

CAARA NEWS



Cape Ann Amateur Radio Association
Gloucester, Massachusetts
MAY 2023 EDITION



PRESIDENT'S COLUMN

by Brandon- NQ1W

It is May! My focus this month is on ways you can participate in the club by volunteering to help make one of our upcoming events a success.



First up is one of my favorite events - ARRL summer field day (June 24th and 25th). We will be looking for volunteers to set up gear, transport equipment to Hospital Hill, operators, lead teams, cook hotdogs and burgers, and any other ideas you have. This event brings out a good number of members and is a great way to see each other in person. Please let me know as soon as you can, preferably before our May meeting, what areas of this event that you can help with.

Next, we are looking for topics for our monthly Members Meetings and have a general open call for demonstrations and presentations. We are ready to put to use the improvements to the clubhouse! At the May members meeting, Bill W1WMM suggested a show-and-tell of handheld radios. A great idea! Please bring your favorite or interesting handy-talkies with you to the May meeting to share and check out what others use for their daily drivers too. Hopefully, this is sparking ideas for demos, presentations or lessons you'd like to share too.

Finally, while we have a core group who are giving so much of themselves during race season (thank you!), we can always use more volunteers for the Yukanrun races. Even if only for one race, every bit of volunteer time helps. These events are crucial to keeping the club active and the community engaged.

These are only a few of the places where CAARA can use your help. Our committees and Board of Directors are always looking for new participants to keep our club the special place it is for our members and participants.

One committee needing new volunteers that I'll highlight today is the House Committee. This committee is crucial to the preservation and improvement of the clubhouse. Please reach out if you are curious to know more.

We really hope you can join us for the activities we have lined up for this summer and show your support for all the hard work the volunteers do for CAARA!

Regards,

Brandon Hockle NQ1W

CAARA President

THE EMCOMM MINUTE

by Dean- KB1PGH

Before I forget, if your looking for some HF operating opportunities don't forget about the New England QSO party coming up on May 6-7th. You can find out more information



at www.neqp.org and the annual ARRL Field Day event is coming up on June 24-25th and you can go to www.arrl.org for more information. I'll cover more on field day in next months column. So in the past couple of columns I have covered portable battery power and how to extend your battery life in portable radio operations. So the next logical thing is how do we monitor how much battery life we have left and how much are we currently using. Of course some radios will tell you the volts the radio is seeing but that's it and of course if you using a power supply that will give you volts and amps read out. So when you operating portable you will want to know how many volts the battery has left so you don't go below the recommended voltage or you will damage the battery. You also will want to know how many amp hours you are using and how many you have left before exhaust the battery. So I have purchased the Powerwerx DC in line power analyzer.

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

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.

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.



This analyzer will monitor and display amps, volts, watts and total amp hours used and total watt hours used. It will also monitor peak amps and peak watts as well as minimum volts.

It measures up to 60 volts and 100 amps in power and requires at least 5 volts to run. As you can see in the photo it has a nice backlit display and uses 12 gauge wire and anderson powerpole connectors. It also resets itself once you unplug it from the battery. So it's pretty basic to install. Just connect the source side to the battery and the load side to your radio and that's it. I added another photo so you can see the basic set up of it. The meter goes right after the battery and before any voltage booster you may have. You want the meter before the voltage booster because all you'll see is the 13.8 volts of the booster and not the true voltage of your battery as it drains. This meter has a plastic outer shell and is really small enough to fit into any go kit or HF operation bag.

It's really cheap insurance to be able to monitor your batteries power status. You can use this meter in other situations as well. You could put it after your power supply to see if it is really putting out the power it says and you can also see how many amps your rig is calling for when you transmit if you think you may have a issue with it. Of course this meter goes with any battery that's out there-flooded lead acid, AGM and Lithium as well. It costs \$51.00 and you can get either by www.powerwerx.com or by Amazon . one interesting thing that happened when I went to set up the power analyzer in the

photo to show you one of the anderson powerpole connections came loose. I was lucky enough to have a replacement connector and the crimper. I had



reviewed anderson powerpoles just a few months ago so it's always good to have a couple extra connections on hand and the crimper nearby. You never know when one of those connections will come loose. I would say the powerpole connections I bought with the crimper made a much better connection than the factory bought cable I had. Since I had mentioned to you about the ARRL field day event coming up at the end of June there is one product that I have covered in the past that I would like to do again as it can be used during field day and it would give you time to buy one before field day hits. It is the HF single band bandpass filter. Here's why you might need one or several of these. During ARRL field day or during any portable operations you will have several HF antennas very close to each other. Which is actually one of the worst operating conditions you can have. Having HF antennas less than 50 yards apart can cause front end overload in most of today's HF radios. You probably have heard that when someone keys up on 20 meters and if your operating and listening on

40 meters on another radio that radio goes "Deaf" and you hear all the "Splatter". The HF radio like I have, the Icom 7300, has 15 different band filters already put in but they can't handle the phase noise interference and Intermodulation Distortion that you hear and what happens when someone close by transmits. So the way to solve this issue is to install a single band bandpass filter in line with the antenna coax. As you can see in the photo the one I have is for 20 meters. It's made out of a durable aluminum case but only weighs 10.9 ounces. This filter will reject all signals out of the 20 meter





transmit passband of 14.000 to 14.350 MHZ up to 40 db. This bandpass filter can handle up to 200 watts transmit power. They are made by Dunestar and cost \$99 each and you can get

them for all the HF bands from 160 to 6 meters. You can find these at www.dunestar.com .I have 4 of them that cover 40,20,10 and the 6 meter bands. Say you have two stations in close together at field day one station can work 40 meters with its own passband filter and another station can work 20 meters with their own passband filter an they won't interfere with each other. So don't forget about adding passband filters for your multi station field operations. 73 and see you next month!

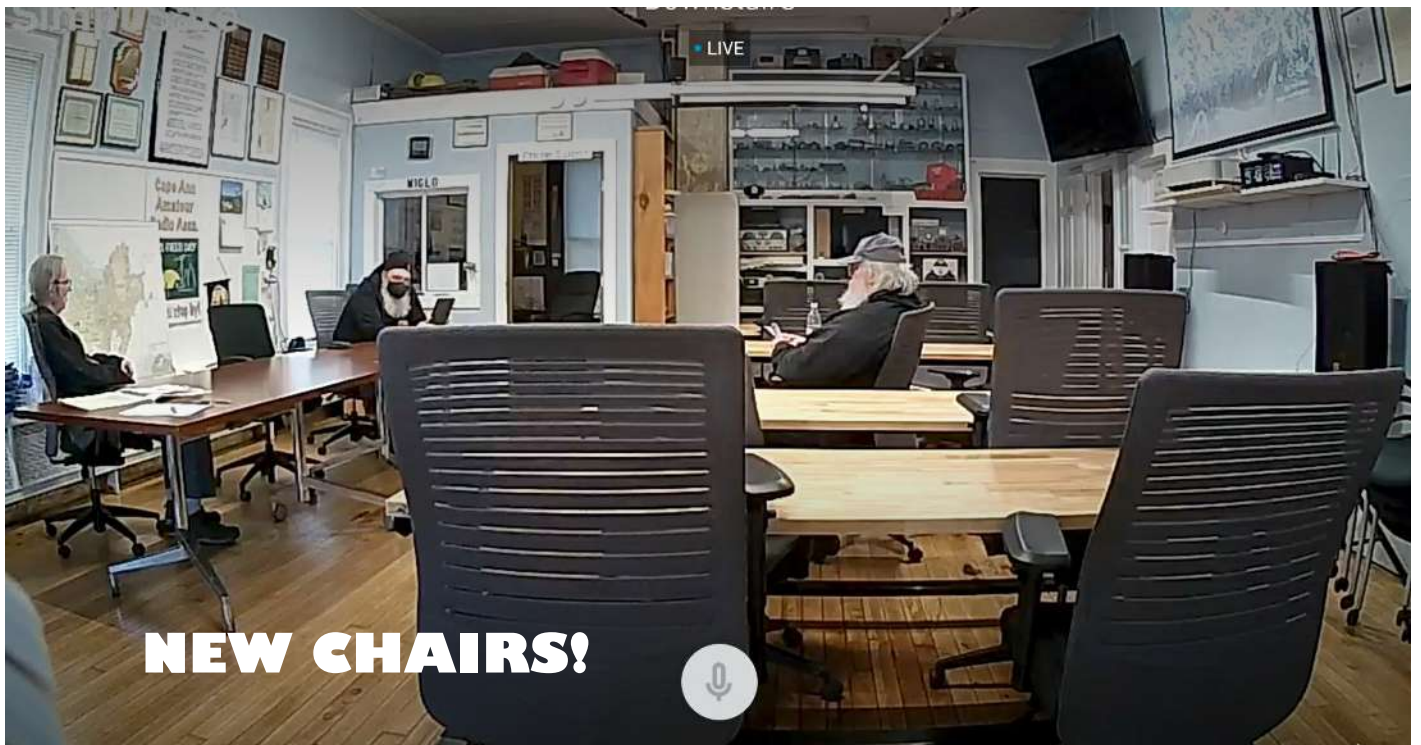
WHAT HAS BEEN HAPPENING AT THE CLUB?

What do your club dues pay for besides the monthly utility bills?

In the month of April we had a Saturday pancake breakfast as well as a Saturday donut "meet and greet event" sponsored by club Chef Bill- W1WMM.

Brandon- NQ1W sponsored a Tuesday night movie event complete with snacks.

The Saturday BOD/Member/meeting followed by a lunch prepared by our club Chef Bill- W1WMM.



NEW CHAIRS!

Wouff Hong

by Curtis- AA3JE



Well. Spring is in the high country. The snow has melted and the green is appearing.

It is a time for renewal, for rejoicing.

For everyone but me. You see, I have just finished five months of snow plowing, often twice a day. With snow fogged glasses and ice-covered beard. If I was wise, I would leave a six-foot perimeter around the drive, but being compulsive, I want to get it clear. Besides, if I don't get to the edge, the frozen snow creates a kind of ice rink effect.

I plow to the edge, and when I turn, I don't always estimate the distance perfectly. This is followed by a large "dink", and I have dinked the fence with bucket or the scraper blade. It's a nice fence, top and bottom rails, and thin, 1/2 inch aluminum verticals. They bend, easily, every time.

In spring, I look out and see one or two new bent vertical bars in the fence. Every year, for five years. It looks awful.



At first, I tried to find the fence supplier.

"You got 1/2 inch four foot vertical bars for a fake wrought fence?"

"Brand Name?"

"Magestic"

Sound of clicking as he looks it up.

"Nope, you got to buy a whole new panel."

"How much?"

"\$350 a panel. Pricy."

\$350x10= \$3500. Non-starter.

I tried the hardware stores.

"Any rectangular aluminum square extrusion 1/2 by 1/2, four foot?"

"Nope, got round stock though."

Stuck, I remembered 7th grade shop. The metal benders that I used to make wrought Iron lamps. Used carefully, you could bend stuff into almost any shape. But that was 1/2 by 1/8.

Then I remembered the Wouff Hong, the odd device found in Hiram Maxim's estate that no one recognized. I made a similar device.

With care, and two helpers, this gadget bent the bars till they were visually straight. Who said ham radio was a useless pursuit.

Now I need to work on the corner of the house where I clipped it with the bucket.

Annual Armed Forces Day Crossband Test

The US Department of Defense (DoD) will host this year's Armed Forces Day (AFD) Crossband Test on May 13, 2023. This annual event is open to all licensed amateur radio operators and will not impact any public or private communications. For more than 50 years, military and amateur stations have taken part in this event.

The AFD Crossband Test is a unique opportunity to test two-way communications between military communicators and radio stations in the Amateur Radio Service (ARS), as authorized in 47 CFR 97.111. These tests provide opportunities and challenges for radio operators to demonstrate individual technical skills in a tightly controlled exercise scenario.

Military stations will transmit on selected frequencies and will announce the specific ARS frequencies monitored. All of the times are Zulu (Z), and all frequencies are Upper Side Band (USB) unless otherwise noted. The frequencies used for the test will not stray outside the confines of the exercise.

A complete list of frequencies, time periods, QSL cards, and other information can be found at DoD MARS - Armed Forces Day.

AFD is a time of honor. It will be celebrated on Saturday, May 20, 2023. The first AFD was celebrated with parades, open houses, receptions, and air shows. Today, many events and activities take place and may include multi-service military displays in areas open to the public, various educational activities that teach children about the armed forces, and large parades with local celebrations.

The longest running AFD parade in the United States is held in Chattanooga, Tennessee. Certain types of music will be played at AFD 2023 events to show respect to those in the armed forces who died for their country.

Respectfully Submitted

Bill Poulin, WZ1L

SPACE WEATHER WOMAN

Sharing New Sights

Dear William,

With all the recent rain in California, snow is now plentiful in the mountains. Growing up in Denver, Colorado, however, I didn't think much of it. I mean, I've seen snow. Lots of it. I lived in it for over a decade. So imagine, after my daughter begged me to take her to see the snow, how surprised I was to discover that no one in my Skov family had ever seen real mountain snow. It didn't take but a moment for me to remember how amazing my first experience with snow was and how important sharing new sights like that could be.

Needless to say, it didn't take long to pack up, drive to the local mountains and take a gondola to the top. (That is where the best snow is found, after all.) Watching my family experience real snow for the first time (see the picture above) was truly a transformative experience for all of us.

Looking back on that trip now, I realize it is not much different than the G4-level solar storm we had just yesterday. Although it felt familiar to me-- reminiscent of my graduate work studying big space weather events of the Grand Maxima Cycles 19 through 22-- I soon realized there were many, who had never experienced such an intense solar storm. In fact, many never knew big storms like this could occur so frequently. They were understandably frightened, considering we had a near G3-level storm just a month ago.

As it happened a month ago, again last night bright auroral curtains were seen all over the UK, Canada, and the USA, but this time naked-eye aurora was also spotted in places as far south as Austria, North Carolina, Oklahoma, New Mexico, and southern Arizona. Even 21 hours later, while the solar storm waned overnight, Aurora Australis was still seen as far north as Victoria and Perth, Australia.

So as you watch the forecast this week waiting for the fast solar wind part of the forecasted "combo-pack" to

arrive, know that the solar storms in Cycle 25 are looking more and more like the stronger storms of old. That does not mean anything is wrong. It is all perfectly normal, especially as we ramp up to solar maximum. It simply means that forecasters like me need to remember what those old storms were like and set our expectations accordingly. But similar to sharing the fresh mountain snow with my family, these "old" sights feel "new" again and I am grateful to be sharing these new sights with you too.

Cheers,
Tamitha

FT8: SAVING HAM RADIO OR KILLING IT?

It is popular to blame new technology for killing things. The Internet killed newspapers. Video killed the radio star. Is FT8, a new digital technology, poised to kill off ham radio? The community seems evenly divided. In an online poll, 52% of people responding says FT8 is damaging ham radio. But ham operator [K5SDR] has an excellent blog post about how he thinks FT8 is going to save ham radio instead.

If you already have an opinion, you have probably already raced down to the comments to share your thoughts. I'll be honest, I think what we are seeing is a transformation of ham radio and like most transformations, it is probably both killing parts of ham radio and saving others. But if you are still here, let's talk a little bit about what's going on in ham radio right now and how it relates to the FT8 question. Oddly enough, our story starts with the strange lack of sunspots that we've been experiencing lately.

CLASSIC HAM RADIO

I've been a ham radio operator since 1977. The hobby has changed a lot over the years. I can remember as a teenager making a phone call from my car and everyone was amazed. Ham radio covers a lot of ground, but "traditional" ham radio is operating a station on the HF bands — 3.5 MHz to 30 MHz — and talking to people all over the world. That kind of ham radio is suffering right now for a few reasons. First, HF propagation largely depends on sunspots and sunspots tend to ebb and peak on an 11-year cycle. Right now we are in a deep low part of the cycle and even the last few peaks have not been very good and no one knows why.

I've often thought that if Marconi and the others had started experimenting with radio during a sunspot low, they might have decided radio wasn't very practical. With low sunspot activity, higher frequencies don't propagate well at all. Lower frequencies might get through, but those require much larger antennas and that causes another problem.

At the height of classic ham radio, every ham wanted a beam antenna or a cubical quad or some other type of rotating directional antenna. Being able to swing an antenna at a particular direction brings more power to bear on the receiver and also helps you receive the other station. The problem is, the antenna elements are typically about a half wavelength in size. So at 20 meters, the elements are about 10 meters in size. You can shorten them a little using some tricks but you pay a price for that in performance. At 10 meters, though, the size is quite manageable. Many hams had directional antennas for the 20, 15, and 10 meter bands (all-in-one antennas called tribanders). A very few would have something for 40 meters — despite Mosley's description of its 40-20-15 antenna as "vest pocket", but that was pretty exotic. At 80 meters, mechanically rotating directional antennas are all but unheard of.

So when propagation is bad you should go to lower frequencies, but that means larger antennas. Worse still, the last few decades have seen an increasing hostility to ham radio antennas with city governments, home owner's associations, and similar. People living in apartments or condos have the same kind of problem. So the number of hams who can even put up a tribander or any sort of visible antenna has dropped significantly.

So here you are with your radio. The bands are bad, and your small hidden antenna is not very good at any band that might work. What do you do?

VOICE IS WASTEFUL

One historical answer to this problem was to quit talking and start using Morse code. For a variety of reasons, Morse code will get through when there isn't enough power, antennas, or propagation to send voice communications. A skilled operator can pull a Morse code signal out of noise that you would swear is just noise. But what if you aren't a skilled operator? Bring in a skilled computer.

Some hams have always experimented with digital operation, mostly with war-surplus teletype machines. Sending data digitally is almost as good as sending Morse code and it is easy to type and read a printout compared to manually sending and receiving code. Sure, computers can read code, but since a human is sending it, it is likely to not be perfect copy unless the software is very smart and can adjust to slight variations like a human operator can.

Then came a digital mode called PSK31. It was a low-bandwidth slow digital protocol that used a computer's soundcard to both send and receive. The computer could pull data out of what you would swear was nothing. There was some error correcting and other technical features that made PSK31 possibly better than Morse code for disadvantaged operations even by very skilled operators.

There are other similar digital modes, but most of them have not really caught on in the way that PSK31 has. Until FT8.

SO FT8?

FT8 is a digital mode, too. It was specifically created to work well in really bad situations like meteor scatter or moonbounce. To maximize the chances of success, each FT8 packet holds 13 characters and takes 13 seconds to send. The protocol depends on a highly synchronized clock and every minute is divided into 15-second slots. Because of this FT8 contacts are highly structured and short. It's like Twitter on sleeping pills. You won't use FT8 to talk about your new motorcycle with your friend in Spain.

However, because the information is digital and of limited format, a typical exchange is that one operation calls CQ. Another operator notices and clicks on the first station in their display. Now their computers exchange basic information like location and signal strength. And then the contact is done.

THE GOOD, THE BAD...

If your goal is to "work" a lot of countries, or states, or islands, or any of the other entities hams try to get awards for, then this is great. It favors getting the minimum data through under the worst conditions. If you want to use ham radio to learn about other people and cultures, this doesn't help because you just can't say all that much. The truth is, though, that having long casual conversations with people very far away doesn't happen as much as you'd think anyway.

[K5SDR's] point, though, is that right now HF ham radio is on the brink of disaster even without FT8. The bands are bad and with antennas restricted, there isn't much to do for a lot of hams. FT8 lets them get on the air. Purists complain it doesn't take skill. But honestly, we've heard that before. Automated Morse code gear didn't ruin ham radio. Nor did the availability of store-bought equipment.

Besides, this is all classic ham radio. There's plenty of other things to do: emergency preparedness, radio control, propagation experimentation, and TV or image transmissions, just to name a few. If those don't excite you, there's moonbounce and satellites (even one orbiting the moon), so there's always something to get involved with. The frontier is moving, and ham radio is moving with it, or at least maybe it should be.

YOUR TURN

What do you think? Is FT8 going to kill ham radio? Save it? If you aren't a ham, does that make you think about getting your license? Or is it just another boring thing old guys do with their radios that you don't care about?

Amateur Radio Newslines Report

NEW SATELLITE BUREAU PRODUCES SPECTRUM RULES

PAUL/ANCHOR: A newly created bureau of the FCC has just produced its first set of rules governing satellites. Sel Embee KB3TZD tells us what this means.

SEL: Just days after the US Federal Communications Commission announced the creation of its new Space Bureau on April 11th, the fledgling department has already adopted new rules for spectrum-sharing among satellites in non-geostationary orbit. The rules require operators with licenses for these satellites to avoid interference with one another. According to a report on the spacenews.com website, future licensees must demonstrate how they will coordinate with their predecessors and protect them from interference.

The FCC is asking licensees to coordinate their systems [quote] "in good faith," [endquote] meaning that they are expected to share information, even with competitors in the marketplace.

The regulator will be looking for comments from the public.

This is Sel Embee KB3TZD.

(SPACENEWS.COM)

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ARRL INVITES COMMENTS ON INCREASE IN DUES

PAUL/ANCHOR: If you are a member of the ARRL, it's time to let them know what you think about their proposal to increase membership dues. Patrick Clark K8TAC tells us how to get your message across.

PATRICK: The ARRL is making an online survey available starting on May 1st, inviting all league members to share their thoughts on membership benefits and the prospect of higher dues. In delivering his message in the April issue of the ARRL magazine QST, CEO David Minster NA2AA stressed the importance of participation by every ARRL member.

Before members can do so, however, they also need to review their accounts on the league website to ensure it is still valid. On May 1st you will be able to share your thoughts when the survey goes live. Please see the text version of our newscast at arnewsline.org for a link you can follow for more details.

The ARRL encourages members who are having difficulty with their log-in process to call the league at 860-594-0200 or send an email to membership@arrl.org

(ARRL)

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UAE ASTRONAUT HAS 1ST QSO IN NEW EDUCATIONAL PROGRAM

PAUL/ANCHOR: Students enjoyed an amateur radio contact with an ISS astronaut who, like them, is from the United Arab Emirates. It was a "first" for a new educational program. Jim Meachen ZL2BHF shares the details.

JIM MEACHEN: Twenty-five students from a number of schools in the United Arab Emirates got a chance to connect over amateur radio with ISS mission specialist Sultan Al Neyadi, KI5VTV. The call on April 18th was the first of 10 scheduled educational sessions being arranged with the communications engineer by the Mohammed Bin Rashid Space Centre in Dubai and the Emirates Literature Foundation in collaboration with the Emirates Amateur Radio Society.

It was the first ham radio contact through this programme for the astronaut, who is the second from the United Arab Emirates. As the ISS passed over the region, the call utilised the Centre's ground station to make the contact.

Like the international ham radio programme known as Amateur Radio on the International Space Station, or ARISS, ELF in Space provides a window into life aboard the space station and the various challenges and projects undertaken by those on board. Perhaps just as importantly for some, it also provides an amateur radio experience.

This is Jim Meachen ZL2BHF.

(GULF NEWS, EMIRATES NEWS AGENCY)

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INDIAN RESEARCHERS DEVELOP MICRO-SUPERCAPACITOR

PAUL/ANCHOR: When it comes to super-capacitors, scientists in India are calling their new development the smallest-of-the-small. We hear about it from Jason Daniels VK2LAW.

JASON: Scientists in India say that they have created the smallest micro-supercapacitor to date, developing it out of two-dimensional materials: graphene and molybdenum disulfide. This is considered significant because as electronic devices continue to shrink - as is the case with wearable sensors and smart devices - their energy storage devices must be just as small. Supercapacitors are considered ideal for this task because they not only store energy but can handle the kind of rapid charge-discharge cycles beyond the ability of conventional chemical batteries.

Misra said that she and her colleagues used two-dimensional materials for the ultramicro-supercapacitor because they are semiconductors. Each of the multi-layer electrodes acts as a field-effect transistor.

She told the IEEE Spectrum that the tiny device has a remarkably high capacitance and an easy ability to integrate with electronic chips because of its use of a gel electrolyte instead of a liquid.

The researchers are not stopping there, however. Their next challenge is to create devices out of other two-dimensional materials in an attempt to boost capacitance even further.

This is Jason Daniels VK2LAW.

(IEEE SPECTRUM)

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SILENT KEY: CALGARY EMERGENCY COMMUNICATOR JASON LOW, VE6SRT

PAUL/ANCHOR: Hams in the amateur radio community - and the community-at-large - in Calgary, Alberta, are grieving the loss of a devoted public servant. Here's Andy Morrison K9AWM to tell us about him.

ANDY: It is difficult for those who knew him to imagine the emergency communications community without Jason Low, VE6SRT, being there. Jason had served Redwood Meadows Emergency Services in Calgary as a firefighter, EMT and fire communications officer. Jason became a Silent Key unexpectedly on April 15th.

According to the Redwood Meadows Emergency Services website, Jason could not be revived despite the best efforts of his colleagues and emergency medical personnel. Chief Rob Evans wrote on the website that the team was "devastated."

According to Vince d'Eon, VE6LK, and Ian Burgess, VA6EMS, Jason - known to everyone as Jay - worked tirelessly to ensure the quality of emergency communications and shared his expertise in radio as well as the computer dispatch system.

Ian told Newsline that Jay was a lifelong radio enthusiast who was introduced early on to the hobby by his scanner. He later got his ham license and used his skills to help communities in the Calgary area connect to the fire department's dispatch.

Vince wrote in an email: [quote] "Jay was generous with his time and expertise, offering solutions across the province, the country, and the continent. There is no way to know how many people were safer and better cared for thanks to Jason." [endquote]

Jay was 50.

This is Andy Morrison K9AWM.

(VINCE D'EON, VE6LK; IAN BURGESS, VA6EMS)

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SILENT KEY: STEVE SZABO, WB4OMM

PAUL/ANCHOR: Amateurs in the Florida community and beyond are mourning the death of a leader and an Elmer whose deep involvement in ham radio touched many lives over the years. We hear about him from Kevin Trotman N5PRE.

KEVIN: Well-known for his enthusiasm for QRP, Steve Szabo, WB4OMM, served as a powerful influence on the many amateurs he knew personally or had come to know on the air. Steve, a past president of the North American QRP CW Club, became a Silent Key on April 23rd. He had been diagnosed with lung cancer.

His involvement with amateurs ran deep throughout his years on the air. He was a Life Member of the AARL, which he served as a volunteer examiner and QSL card checker and he had been Northern Florida Section Manager for four years. Steve also belonged to the Quarter Century Wireless Association and numerous local and national clubs, including the Dayton Beach Amateur Radio Association, where he held numerous leadership roles. According to a post by Kevin, KK4BFN on QRZ.com, Steve started the Daytona Beach CERT Amateur Radio Team Group in 2005 and served as its president until illness earlier this year compelled him to step down.

Steve was 70.

This is Kevin Trotman N5PRE.

(QRZ, WB4OMM WEBSITE, DIGNITY MEMORIAL)

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NETS OF NOTE: THE HOUSTON AMSAT NET

PAUL/ANCHOR: A devoted group of satellite enthusiasts in Houston, Texas, has something to celebrate. Their weekly 2-meter net, has surpassed the 1500 mark. Neil Rapp WB9VPG tells us more about the group.

NEIL: On the Houston AMSAT Net, talk usually centers around satellites and balloons but soon migrates to other topics. It's a long-running conversation that dates back to before the 1990s. In recent years the net has gained even more participants by being carried on Echolink on the AMSAT Conference Node. It is also available as a livestream while the net is in progress at amsatnet.com. There is also a link to nets recorded during the previous four weeks. You have even more ways to listen than that: the net is available as a podcast on popular services such as Apple Podcast and on 1860 kHz AM.

The AMSAT News Service recently recognized the group for having held its 1,506th net. Keep the conversation going!

This is Neil Rapp WB9VPG.

(AMSAT NEWS SERVICE)

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BOOK REVIEW: "THE CW WAY OF LIFE," BY CHRIS RUTKOWSKI, NW6V

PAUL/ANCHOR: Sometimes, the only thing that comes close to being on the air is ... reading about being on the air. Here's one of our occasional book reviews -- it's from Randy Sly W4XJ, and it's all about CW.

RANDY: Whatever your level of CW proficiency, Chris Rutkowski, NW6V has something for you. Chris recently released a great book about Morse Code called "The CW Way of Life." He provides 232 pages full of meaningful and entertaining content that is well written. With each page, all I could think about was that familiar phrase, "and there's more!"

Chris first takes us through the basics of CW and operating with a straight key... and there's more! He talks about how we approach process and understand Morse Code. Do you want to explore a unique approach to strengthening your copy skills, try his chapter on Code Talking... and there's more! He gives us a special way to notate code, some drills, and a whole section on Morse Code lingo, including standard exchanges, protocols, and operating etiquette... and still there's more! Finally, he leads us through advanced key training, looking at bugs, paddles and the rest.

Available through Amazon, this is a great book for hams or non-hams interested in the original digital. I give it a 5 9 9.

This is Randy Sly, W4XJ.

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HAMS WORLDWIDE MARK WORLD AMATEUR RADIO DAY

PAUL/ANCHOR: This year's World Amateur Radio Day celebrated the 98th anniversary of the founding of the International Amateur Radio Union, using the theme Human Security for all. Around the world, hams in every nation marked the day in their own way. John Williams VK4JJW tells us more.

JOHN: For hams in South Africa, World Amateur Radio Day - officially the 18th of April - turned into a month-long celebration. Amateurs in the South African Radio League activated the special event callsign ZS9WARD from the first day of April and will continue to do so until the last. In Canada, the theme was "Get on the Air on World Amateur Radio Day" and Radio Amateurs of Canada's official stations operated from one coast to the other with numerous callsigns such as VA2RAC, VE4RAC, VO1RAC and VY1RAC.

The IARU webpage acknowledged the participation of stations around the world on the big day itself. Hams in Denmark used the callsign 5PØWARD, in the United States the calls were NU1AW, W1W, W4A, K4A and N4A, Belgium had OT23WARD and Slovenia had S5ØARD.

In India, the celebration took on an added level of meaning as one ham, Hari, VU3UCR announced that on World Amateur Radio Day he accomplished the first-time activation of Bandipur National Park in Karnataka for Parks on the Air India. He announced on Facebook this also makes him the third person in India to activate a national park in POTA, an awards scheme that is still new and growing in popularity in that nation.

This is John Williams VK4JJW.

(FACEBOOK, IARU, SOUTH AFRICAN RADIO LEAGUE)

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NOMINATE NEXT 'YOUNG HAM OF THE YEAR'

PAUL/ANCHOR: There is only a month left to nominate your choice for Amateur Radio Newline's Bill Pasternak Young Ham of the Year award. Candidates must reside in the continental United States and be a licensed ham 18 years of age or younger. We are looking for someone who has talent, promise and a commitment to the spirit of ham radio. Find application forms on our website arnewsline.org under the "YHOTY" tab. Nominations close on May 31st.

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WORLD OF DX

In the World of DX, Kasimir, DL2SBY will be using the callsign 8Q7KB from the Maldives, IOTA Number AS-013, until the 7th of May using CW, SSB and FT8/ FT4 (using MSHV). He will concentrate on 30, 17, 12, 10 and 6 meters. QSL via LoTW, Club Log's OQRS, or direct to home call.

On April 26th this year, it will be 100 years since the first amateur radio contact between New Zealand and Australia was made, between Frank Bell of Shag Valley Station, Waihemo in Otago and Charles Maclurcan, 2CM in Sydney.

Listen for the callsign ZL100 from now until the 25th of July. Members of the New Zealand Association of Radio Transmitters will be on the HF bands with this callsign commemorating the 100th anniversary of the first trans-Tasman Radio contact between Australia and New Zealand.

Members of the Russian Robinson Club are using the special call CO3ØRRC from Cayo Coco Island, IOTA Number NA - 086, until the 4th of May. Listen on the HF bands. QSL via N7RO, LoTW, or Club Log. QSL for hams with RU and EW prefixes via RW3RN.

During May 16th through to the 18th, listen for Pete M1PTR, Tom MØDCG and Kieron M5KJM/EI6KP on the air from Great Blasket Island, Iota Number EU-007, in the North Atlantic. They will use the callsign EJ6KP/P. QRV on HF SSB operating during local daylight hours. QSL via LoTW.

(WIA, DXNEWS.COM, 425 DX BULLETIN)

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KICKER: THEY'RE 'PUTTING THE DIGIT BACK IN DIGITAL'

PAUL/ANCHOR: Finally, with International Morse Code Day just having passed on April 27th, we celebrate Morse Code. In fact, a recent magazine article published by a world class institution does just that - and it uses a language that needs no decoding. Kent Peterson KCØDGY takes a look with us.

KENT: Smithsonian magazine is published by the Washington, D.C.-based Smithsonian Institution, considered the largest museum, education, and research complex in the world -- and while you might rightfully expect telegraph keys and other communications equipment to be featured as museum pieces, Morse Code itself is hardly the stuff of archives. That's the whole point of the article, in fact: It notes that the dits and dahs of the original digital communications system - which had its beginnings two centuries ago - are not only part of a very vibrant code but one that is experiencing a resurgence.

As one would expect from anything by the Smithsonian, the article gives a clear history of the code's evolution from American Morse to International Morse, explaining its mechanics, its appeal and yes even its purported medical benefits for brain health.

With references to the ARRL, the Long Island CW Club and the Straight Key Century Club, the article extolls the practice as an enduring form of communication that is [quote] "putting the digit back in digital communication." [endquote] There are even instructions, complete with diagrams, telling non-hams on how to build a Morse Code generator so they can practice their dits and dahs with the help of their smartphone.

New Product: Yaesu FT 710



Yaesu FT-710 AESS HF/50 MHz Base/Portable Transceivers w/SP-40 Speaker

HF/50 MHz, 100 W, Includes SP-40 External Speaker, 4.3 in. Color TFT Touch Display, External Monitor DVI, Req. 13.8 VDC, \$1049



This ham is at every major hamfest and will troubleshoot and align your Collins radio for no charge.



The weather was perfect on Friday and the best attendance I have seen in years. *Jon-K1TP*



Maine Ham radio operators air a grievance: Leave our hobby alone

The construction of several antennas in Jonesboro stirs up some controversy among ham radio operators, and so does a proposed bill in Augusta.

Controversial soaring edifices along the Downeast coast seem to be all the rage, most notably the proposed Flagpole of Freedom Park in Columbia Falls, which garnered national attention and prompted a temporary building moratorium.

But neighboring Jonesboro shouldn't be overshadowed. Although much less imposing than the proposed 1,461-foot flagpole, a ham radio antenna array, with the highest antenna stretching 200 feet, was constructed last year atop Jonesboro's picturesque blueberry barrens off Route 1.

The jarring backdrop along the Chandler River rankled some residents until an ordinance was enacted, but amateur radio buffs are still getting static, even as they fend off what they see as new interference with their hobby from Augusta.

"You know, when you wake up in the morning, you wouldn't want to look at them every day," said Wendy Schoppee, the Jonesboro town clerk and chair of the planning board of the seven ham radio antennas in her town. "So we decided we better put an ordinance in place, basically to keep them from other people's properties, you know, so they don't fall on somebody."

Other than restricting antennas' height, distances from property lines and requiring a permit, Schoppee said ham radio officials told the board there is little else they or any municipality can do to control the proliferation of towers. The Jonesboro array, as well as others along the coast, were built and owned by a Massachusetts ham radio aficionado, Krassimir Petkov, or K-1-L-Z, his callsign in the ham universe.

After retiring from a 20-year naval stint as an electronics technician chief, Phil Duggan got his ham license.

Petkov, a high-end manufacturer of amateur radio and commercial communication equipment, did not respond to The Maine Monitor's request for an interview. But other local "hams," as they call themselves, defended Petkov and his antennas in Jonesboro, and were eager

to fend against any new threats to a hobby that's existed for more than a century.

"I have a great view of his antenna from my living-room window and it doesn't bother me a bit," said Brian Carlton, a retired game warden and licensed ham in the U.S. and Canada. "Higher is always better."

Some, including Carlton (aka KC1FXF, or Kilo Charlie 1 Foxtrot Xray Foxtrot), have estimated the cost of Petkov's array at well over a million dollars.

Carlton, one of Maine's 4,500 hams, has a much less ostentatious setup — a spruce tree stripped bare with a wire antenna attached to his office window. But even he has talked to faraway contacts like "Santa Claus" in Finland with his modest, used rig.

Towering or tiny, the rights of ham operators to erect antennas and transmit across the airwaves are protected by Maine law and the Federal Communications Commission. FCC rules governing ham radio, officially called Amateur Radio, date to 1914 when the hobby was established in the United States.

The regulations prevent municipalities from imposing "overly restrictive" regulations on their ability to transmit across frequencies or limit their antennas, whether it be a single wire attached to a house or a sky-high array, according to Phil Duggan, the Maine section manager for the National Association for Amateur Radio, the ARRL. He helped Jonesboro officials craft what he considers a reasonable ordinance, though he would prefer none at all.

The biggest worry for Phil Duggan is other nearby towns will want to copy Jonesboro's ordinance and put restrictions on ham radio operators in their towns.

"We don't want restrictions on us," said Duggan, a former Navy communications expert, and a veteran ham operator and instructor. "My only worry is that other towns in Washington County would now want a copy of that ordinance and start putting restrictions on other ham radio operators."

Sitting in the cramped control room of his Milbridge home, surrounded by walls of squawking and chattering receivers, Duggan fielded questions while monitoring transmissions from France. In reality, Duggan said most hams don't have the money to put up multiple 200-foot towers like Petkov.

For average or even uber ham operators, Duggan said investments run from \$21 to upwards of \$10,000, depending on the type of radio, number of antennas and their height. After retiring from a 20-year naval stint as an electronics technician chief, Duggan got his ham license. Ironically, his first rig was a Radio Shack receiver and an antenna made of coat hangers.

Petkov, on the other hand, is what hams call a “contester,” competing worldwide for awards and expensive prizes by erecting multiple arrays to see who can bounce a signal the farthest or compete by scouring forests and urban areas hunting for transmitters.

Maine has a relatively open rural landscape and is the closest state to Europe, which makes for great ham radio signal bouncing. The Navy thought so too, locating 13 towers nearing 1,000 feet tall in Cutler.

Duggan said some contests in Maine are purely for socializing and bragging rights, such as “fox hunts” where the fox is a transmitter hidden deep in the woods and hams are the hunters, or the paper chases like “county hunting” with hams competing to see how many contacts they can make with hams from a single county. With roughly only 260 licensed hams spread over 30,862 square land miles, Duggan said Washington County is one of the more challenging paper chases.

But if ham radio sounds like all fun and games, hams stress that they are professionals who can be counted on in any emergency, even though they are unpaid, amateur operators.

To ensure they are preparing for any eventuality, hams have to pass a rigorous licensing test, proving their fluency with the myriad bandwidths and frequencies across the spectrum, not to mention things like a half-wave dipole. Once licensed, many hams do on-air training with the military twice a year.

“We’re the backup communication infrastructure for the nation,” Duggan said. “So if there was disaster or things really hit the fan, then we would be expected to get on the air to help out, whether it be the military or the emergency management director or whatever.”

Lisa Hanscom, the Washington County emergency management director, and Andrew Sankey, who does the same job for Hancock County, call ham radio operators essential personnel. Hanscom said Washington County is in line to receive a \$3 million-plus federal grant for a digital radio upgrade. She said

they have a ham radio at EM headquarters with a roof antenna, and that setup will stay.

“Probably the more advanced we get, probably the more we need ham radio operators because electronics can fail,” Hanscom said. “They’re our guarantee that we have communications.”

In Hancock County, that guarantee has been formalized. Sankey is a ham operator with a designated ham radio emergency backup team. He said that backup is crucial in a rural state like Maine.

“A lot of the cell towers are fed by fiber optic lines and if those lines physically go down, let’s say in a storm, or a vehicle goes off the road and takes out services ... And there are a number of offshore island communities that rely on undersea cables, so if they go out there’s no real means of communication other than radio,” Sankey said.

That’s why Sankey, Hanscom and their counterparts across Maine are mystified and alarmed by what they and the state’s ham operators see as the latest and most serious threat. LD 697, a bill introduced by Rep. Tracy Quint (R-Hodgdon), calls for a study of the environmental effects of 5G technology and radio frequency radiation emissions.

Although possibly an unintended consequence, ham operators believe any study could lead to restrictions on the 5G spectrum, including frequencies shared by ham radio operators, as well as the intended target of the bill, the telecommunications industry. They were relieved to learn that the bill is stalled after a divided legislative committee.

Maine is earmarked to receive over \$128 million from the American Rescue Plan for broadband expansion, essential for 5G technology. Connect Maine, the state agency serving as a pass-through for the funding — is mum on the 5G bill. “At this time, Maine Connectivity Authority doesn’t have anything to add to the story,” said an agency spokesman.

But the bipartisan bill did provoke loud outcry from the state’s ham radio operators — despite there being no mention of ham radios in the legislation. Quint said the state’s lack of interest in a study and the focus shift to ham radios is “weird” and perhaps convenient for those with a financial interest in 5G.

“I sort of feel like the (telecommunications) industry would like it to be about ham radios, because then the

true conversation gets lost,” Quint said. “And I feel that that’s somewhat what’s going on, from the original hearing when I explained that I wanted a study by non-industry experts — then it became all about ham radios.”

After word about the bill circulated, dozens of Maine ham radio operators objected, submitting written testimony in opposition.

“The way this bill is worded it talks about 5G, but it also opens it up to all ‘modulated radio frequency radiation at nonthermal levels.’ That means essentially everything ... then let’s shut down the VLF in Cutler that can emit over 1 million watts of (radio frequency) power,” said Milbridge ham operator Eli Brown in his written testimony.

Others, like Duggan and Maurice Mills of Dennysville, wrote to the committee arguing that amateur radio operators are required by their license to conduct an initial evaluation of the RF emissions produced by their station and repeat this evaluation whenever changes to equipment or antennas are made to be sure their stations meet federal limits and guidelines.

In New Hampshire, a similar bill passed the legislative committee. The New Hampshire State Commission on 5G Health and Environment issued a final report in October after a year of research and testimony from numerous experts. The report made several recommendations, including setbacks for cell towers from homes, and a resolution that would require the FCC to commission an independent health study and review radio frequency emission safety limits.

For Maine’s hams, as well as the telecom industry, the bill might become much ado about nothing. Sankey certainly hopes so, or at least if the bill goes forward that ham radio operators and other emergency personnel be exempt.

“As we become more and more technologically dependent, the failure points of that increase,” said Sankey. “In reality, we have to rely upon Flintstones solutions like ham radio as our backups.”

FOR SALE by Jon- K1TP



I have a new Icom IC-718 for sale that I bought as a backup to the backup radio. They are selling for \$659.00 at HRO.

I took it out of the box and made one contact on 75 meters SSB to check it out and listened for a while and boxed it back up again.

This is an ideal radio for beginners as it is so easy to operate. It has a front speaker, covers 10-160 cw , ssb,and am. 100 watts output.

I would demonstrate and show you how it works at the clubhouse if you are interested.

Jon K1TP AT 978-853-2233

Panics

by Curt- AA3JE



I have noticed a recent trend. It has to do with my wife. She has a large number of social contacts, all of whom forward emails and texts that they think might interest her. Even when their issue occurs in California, Bangladesh, or lower Slobovia.

So, back when there were shortages of toilet paper in New York, she cautioned me to buy toilet paper when I went to the store. I went a few days later, and to my shock and horror, the only toilet paper on the shelves (12 rolls), was “MANLY MAN”, a brand that is made from recycled corncocks.

The rest of the store had nothing but empty shelves and angry staff.

Three weeks later, the truck arrived, and I got toilet paper. I bought a little extra and stuffed the excess on top of the freezer.

But my wife had received a text that sugar was going to be in short supply. So I went to the store, and guess what, no sugar.

A month later I bought 20 pounds and stuffed it on top of the freezer again.

You guessed it.

The next month it was flour, then paper towels, then pork, then chicken, it went on and on.

I kept stacking the stuff up till the freezer was full, the garage was full, and the pile on the freezer collapsed and nearly killed me.



The problem with the Internet is telling real information from purely local news. Personally, I think this is a new marketing ploy.

Anyway, anyone need flour?

NEXT CLUB MEETING ON SATURDAY, MAY 13 AT NOON
BOARD MEETING AT 11AM, ALL ARE WELCOME
COOKOUT LUNCH- \$5.00
BURGERS & HOT DOGS-