to the early days of VHF FM voice, as both eras share a common spirit of adapting commercial equipment due to the distinct lack of purpose-built amateur gear.

This article will focus on my experiences with FM voice operations, although other modes—such as P25, mesh networking, amateur television, weak signal, etc.—can also be used in this band.

History and Current Status

The 33cm band was allocated to amateurs on a secondary basis by the FCC in 1985. This secondary basis is behind federal uses (radiolocation which includes RADAR, RFID tracking, etc), ISM Part 18 (Industrial, Scientific, and Medical), and LMS (Location and Monitoring Service). Amateur users must accept, and not cause harmful interference to users in these services. It is highly unlikely that amateur operators will interfere with ISM users, as those systems are generally non-communication transmitters used for applications such as RF heating.

The Navy also uses the 33cm band for RADAR aboard ships, as the propagation characteristics of the band are ideal for detecting fast-moving objects/targets over water (e.g., sea-skimmers).

By far the greatest use of the 902MHz band is by Part 15 unlicensed devices. Everything from alarm monitoring, smart thermostats, cordless phones, LoRa devices (eg, Meshtastic), IoT devices, highway tolling, industrial and residential automation, utility smart meters, etc use this band. Millions of devices actually! In fact, the FCC has adopted policies that promote a holistic approach to the sharing of the band among various services. For example, LMS licensees were only granted access to this part of the spectrum after demonstrating that interference with Part 15 devices would be minimal. As an aside, Chirp Spread Spectrum (CSS) is used extensively here.

At the time of writing this article, a petition to the FCC has been filed by a company called NextNav (an LMS provider) who seeks to fundamentally change the use of the 902MHz band. In a nutshell, NextNav wants to reconfigure the band so that it is essentially granted exclusive access to 15MHz of spectrum (902-907MHz and 918-928MHz), thus enabling it to replace the LMS service with high power 5G cellular and other related positioning services. Based on expert testimony contained in filings to the FCC, this will likely have a disastrous effect on all current users of this spectrum. The ARRL, as well as what appears to be the majority of all users and industry stakeholders, strongly oppose this petition. Hopefully, common sense will prevail!

In New England

Regarding 902MHz use here in New England—particularly in Eastern Massachusetts—as mentioned above, I'll limit my notes to FM voice use on the band.

The New England Spectrum Management Council (NESMC) has a published band plan that essentially sets aside most of 902.xMHz for repeater inputs, and 927.xMHz for repeater outputs, resulting in a 25MHz repeater split. There were some legacy repeaters in the middle of the band using a 12MHz split but as of this time, they are either QRT or have converted over to the 25MHz split.

Note that some repeaters use a slightly different frequency split because their input (uplink) frequency has been moved to avoid interference from ISM devices and other sources.
Simplex is usually conducted on 927.5MHz (primary), and 927.6MHz (secondary).
Most FM voice operation uses narrowband 2.5kHz deviation (NFM). While not strictly FM operations, there are a number of dual-use repeaters in New England that can switch between FM voice and P25 (Project 25).
Currently, there are no DMR repeaters.

Unfortunately, the use of 33cm here in New England isn't as high as it should be, despite the number of repeaters in the region. So, please consider giving experimentation on 33cm a shot. It'll be worth it!

Characteristics

Propagation is very similar to what you would expect using the 70cm band, although it is more line-of-sight and you will notice much faster mobile flutter on weaker signals (much like 70cm is faster than 2M).
Multipath propagation (eg, signals bouncing off buildings, etc) is much more pronounced than on 70cm due to the shorter wavelength. This can result in good building penetration.
Antennas are smaller, but cable losses are much higher, so short runs are preferable.

Getting on 902MHz

One thing you won't be able to do is to waltz over to HRO and buy a 902MHz capable radio. With the exception of the now-discontinued Alinco DJ-G29T and transverters from companies like Downeast Microwave (used mainly for weak signal work), most radios will be ex-commercial Motorola or Kenwood equipment.

Unlike typical amateur VHF/UHF radios, ex-commercial equipment must be programmed before use, ie, there are no VFOs or direct frequency entry keypads.
There are a number of websites (eg, BatLabs.com and KW902.com, among others) that describe which radios can be made to work on 902MHz (with or without modifications) as well as how to program these ex-commercial radios. Please note that, with a small number of exceptions, most programming will involve hex editing of some files in order to fool the programming software and/or radio into working in the 902-928MHz band.
This is mainly because the designed frequency range for a typical 900MHz commercial radio is intended for operation in (among other ranges) the 896-902MHz (usually transmit) and 935-941MHz (usually transmit and receive) Land Mobile Radio (LMR) band.

There are a number of 33cm repeaters in the New England area. These can be found on various websites like nerepeaters.com – sample extract below:

Data Sorting — New England Repeater Database - 902 MHz as of October 5, 2025 05:00Z — Column Explanations

FREQ	OFS	ST	CITY	CALL	MODE	CODE IN	CODE OUT	STATUS	COUNTY	VOIP	LINKS/COMMENTS	Last Update
927.8500	*	MA	Falmouth	K1RK	NFM	88.5	88.5		Barnstable	A 60635 E W1ATD-L 249961 I 9125	*Input: 902.0625 (-25.7875 MHz), NEAR-900 Net	2025/08/25
927.8625	-	MA	Woburn	KB1KVD	NFM P25	D411 NAC671	D411 NAC671		Middlesex		HC	2024/07/18
927.8750	-	MA	Mt. Greylock	K1FFK	NFM	100.0	100.0		Berkshire			2014/01/15
927.8875	-	MA	Ashland	N3HFK	NFM	131.8	100.0*	Local	Middlesex	A 60635 E W1ATD-L 249961 I 9125	NEAR-900 Net	2025/08/25

Terminology

Since we'll be focusing on ex-commercial radios from this point forward, some of the terminology used may differ from what you've used or heard in amateur radio. You may encounter these terms when searching for or programming radios. Here are some common examples from Motorola and Kenwood:

Codeplug: the data file generated/maintained by the programming software and which is loaded into the radio

Direct: Simplex

Talk Around or T/A: Simplex

Channel: a specific channel programmed with a given frequency

Zone: a specific bank of channels

RSS: Radio Service Software (usually DOS based)

CPS: Customer Programming Software (usually Windows based)

System: a specific bank of channels

Group: a specific radio channel frequency

RIB: a Radio Interface Box (ie, hooks up your computer to the radio)

RSSI: Radio Signal Strength Indicator (usually measured in dBm where the more-negative the number, the weaker the signal)

Conventional: where users select a single channel for conversations (ie, typical amateur use)

Trunking: a system where automated logic is used to select a clear channel from a pool of channels to reduce the chance of waiting for a clear frequency (not used in amateur circles)

HearClear: Motorola HearClear is a technology that improves audio clarity in 900MHz radios by reducing noise and enhancing speech quality.

HearClear

If you look at the 33cm repeater list in nerepeaters.com, you will notice that some entries are annotated with "HC". This stands for HearClear.

Motorola HearClear is a proprietary audio enhancement technology designed for 900MHz band radios. It combines companding—to compensate for narrow channel bandwidth (i.e., poorer signal-to-noise ratio)—with "Flutter Fighter," which dynamically reduces noise bursts caused by Rayleigh fading (e.g., mobile flutter). Together, these features improve overall speech clarity and reduce background interference. HearClear audio can best be described as thin, as it prioritizes intelligibility over tonal richness. When a repeater is using HearClear, all radios must have HearClear enabled. Not doing so will result in a very muddy and "weird"-sounding audio.

Next Month

Next month, in Part 2, I'll be covering topics such as available surplus hardware, recommended software, and some antenna suggestions. Stay tuned!

Hurricane Melissa Update

Hurricane Melissa, now a Category 1 storm, is expected to approach the island of Bermuda late Thursday afternoon.

The Hurricane Watch Net ended operations Wednesday night and are now at an Alert Level 3 standby mode. They will continue to closely monitor Melissa's track, forward speed, and intensity. Should conditions warrant, they will resume operations for a potential threat to Bermuda on Friday. The VoIP net is also in standby mode.

Amateur radio operators were busy on Wednesday monitoring the hurricane nets and relaying messages throughout the day.

The National Weather Service is expected to issue a new forecast at 8:00 AM Thursday.

Updated Wednesday, October 29, 2025 @ 5 AM EDT

Hurricane Melissa is moving over Eastern Cuba after making landfall late last night. Now a Category 2 Hurricane, it's bringing damaging winds, flooding rains, and dangerous storm surge. At 5:00 AM EDT, Melissa is expected to move across the southeastern or central Bahamas later today, and pass near or to the west of Bermuda late Thursday and Thursday night with winds now at 115 miles per hour.

WX4NHC, amateur radio station at the National Hurricane Center, remains active and will be on-the-air on the Hurricane Watch Net frequency 14.325 MHz most of the time and 7.268 MHz depending on propagation. The VoIP Hurricane Net was activated on Monday and is expected to remain active until late Wednesday evening. The National Emergency Network of the Cuban Radio Amateur Federation (REN-FRC in Spanish) is also active through station CO9DCN, from the National Civil Defense Staff. Cuba.

Amateur radio operators are continuing to monitor the weather nets and are relaying information, as necessary.

ARRL will have updates as the situation develops and Hurricane Melissa continues its path northwestward

Operation HELO, Triad HAM radio operator step up to help Jamaica after Hurricane Melissa tears through island

STOKESDALE, N.C. — As Hurricane Melissa pounds Jamaica with dangerous winds and torrential rain, some in the Piedmont Triad are already stepping up to help from hundreds of miles away.

While most people steer clear of disasters, groups like Operation HELO move toward them. The rapid-response relief organization was created in the aftermath of Hurricane Helene, and its leaders say Melissa is bringing back familiar concerns.

"Unfortunately, there are some similarities with Hurricane Helene and Hurricane Melissa," Eric Robinson, executive director of Operation HELO, told WFMY News 2.

Melissa is expected to bring not only damaging winds, but extreme rainfall to the island nation.

"I think they're calling from anywhere from 30 to 40 inches, and that's what the mountains of North Carolina saw," Robinson said.

Robinson said Jamaica's mountainous terrain could create similar hazards to what western North Carolina experienced during Helene.

“They're gonna see a lot of flooding, a lot of flash flooding, a lot of landslides like we saw during Helene,” he said.

During Helene, Operation HELO used helicopters to reach stranded communities in the mountains. But this time,

Robinson said getting a helicopter into Jamaica is too risky. Instead, the organization will help coordinate aid from the U.S. once airports reopen, sending supplies by ship or plane.

“Obviously, during Hurricane Helene, they were our neighbors, but when we start looking at it from a global aspect, these are also our neighbors as well,” Robinson said.

Others in the Triad are also helping from afar. Mark Nadel of Stokesdale operates a ham radio from his home, allowing him to connect with people in Jamaica as other methods of communication fail across the island.

“I have my own generators, I have my own antennas, I have my own equipment. In the event power goes out, I don't need anybody else to be able to communicate,” Nadel said. “So, and that's the same thing that's going on down in Jamaica right now, most of the power is out but stations that we're talking to have their own generating systems and it doesn't take a whole lot to run it.”

On Wednesday, he spoke with the National Weather Service at a Jamaican military substation — helping assess damage and connect people with shelters and hospitals.

“People always want to do something but you can't get there and do it and this gives me the ability to really participate and kind of give back,” Nadel said.

As conditions slowly improve, both men say their work is just beginning. Robinson’s team is preparing to move supplies in as soon as it’s safe, and Nadel hopes to help reconnect families on the island.

Both say that in the worst storms, connection and compassion can make all the difference.

A QUICK LOOK AT OUR NEW BUDGET

Category	2026 Budget	2025 Budget
GROSS INCOME	8,150.00	7,850.00
DONATIONS	4,250.00	4,250.00
DUES	3,000.00	3,000.00
FUNDRAISING	900.00	600.00
MISC INC	0.00	0.00
GROSS EXPENSES	8,150.00	7,850.00
BUILDING & GROUNDS	500.00	500.00
INSURANCE	1,700.00	1,700.00
LEGAL	150.00	150.00
MISC EXP	650.00	650.00
RADIO EQUIPMENT	950.00	650.00
UTILITIES	4,200.00	4,200.00
Net Difference (Balanced Budget if 0.00):	0.00	0.00

CAARA PUBLIC SERVICE- THANKS TO OUR VOLUNTEERS!

Pre-Race Information and Updates: https://sites.google.com/view/caararaces/hom				
Gloucester Police 978-325-5400 Fire 978-325-5300				
Rockport Police 978-546-1212 Fire 978-375-2103				
Around Cape Ann Half Marathon Staffing and Logistics				
	Station Location	**Call sign**	**Name**	**Cell Phone**
NC	Net Control. NCO / NCS	WA1ESU	Fred	[redacted]
S/F	Start/Finish	WA1ESU	Fred	[redacted]
LV	Lead Vehicle / Rover Unit 1	AA1TS	Tom	[redacted]
TV	Trail Vehicle / Rover Unit 2	W1PAG	Paul	[redacted]
CP1	Thatcher Rd. and South St.	K1TP	Jon	[redacted]
	Mile 2* (Rockport)			
CP2	South St. and Lanes Farm Way	N1STJ	Bob	[redacted]
	Mile 4* (Rockport)			
CP3	Granite St. and Curtis St.	W1NHD	Nate	[redacted]
	Mile 6* (Rockport)			
CP4	Langsford St.& Washington St.	KC1WQK	Mike	[redacted]
	Mile 8* (Gloucester)			
CP5	Washington St. and Revere St.	W1CAF	Charles	[redacted]
	Mile 10* (Gloucester)			
CP6	Washington St. & Deacon Farm Ln.	K1KL	Kevin	[redacted]
	Mile 12* (Gloucester)			
*Checkpoint Miles are Approximate, **Use Cross-Streets to Identify Location for**				
Lead Vehicle Copper Lexus RX SUV MA Plate AA1TS RaceJoy ID Lead Car 1111				
Trail Vehicle White Honda Pilot NH Plate W1PAG RaceJoy ID Trail Car 9999				

Some Assembly Required

by Curtis -AA3JE

The people who renovated our house in New Hampshire, the last owners, raised show dogs, so they put up fences all around the property. Very pretty fences (about 1000 linear feet of fences). This was no problem for them as they hired a local to cut the grass. So in addition to cutting the 5 acres of lawn, bumping my poor back all the way on the tractor, I have to weed whack the fence lines. This is painful, but possible as my Mighty Max fifteen-year old weed whacker had plenty of power.

Then one day I pulled the cord and the top of the machine exploded. The top pulled off, and what seemed like fifty feet of tangled recoil spring leaped out and began doing the Macarena down the driveway, accompanied by bits of the recoil starter mechanism. “No Problem” I thought and gathered up all the bits and began reassembly. DO NOT ATTEMPT THIS AT HOME. After several hours of untangling, cramming and prying, I realized that getting it all back in was beyond my skill. So I put it all in a box and went to the nearest Max dealer. To my horror, they were out of business, having sold the business to a container company that made a decent offer and retired to Florida.

Calling Max Corporation was a non-starter. No, they did not have a local dealer anymore. No they did not offer a mail in repair service. Did I want to buy a new one? I said yes, was directed to their website, and found that my model was no longer made, having fallen victim to EPA noise and emission regulations. My old one was a 52 cc four horsepower model, and the biggest they made these days was a 28 cc 1.4 horsepower model. I knew that this would not work (the weeds would just laugh) and started searching. I finally discovered that no one made the old, high-power ones for the US market.

Such is progress.

I finally found out that a company in China made one for use in the far east, where local grasses are really tough, and an importer who was a bit casual about US import requirements. I think they also provide fentanyl, but I am not sure. So I ordered it. It came in a rather small box, and a sticker on the outside saying, “Some assembly required”. I cleared the workbench, opened the box, and discovered it was a “Do It Yourself” assembly kit. There was a manual, written in what might be considered English in China, and a series of photos taken with someone’s cell phone. In bad light, while shaking badly from withdrawal.

Fortunately, there are only so many ways a weed whacker can go together, and to my delight it was one of the very old “backpack” units where the motor assembly is in a shoulder harness, and a heavy cable transfers power to the wand. I was familiar with these from my days on Okinawa in the Navy, forty years ago, where they were called “Habus” and responsible for a series of fascinating injuries to the Marines I took care of.

Four hours later I had it assembled. It started first pull, sounded like a 1940s hot rod with straight pipes, and came with a line head, a brush head and a really evil looking circular saw. Thankfully I have chainsaw chaps, armored gloves, and a helmet. When my back feels better I look forward to seeing if it works as good as it sounds.

My wife says I need to look for some battery powered units, but they will never get the job done. Meanwhile she is looking at local lawn services. Such is life.

CLUB ACTIVITIES

Brandon- NQ1W teaching the cub scouts about ham radio at the club on Saturday morning.

HURRICANE MELISSA SPURS HAM ACTIVATIONS

STEPHEN/ANCHOR: As Newsline went to production, Hurricane Melissa was still a developing story in the Caribbean. The Category 5 storm had already done catastrophic damage to parts of Jamaica as it continued its rampage through the region. The Hurricane Watch Net was active on 14.325 MHz and 7.268 MHz and advising all other traffic to avoid those frequencies The VOIPWX.net was monitoring calls for help and Skywarn weather reports from impacted areas. Many reports came from the Caribbean Digital Amateur Radio Service and other amateur radio stations who relayed information from Jamaican News Radio as well as local ham stations. Newsline will be following amateur response to the storm and its aftermath.

REPORT: LITTLE OR NO SECURITY FOR SATELLITES' SENSITIVE TRANSMISSIONS

STEPHEN/ANCHOR: Meanwhile, teams at two major US universities have released a report revealing dangerous security issues with some sensitive satellite transmissions. We have details from Kent Peterson KCØDGY.

KENT: Using a commercially available satellite dish, a team of researchers at two US universities confirmed the lack of security protecting the at-times sensitive content being broadcast from satellites. The teams at the University of Maryland and UC San Diego said that they easily tapped into geostationary satellite transponders sending private consumer data, internal corporate communications, voice and SMS transmissions from mobile phones and - perhaps most disturbing - military transmissions that were particularly sensitive.

The research teams released their findings on the 13th of October and the contents were carried by the website Wired. They said that the satellites' extreme vulnerability was discovered with the use of nothing more than off-the-shelf radio equipment that is widely available on the market.

The teams concluded that at least half of the geostationary satellites carrying such data do not have effective encryption in place, leaving the contents of the transmissions accessible to hackers and others with the ability to monitor them.

According to the report, the researchers alerted many of the satellite operators after the discoveries were made. They wrote, in their report: [quote] "In several cases, the responsible party told us that they had deployed a remedy." [Endquote] They included WalMart, T-Mobile and KPU. They note that remediation was still going on for other affected parties and, as such, the team did not identify them in the report. In the meantime, they said, end users are able to encrypt their network traffic via a Virtual Private Network and, on mobile devices, the use of end-to-end encrypted apps

LATVIAN HAMS CELEBRATE 100 YEARS OF BROADCAST RADIO

STEPHEN/ANCHOR: The broadcast and the amateur radio worlds have often overlapped, especially sharing many of the same people behind the microphone or behind the scenes. In Latvia, hams are taking part in a celebration that marks 100 years of that nation's first radio station. Jeremy Boot G4NJH has those details.

JEREMY: The hams who are calling CQ as YL100LR until the 2nd of November are sharing the story of Rigas Radiofons, which went on the air in 1925 with a 2 kW transmitter, two 45-meter-high antenna towers and equipment purchased from France. From its studio inside a post office building in Riga city, the state-owned station began its life on the air with a two-hour broadcast that included the Puccini opera, "Madame Butterfly" and a speech by Minister of Transport J. Pauluks.

The evolution of radio broadcasting in Latvia is closely tied to that of amateur radio there: When the Latvian Radio Society helped create the Radio Subscribers Law, they created a category for radio experimenters who eventually became the nation's hams. From the start, hams were big supporters of the newly created broadcast station. In fact, by 1926, a spare transmitter at the station was being used for ham radio communications. The relationship remains strong to this day and many amateur radio operators in Latvia are also broadcast radio professionals.

HAM TO CHAIR COLLEGE'S NEW ELECTRICAL AND COMPUTER ENGINEERING DEPARTMENT

STEPHEN/ANCHOR: Recognizing industry growth and student demand, a university in northern Washington State has developed a full Electrical and Computer Engineering Department on its campus - and it's being chaired by an amateur radio operator. We have those details from George Zafiropoulos, KJ6VU.

GEORGE: Starting in the fall of 2026, students at Western Washington University will be able to enroll in programs in the new Electrical and Computer Engineering Department and to pursue studies in the school's first engineering graduate program. The courses were previously housed within the school's Department of Engineering and Design.

The Zero Retries Newsletter, which reports the development in its latest edition, said that Janelle Leger, dean of the College of Science and Engineering, credited student and industry demand as the primary reasons for creation of a new department. She said the move is being made with support from the state to create the degree programs. Majors will select from four programs, which include wireless networking and signal processing focus, as well as AI, electronics and energy.

The professor chairing the new department is Andy Klein. On the university website, the professor writes that having a standalone department will pave the way to creating partnerships and internships with companies and generate more internships for students. Andy Klein is an amateur radio operator who received the callsign KG7WFT in July.

RSGB TEAM HONORED BY BRITISH INTERPLANETARY SOCIETY

STEPHEN/ANCHOR; Newsline congratulates the team at the Radio Society of Great Britain's National Radio Centre. They were selected for the 2025 Sir Arthur Clarke Education and Outreach Team Award for their work advancing knowledge into amateur radio satellite communications. The British Interplanetary Society conferred the award which was accepted by RSGB General Manager Steve Thomas, M1ACB; NRC Coordinator Martyn Baker, G0GMB; and NRC Volunteer Brian Hardy, G4BIP.

'WAR OF THE WORLDS' SPECIAL EVENT REMEMBERS MARTIAN 'INVASION'

STEPHEN/ANCHOR: Radio was precious to Orson Welles, the American writer, actor, magician, and filmmaker who is most prominently celebrated at this time of the year for "War of the Worlds," his 1938

science fiction broadcast depicting a Martian invasion - a drama so realistic that it incited panic in listeners. War of the Worlds was back on radio recently - but this time it was amateur radio, as Travis Lisk, N3ILS, tells us.

TRAVIS: The fictional Martians may not have have their antennas tuned but members of the Delaware Valley Radio Association did as 16 operators called CQ for several hours in a public park in Grover's Mill, New Jersey, the site where the original broadcast radio drama played out in 1938. This was the club's fourth year hosting the event as station WØW [W ZERO W], and it was timed to coincide with the original late October airing.

There is a monument in the park honoring that broadcast, which put Grover's Mill on the map - but the hams' activation in the park may have left a lasting impression too:

Unlike the invading Martians, the visitors here came in peace. Cyclists participating in the township's "Martian Bike Ride" and other members of the public stopped by to get a close-up look at what amateur radio is all about. One young person even got on the air and logged one of the 159 QSOs that were made, according to Martin Crabtree W3PR.

Anyone saying "take me to your leader" would have been introduced, of course, to club president Martin - that's Martin, not Martian - who was outfitted appropriately in foil-covered fedora.

EVENT MARKS 50 YEARS SINCE LAKE SUPERIOR SHIP TRAGEDY

STEPHEN/ANCHOR: Amateurs in Minnesota are preparing to mark a somber 50th anniversary - a maritime tragedy that has even touched the lives of some club members. Andy Morrison K9AWM has the details.

ANDY: Fifty Novembers ago, a storm stirred over Lake Superior and the USS Edmund Fitzgerald, a ship with 29 men aboard, was swallowed up by the raging water. That tragedy in the American Midwest claimed the lives of the entire crew; they share their final resting place with the doomed iron-ore carrier.

These men are not buried and forgotten, however; their friends, relatives and former neighbors are among those who participate every year in an on-air tribute organized by the Stillwater Amateur Radio Association. Hams will be calling QRZ as WØJH from the 7th of November through to the anniversary date of the ship's sinking, November 10th.

Special events chair and past president Dave Glas, WØOXB, told Newsline that connections to this ship have emerged almost every year for the two decades of this event. A distant cousin of club member Curtis Letch, KFØPSC, was among the fatalities: Blaine H. Wilhelm, was 52 and the ship's oiler. Dave told Newsline: [quote] "Over two decades of operating our special event, we've made contact with 1,000 hams average per year worldwide. Mostly throughout North America. There's often someone who tells us of a connection they've had with one of the lost crewmen." [endquote]

The hams will operate from Split Rock Lighthouse State Park. The ship had passed that lighthouse on the day it made Its final trip.

For etails about modes, frequencies and times - or instructions on how to get a certificate - see QRZ.com.

ASTRONOMY TRADE FAIR TO DEBUT AT HAM RADIO FRIEDRICHSHAFEN

STEPHEN/ANCHOR: If your plans next year include attending Ham Radio Friedrichshafen in Germany, you may want to set aside a day to consider some sky-gazing that has long been a companion to amateur radio. Astro, an astronomy trade fair is making its premiere next year. The exhibition center that will be home to the large ham radio trade fair from June 26th through to the 28th will also be welcoming amateur astronomers and technology hobbyists on June 27th. Space is being set aside in Hall B1 for the trade fair focusing on astronomy, astrophotography and related activities, giving hams and others many more worlds to explore.

WORLD OF DX

In the world of DX, Rudi, DK7PE is making his third Pacific DXpedition and is on the air through to the 19th of November. His plans include activating Guam with the callsign KG6/AHØG, Micronesia, using V6CW, the Marshall Islands, using V73RK and possibly Western Kiribati using T3ØRK. He will operate CW only with 100 watts and wire antennas.QSL via his home callsign.

The Mediterraneo DX Club is on a DXpedition to Sierra Leone until the 10th of November using the callsign 9L8MD. A separate activity will take place on Banana Island, IOTA Number AF-037, using the callsign 9L9L on 40-6 metres. QSL via IK2VUC.

Eddy, OE3SEU, will be active as CN2SE/p while touring Morocco in his motorhome between the 1st of November and the 7th of December. Eddy will also be calling on the QO-100 satellite. QSL via LoTW.

Members of the Radio Club del Tarragones, EA3RCY, will be using the callsign AO25TWHS [pron: AY OH TWO FIVE TEE W H S] from the 1st to the 30th of November. The special callsign celebrates the 25th anniversary since the Archaeological Ensemble of Tarraco, which is modern-day Tarragona, as inscribed into the UNESCO World Heritage List. QSL via LoTW, QRZ Logbook and eQSL.

(425 DX

KICKER: WHY HAVE A QSO WHEN YOU CAN HAVE A CONCERTO?

STEPHEN/ANCHOR: Our final story this week, will be music to your ears, or maybe not. Jim Davis W2JKD explains.

JIM: When the musician-composer duo of Brian Eno and Beatie Wolfe launched their new album, "Liminal," on the 10th of October, they really launched it, in every sense of the word. On Facebook, Brian Eno described the pair's musical partnership as [quote] "exploring an intimate and unfamiliar new sonic world" [endquote]. So what better venue for it than some far-away sonic world? The pair beamed the album into space via microwave transmission five days after its release. At the helm of Liminal's liftoff was Nobel Prize-winning physicist Robert Wilson operating the Holmdel Horn Antenna in New Jersey which had played a role in helping prove the Big Bang Theory.

The microwave horn antenna, as it turns out, is a well-tuned instrument of music as well as science. For Beatie Wolfe, this was actually its encore performance. Robert Wilson helped broadcast a previous album of hers in 2017, a work known as "Raw Space."

Music, the universal language, is now the universe's language. Even NASA has got into the act. In 2008 the space agency marked its 50th anniversary by sending a recording of the Beatles' "Across the Universe" into deep space. Last year its Deep Space Station 13 radio dish antenna in California beamed the first hip-hop song into space, Missy Elliott's "The Rain (Supa Dupa Fly)."

This past May, the European Space Agency broadcast a Vienna Symphony Orchestra performance of Johann Strauss' "Blue Danube Waltz" from its radio antenna in Spain at the speed of light in the direction of the Voyager 1 probe.

This is the never-ending journey of music. It is now surrounded by constellations and CubeSats, dancing with the stars.

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