CAARA NEWS



Cape Ann Amateur Radio Association
DECEMBER 2021 Edition



PRESIDENT'S COLUMN

by Brandon-NQ1W

Dear Members,

So much is happening with CAARA! Where do I even start?



By the time this letter reaches you we will have had our first in person meeting of the steering committee for Emergency Communication Team in over a year. And we will have hashed out the plan for what the committee will be taking on in the coming months. And we will have talked about a few key events coming up this winter related to the Emergency Communication Team and disaster preparedness. One of the great ideas we're kicking around is running winter field day operations from the clubhouse on power from our propane generator only. That should be a fun event that can bring out operators and get us ready should the need arise to communicate when city power is unavailable. More to come on this event, it should be entertaining and rewarding.

We are also bringing back a monthly program of instructional seminars and demonstrations at our beloved CAARA clubhouse, with FOOD! We have had the first informal session after the November members meeting where an antenna build demonstration was presented. Paul Sedgwick K1AID walked away with our 40m dipole build and a promise of field trip to his home QTH to demonstrate how to get it up in the trees and on the air. Jim W0ZEN and his assistant Chris W1TAT showed how to make a couple of VHF antennas for 6m and 2m band and demonstrated their operations on 2m. I really enjoyed seeing so many of you there to help, eat pizza, and see the demos.

The month of December will have another big seminar we've been dying to get presented to our membership and I am personally very excited to attend this one. Chris W1TAT and Keven K1KL will be returning to lead a

discussion and demonstration of NetLogger, the popular net logging and near instant messaging application for net control operations. People considering taking part in net control operations should really make a point of coming to this one after the December members meeting. You will learn more than you ever thought you could about the program that keeps our radio nets humming.

There will also be more information forthcoming on another huge upcoming event, our 2022 CAARA Holiday Party! So far we have the promise of presidential turkey bought and prepared by current and former presidential turkeys. We also need people to pick potluck sides to prepare, and just let me know at president@caara.net what food you intend to bring and I will endeavor to keep people who might be bringing the same dishes informed of possible duplication. It should be a blast and I hope to see all who can make it! It will be held after our January members meeting.

In other great news the 6pm net will be expanding from Monday and Wednesday nights and will be running guest net control operators on Friday night. By the time this letter arrives to you Fred WA1ESU will have done a couple of the Friday slots and should be doing a bang up stint as a new 6pm Net control operator. Chris and Kevin are really knocking it out of the park with the popularity of this net. I am so happy to see it thriving so well!to check in to ECARS on 7.255MHz and got great audio reports using my PHONE!

These items were great news to me, so finally let me thank Jon Cunningham K1TP and Kevin Lyons K1KL for resuming our monthly CAARA Newsletter editing and staffing. Without them we wouldn't have this great way to share what's going with you and you wouldn't have this great way to contribute amateur radio stories and news with your fellow members. Feel free to contribute and share your stories with Jon and Kevin for publication here.

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).

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 k1tp@arrl.net. If possible, material should be in Word format. Material may also be submitted as hard copy to Jon-K1TP or any Club Officer.

All material published in the CAARA Newsletter may be reproduced for non-commercial use provided such use credits both the CAARA and the author of the article. Copyrighted material will not be accepted without accompanying written permission to publish.

The opinions expressed in the CAARA Newsletter are solely those of the editor or other contributors and do not necessarily reflect the opinions of either the Board of Directors or membership of CAARA.

Jon Cunningham- K1TP Editor Dean Burgess- KB1PGH Reporter

Board of Directors- 2021/22

President: Brandon Hockle- NQ1W Vice President: Jake Hurd- W1LDL Treasurer: Tony Marks- N1JEI Clerk: Charles Herlihy- KC1JKJ **Directors**:

Hank McCarl- W4RIG Chris Winczewski- K1TAT Larry Beaulieu AJ1Z Jon Cunningham- K1TP Neil Weisenfeld- KC1MYZ Bill Poulin- WZ1L Kevin Lyons- K1KL

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 former W1RK 443.700 repeater is now on the ATT cell tower in the Blackburn Industrial Complex with greatly enhanced performance.

The Association is one of the few amateur radio clubs that has its own clubhouse. Located at 6 Stanwood Street in Gloucester, it includes a permanent HF station with beam, vertical/wire antennas along with an operating 2 meter packet station as well as 2/440 meter voice and 220 MHz Transceivers.

Amateur radio exams are held on the second Sunday of each month at 10:00 AM at the CAARA clubhouse. Anyone who is considering a new license or an upgrade, is welcome to test with us. There is no pre-registration necessary. Contact the head of our VE team Bill Poulin 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 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.

New! The club is open every Tuesday from 5-8PM for CAARA members to stop by and socialize, as well as use the extensive collection of ham radio gear.

As you can see, now is such a great time to be a CAARA member! I am so glad that we are getting more engagement and activity on so many fronts at CAARA. But the one person that CAARA counts on more anyone is YOU! Please continue to let myself, your officers, and your board of directors know all the things you expect of your radio club and how you would like to be involved. We'll do our best to take action on your thoughtful feedback!

Thank you for your continued support and patronage of CAARA!

Regards,

Brandon Hockle NQ1W

The Emcomm Minute

By Dean- KB1PGH

I would like to take a moment to introduce myself, or reintroduce myself since CAARA has restarted the club

newsletter. My name is Dean Burgess KB1PGH and I am one of your ARRL Emergency Communications Coordinators for Essex County. I have been a CAARA member since 2007



and have a Extra Class license. I was a clerk for the club Board of Directors for 5 years and I am also a ARRL VE and a ARRL public information officer. I would like to thanks Jon K1TP for being the newsletter editor and for asking me to write columns again.i used to write under the title of "The information desk" but since I am a ARRL Emergency Coordinator now I though I would change the title to "The Emcomm minute" where I will focus on the local emergency communications happenings as well as equipment reviews and the occasional disaster prepper stuff. I was appointed as a ARRL Emergency Coordinator back in march of this year after the passing of former ARRL Emergency Coordinator Gardi Winchester KA1BTK back in 2020.I would like to thank ARRL ARES Section Manager Rob Macedo KD1CY and ARRL Section Manager Tom Walsh K1TW for the appointment. Ok, with that out of the way I thought I would let you know about your local ARRL ARES Leadership and organization. In case for those new to the hobby or area. It first starts out with Rob Macedo KD1CY, he's the ARES Section Manager for Eastern Massachusetts. Then you have Mike Leger N1YLQ.He's the assistant section manager to Rob. The

ARRL ARES section is split up into districts and we are obviously in the Essex County District which is headed up by Jim Palmer KB1KQW. Then we get to local ARRL Emergency Coordinators like myself. Actually Jim Palmer and I are the two emergency coordinators for Essex County. I am responsible for the Cape Ann Area. I know all this stuff may not sound too thrilling but at least now you know. Actually if you want to find out the full complement of people in this ARRL ARES Section you can go to ema.arrl.org/ares; .The whole ARRL Eastern Mass web page is there as well. Just so you know CAARA is supposed to be holding its first emcomm committee meeting at the end of November so I will fill you in next month on any happenings with that.If you ever have any questions about emergency communications in our area please feel free to e mail me at dburg101@aol.com .Well each month I'd like to do a review of some sort of emcomm related ham equipment or disaster prepper stuff. For this month Ill cover the topic of one item that should be in a disaster bug out bag. Say you had to leave your house and evacuate to another area. The first things that you are going o try to do is stay informed.. Well every bug out bag should have some sort of am/fm radio so you can



tune into your local news stations to find out what's going on in your area. For me I have purchased the Tecsun PL 880 portable AM/FM/Shortwave receiver. I

like it because it comes with it's own case and earbuds and it's own wire antenna for the shortwave bands. The performance on AM and FM is top of the line for a portable and has a very rich sound coming out of the built in speaker. It also cover the entire shortwave band with SSB reception with a 10 HZ step. One other cool feature is that is has a long life lithium ion rechargeable battery which can be charged with a USB cable. The Tecsun PL 880 comes from China but the build quality is not cheap-the display is clear and the buttons have a solid feel to them. This radio cost almost \$170 on Amazon and is a top of the line portable radio. If your looking for something a bit cheaper Tecsun does make the PL 660 model which costs \$130. Anyway, as always information is key during any disaster and a quality AM/FM radio is vital when the cell phones don't work and the internet is down. See you next month

Kevins Corner by K1KL

November 13 Members' Meeting Highlights: Antenna Building

Members attending the November 13th meeting were treated to two presentations on antenna building. Jim, W0ZEN brought in his homemade Delta Loops, one for 2 Meters and one for 6 Meters. He demonstrated and explained the antenna theory and the practical side of how he constructed both antennas using spare materials he had around the house. Participants were impressed with how portable the antennas are and the flexibility that one can use to hang them. They are very quiet antennas. Chris, W1TAT assisted by putting the 2M Delta Loop on the air for a quick test "hitting" the W1GLO 2M repeater and the Danvers "SRA" Repeater. Participants were then immersed in a workshop by NQ1W, Brandon, demonstrating a home-built 2 Meter ¹/₄ wave vertical and a 40 Meter Inverted V dipole. Participants actually built the dipole – first measuring and cutting the 2 dipole legs and then soldering these to home-built center-conductor. Brandon demonstrated a unique method of encapsulating the wired center-conductor in a heated thermoplastic material. Really Cool!

K1AID, Paul, took home the workshop door prize of a ready-to-go 40M dipole. Congratulations Paul!

There are more workshops already planned for the December and January Member Meetings. Stay tuned for announcements about these great learning opportunities.

NQ1W, CAARA President, wrote, "We are also bringing back a monthly program of instructional

seminars and demonstrations at our beloved CAARA clubhouse, with FOOD!"

Also talked about at the Members' Meeting was the fact that the Board of Directors had just voted to have a CAARA Holiday Party in January 2022 after the Members' Meeting on January 8th.

W1GLO 6 O'Clock Net December Update

The 6 O'Clock Net is thriving, thanks to the regular group of participants usually numbering between 16 and 20. With new check-ins continuing almost on a weekly basis the Net's unique station check-in list has grown to 122 including check-ins (list) from 11 U.S. states, Canada and England. M7AMT, our British regular, checks in by EchoLink beginning 11:00 pm his time, from Midsomer Norton, G.B.

Here is the **BIG NEWS**: The 6 O'Clock Net has expanded back to 3 evenings per week, Monday, Wednesday, and Friday, thanks to Fred, WA1ESU, who has picked up net control duties on Fridays. So now it is generally W1TAT controlling on Monday, K1KL on Wednesday and it's Friday Night with Fred!

Just a sampling of topics discussed in November on the Net, includes,

Dog: Man's Best Friend Working at Great Heights Radio Station WWV

WBZ Radio Centennial Be A Net Controller! Q R P or ORO?

Johnny Cash, Morse Code Hero Home Alone, 31 Years Ago Parks On The Air

Call Signs Beaver Moon Eclipse Best Books Shure Microphones Jack Ruby & L.H Oswald W a r of the Worlds

The 6 O'Clock Net is now in progress for 21 months. Conceived by W1WMM and K1TP at the very beginning of the pandemic (as a crisis-based support net), first sheparded by Bill, W1WMM, then hosted by Ruth, WW1N who expanded the net to 7 nights a week and introduced "topics in advance". Ruth is really the best! When Ruth moved to Utah, W1WMM, W1TAT, and K1KL worked the controls.

New check-ins still get a QSL card (W1WMM QSL Mgr.). The Net has its own dedicated website - https://sites.google.com/view/6pmnet- where topics are listed in advance.

What Do You Want from Your Amateur Radio Club?

On September 29th, The 6 O'Clock Net topic was: What Do You Want from Your Amateur Radio Club? Some Net participants belong to CAARA, others do not but belong to other ham clubs. This informal survey focused on Your Ideal Club, not CAARA or any other club. Here is what participants said was important:

- Daytime activities (as opposed to after dark driving)
- Emergency Mgt. Training/Opportunities
- Learning Opportunities
- Access to Elmers
- Nearby
- Agenda, Themes ex., Satellites in November, Digital Modes December
- Schedule of Activities
- Schooling/Workshops
- Specific Trainings
- License Prep
- HRO and Manufacturer Reps to Speak/Demo
- Equipment Loans
- Clubhouse
- Speakers
- Food
- Camaraderie
- High Participation and Lots of Activity
- Tech Support

There were 18 participants. The most repeated ideal was Learning Opportunities in one form or another—workshops, lectures, Elmer connections, and trainings. Also often repeated were Published Monthly Club Agenda and Food. Why are hams always hungry?

Getting Started With Parks on the Air Operation by K1KL

Half the fun of participation in Parks On the Air, POTA, is operating from your own shack and "hunting" for Parks on the Air. Park "activators" call CQ on all bands and activate "official POTA parks" around the world.

As a Hunter, if you register your call-sign with Parks On The Air (https://parksontheair.com/, you will have your own logbook on the POTA website with all of your Hunter contacts listed. Want to jump right in? There is a video, Beginner's Guide to Hunting Parks and there is the official print version, Parks On The Air Hunter Guide.

The POTA web site is incredible—You can find "spots" of all the parks now on the air, the activator's callsign, the frequency, and the time last heard in minutes. Also, one-click to open a map or open more information on the park or the operator.

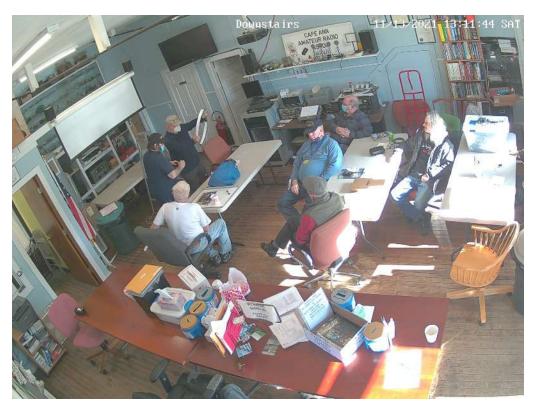
POTA is an awards program for both Hunters and Activators, and you get your first award after only 10 contacts as a Hunter.

I watched a couple of hours of videos before I put my toe in the water (search for POTA on YouTube and you'll find hundreds)! For my first contact I pulled up the POTA "Spots" page, dialed in the frequency, jotted down the activator's callsign, and joined the pile-up. A couple of calls and I had him in the log. Amazing! When the Activator uploads his log, your Hunter contact goes into your logbook account.

I made my first 10 contacts the first day of hunting and a week later got my Bronze Hunter Award! I could not understand why my wife was not as excited as I was.

In a subsequent article, I'll share information about becoming an Activator and what that involves. I now have 7 activations logged and I'm having a blast. And I thought there was nothing new to get excited about in ham radio! I'm hoping POTA activity becomes a CAARA club activity and several members have declared their interest. It was W0ZEN and W1TAT that got me hooked with their POTA activation of K-2422, Bradley Palmer State Park in in Topsfield. More on POTA and how to activate your favorite park next month.

November 13th Meeting Photo's



Noon Members Meeting with lunch served. Jim-W0ZEN and Chris- W1TAT explaining the antenna construction activity.



The monthly CAARA Board of Director's meeting welcome to all at 11AM.



Jon- K1TP, building a screen door for a rented box truck we used for field day in 1990. Dave- N1CDL looking on with hands in pockets....supervising? Can you identify the hams below? *Mac, Joe, Tom, Glenn, and Tony*.



The Trench

By Curtis- AA3JE

Sure! Glad to help.

Being retired means I should have lots of time to help on other people's projects.



The fact is that I have much less time than I thought, as SAHE WHO MUST BE OBEYED has a number of things that always need to be done. The result is that when I am asked to do something, anything, of a manly nature, not involving curtains, I readily volunteer.

As in this case.

"Hey, the club has a little problem, I think we can fix it, want to help?"

"What kind of problem, Chris?"

"You know the trench across the main room?"

"The one where there used to be stage lights? The trench we covered with old plywood?"

"Yeah. The Board of Directors want it filled in."

"And are looking for volunteers?"

"They have been looking for volunteers for 12 years. I asked every year when I was President. No one ever volunteered. I'm tired of waiting."

"THE TRENCH" was 30 feet long, about a foot deep, and about a foot wide. The Board wanted it filled with compacted sand with a two inch concrete cap. That way, if they ever decided to put the footlights back in, it would not be a big job to remove it. It seemed a reasonable fix.

"OK, I'll help."

"Figure out how much sand, how much concrete, and pick it up. Also a concrete mixer, a small one."

Evidently "Help" has a different meaning in New Hampshire.

Thirty feet by 1 foot by 1 foot works out to 30 cubic feet. A bag of sand or cement is about 0.6-0.7 cubic feet, so about 25 bags of sand and 25 bags of concrete should do it. I called around, found the best price, and two trips later it was all stacked in the club.

(and my back hurt, a lot!)

Then I started looking for a mixer. I called the local rental agency.

"Cement mixer? I used to have one. Might still have it"

"Could you look?"

"I'm the only one on the phone. Can you wait till George gets back?"

"When will that be?"

"Depends on how much he has already had to drink."

I got on the computer and called the five rental agencies within a 50-mile radius.

No small cement mixers.

I called the local "BIG BOX" stores. Each had 3 or four kinds of mixer on the website, but when I called, none in stock.

"Not much call for those in the fall. Spring we get a few in. Can you wait? Sorry, what's that noise?"

Ignoring the sound of my back teeth grinding, I ordered one "Little Giant cement mixer". It came within a week, and only took four hours to assemble.

Finally, I was ready, and called my friend.

"Got mixer, got sand, got cement. How many people do we have who can help?"

"Well, Jim might help. He owes me."

"The three of us have to shift a ton of sand, mix, pour, and finish 25 bags of cement?"

"Won't take any time at all."

So, I loaded up the "LITTLE GIANT" and headed out. Dodging the axle snapping potholes in the road, I arrived at 9 AM.

"Bring a bucket?"

"Bucket?"

"No water at the club, got to dip it out of the beaver pond."

A short time later, equipped with a 5-gallon bucket and rope, ignoring the very irritable beavers, we had water, mixer, a striker board and a float.

Joe proved an able concrete mixer.

Chris did a great job with the float.

ME? I mixed, and poured, mixed and poured.

And in 3-4 hours, it was all done. I went home after cleanup, fending off the beavers.

"WHERE HAVE YOU BEEN?"

"Working on a project at the club."

"FIGURES."

I was expecting a nod of thanks, or even a note in the newsletter. When none appeared, I called Chris.

"How did the board like it?"





"They think we did a great job. They are wondering if we can fix the back wall next."

"How long has that been damaged?"

"The Board has been discussing it for 20 years. They want it insulated."

Volunteer organizations. Always the same. Wonder what's next after the wall.

Anyway, I now have a cement mixer. Just the thing for an antenna base.

Why we say "Mayday" when we're in distress

"Mayday!" is an international distress call, airplane pilots, boat captains and some emergency response personnel use it.

We began to use this word just after World War I, as nations around the world realized we needed some word everyone would understand, besides the Morse code SOS.

Because air traffic was building between London and Paris, the radio experts decided on a French word

"Mayday," the French pronunciation of "m'aider" ("help me").

The U.S. started to use it in 1927, and you say it three times to get attention. But there's another signal that means we've got a problem but it's less urgent than a Mayday. Your boat ran out of fuel, or you've had a breakdown.

Again, we go to French and say "pan-pan."

In French, a panne is a breakdown, a mechanical failure. In English, we pronounce it PAHN and sometimes PAN.

P-A-N can also sand for something: "possible assistance needed" or "pay attention now."

Foundations of Amateur Radio

Defeating the Pitfalls of Predicting HF Propagation

As you might know, I like to transmit with as little power as possible, known as QRP operation. My own station runs at 5 Watts, since on HF, that's as low as my radio will go. I could go lower by turning down the microphone gain, which interestingly is how some radios actually operate, but for now, 5 Watts seems to be a good starting point and truth be told, even though I've been here for a while, I feel like I'm learning something new every day.

One of the largest challenges associated with using low power on HF is propagation on the HF bands which is more fluid than ever. There's plenty of variables. For example, in addition to the day-night cycle, there's Earth's magnetic field, the impact from coronal mass ejections as well as the solar cycle. As that cycle waxes and wanes, or in my case, wanes and waxes, propagation trends are affected on a longer term basis.

There's all manner of tools to explore this. The Australian Space Weather Service is one of many such bodies that create ionospheric prediction maps showing frequencies and their propagation through the ionosphere. Then there's the derivative ones that use this data to declare if a band is open or closed, spread widely across the globe with little in the way of context, like time, or location.

There are tools like VOACAP which attempt to predict the point-to-point path loss and transceiver coverage dependent on antennas, solar weather and time and date. They also attempt to arrive at a so-called MUF, the Maximum Usable Frequency, defined as the highest frequency at which ionospheric communication is possible for 50% of the days in a month. The LUF, the Lowest Usable Frequency is defined as the frequency at which communication is possible 90% of the days of the month.

All these tools have one thing in common. They're predictions and forecasts. They reflect an attempt at quantifying reality. There is a place for this, but my often repeated encouragement of getting on air to make some noise is advice that covers the gap between prediction and reality.

I've long been a fan of using Weak Signal Propagation Reporter, or WSPR as a tool to measure actual propagation. What I like most about it is that it can be used on your own station, using your own antenna, at any time.

It occurred to me the other day that there must be a relationship between a WSPR signal and a voice signal. Not a mathematical one, but one that makes the difference between establishing a voice contact with another station and calling CQ until you're blue in the face.

With that in mind I took a leap and purchased a ZachTek Desktop WSPR transmitter, capable of operating on all the HF bands that my license permits. It was shipped from Sweden this week and it is expected to take more than a month to get to me, likely most of that travelling between Sydney and Perth, but when it does, I'll be able to set up my own in-house 200 milliwatt beacon that will show me just how far my signal goes on the bands that I pick. As an aside, I'm still looking for a similar solution for 2m and 70cm since there are all manner of

interesting propagation phenomena associated with those bands as well.

I'm still digging into how I can best gather the reception data to visualise it and I'm working on a strategy that can send me an alert when a particular band is open from my station at such a level that I can look to operating a particular mode, like FT8, or SSB, or anything that I might choose.

The data is public, thanks to the various WSPR reporting systems around, so others in my grid square, likely beyond that, will also be able to benefit from my beacon. I'm considering generating a propagation map from my own station and publish that, but it's too early to say what's involved in making that happen.

Right now I've dived into the rabbit-hole associated with finding a suitable antenna. My current station vertical requires a tuner and I don't think that finding a way to tune my antenna every time the beacon changes band is a good solution.

ENLIST THE SIGNAL CORPS

THE SIGNAL CORPS

RECEIVE A TECHNICAL EDUCATION FREE

ELECTRICITY
TELEPHONY
PHOTOGRAPHY
LINE WORK
CABLE SPLICING
CABLE SPLICING
TEL. CONSTRUCTION

APPLY TO

An old recruitment ad....right up our alley!

I suspect that I'll also need to come up with a way to have two transmitters share the same antenna, but I'll cross that bridge when I need to.

Once the beacon arrives, it's my intention to start with 10m as my beacon band using my current antenna, since 10m is on the verge of being useful for my QRP adventures and I must confess, I'm looking forward to making a voice contact with the other side of the planet with my station for the first time in a long time.

What kinds of things can you think of that would benefit from a solution like this?

I'm Onno VK6FL

CONTESTING- Jon-K1TP



I helped out celebrating WBZ in Boston by making as many contacts on 75 meters as I could and received this certificate thanking me for being an operator in the contest.

If you have any new certificates or awards, please send them to us for submission in the next newsletter.

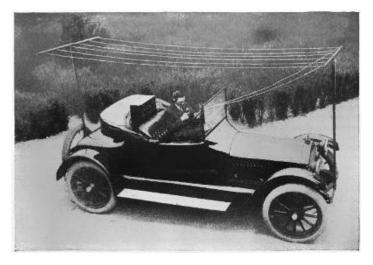


Ken Pearson-KD1MS

Did you know that Ken's mother was W1RK-Ralph Karcher's sister.



Whoever said CW was dead! This was November 25 on 15 meters, no ssb signals to be seen but dozens of cw operators. They say decoding code in your head and sending CW is great for keeping your mind sharp.



Hams always found a way to operate out of cars, this includes Kevin-K1KL at Hampton Beach below.



Kevin noted that he worked South Africa, Alaska, two France, multiple California on that activation. The bands are getting better. Feeling like cycle 23

Foundations of Amateur Radio

Right now it's 10:45

That piece of information is unhelpful without any context. I could just as easily have told you that it's 2:45 and it would be just as accurate, helpful and meaningless. The point being that without context, you don't know if I'm an insomniac, drinking morning tea, recovering from a late lunch or putting on my PJs.

If I'm talking to people in the same room, supplying the time happens within the context of that room, but if the world is our oyster, our room is a little larger and dawn for one person is dusk for another, at the same time.

Before we could communicate at the speed of light and travel faster than a bullet, time was a relative thing related to the location of the Sun and considered mainly by mariners and astronomers. Even with the advent of increasingly accurate clocks, for most people, noon was when the Sun was at its highest point and the local clock was set to that.

When our world got smaller, because communication and travel got faster, people started noticing that noon in one place wasn't the same as noon in another place. It became a real problem when people travelled hundreds of kilometres by train in a day. Imagine coming up with a train time-table that takes into account each local version of noon.

In an attempt to deal with this, railroad managers in the United States established 100 railroad time zones. This malarkey continued until the 18th of November 1883 when four standard time zones were established for the continental United States.

Of course, being human and all, that was a local solution. Great Britain had already established its own standards for time for England, Scotland and Wales.

In October 1884, the International Meridian Conference, held in Washington DC, adopted a proposal that designated the Prime Meridian for longitude and timekeeping should be the one that passes through the centre of the transit instrument at

the Greenwich Observatory in the United Kingdom and established Greenwich Mean Time, or GMT as the world's time standard.

Why Greenwich? At the time the United Kingdom had more ships and shipping using Greenwich as their reference than the rest of the world put together and the observatory at Greenwich had produced the highest quality data for a long time. As an aside, on a French map before 1911, 0 degrees was centred over Paris. There are other wrinkles, like the fact that Earth isn't round and as a result the Greenwich Prime Meridian is not quite in the right spot because measurements didn't take into account local variations in gravity.

In 1972, Coordinated Universal Time, or UTC replaced GMT as the standard for time in the world. It now references the International Reference Meridian, currently about a 102.5m east of the original Prime Meridian passing through Greenwich. It's on the move with reference to land because tectonic plates shift and where it is today is not where it's going to be tomorrow, so don't go looking for a marker to indicate the IRM.

Meanwhile in the rest of the world people needed to come to terms with how to standardise on what to call time zones. The USA establishing four time zones was just for one country. Depending on who's counting, there's over 200 countries and each has its own set of time zones. Which each might include daylight saving, or not. For some, like VK6, daylight saving was voted on several times. Trials were had and time changes during summer were implemented, then reversed, then reversed again, and again, in total, VK6 did this dance six times and we currently don't observe daylight saving, neither does VK4 or VK8.

So, not only does 10:45 require location context, it also requires that you know if there's daylight saving happening at that time in that location, which to add insult to injury, doesn't actually happen on the same date each year. It gets better if you consider time in another location. Do they have daylight saving, is it on at the time, do we have daylight saving at that time, how many hours are we apart, when is this actual event and what if we're coordinating efforts between people in multiple locations? Did I mention that summer in Europe is in July and in Australia it's in January?

In case you're wondering, tracking all this is a massive job currently under the purview of the Internet Assigned Numbers Authority. The person coordinating this, whilst wrangling the politics of naming things, including dealing with warring countries who take umbrage at having their time zone named after "the enemy" is computer scientist Paul Eggert, the project lead of the time zone database.

War aside, time zones are political. For example, Dublin Time was stamped out by the British as punishment for tHe Easter Rising.

If that wasn't exciting enough, to provide local context, we use abbreviations to indicate which location we're talking about. In VK6 that abbreviation is WST, simple enough, Western Standard Time. What if your abbreviation was CST? Is that Central Standard Time in North America, China Standard Time, Cuba Standard Time, or even Australian Central Standard Time. If your local time zone is IST, you could be referring to Indian Standard Time, Israel Standard time, Irish Standard Time or even Irish Summer Time.

As radio amateurs we hold global contests and we advertise our online club meetings and events. Often, we refer to times and dates that might be understood by an audience of one, but utterly confusing to the rest of the world.

So, what do you do with this?

Simple, use UTC. My timezone, called WST, or AWST, is UTC+8. F-troop, a weekly net for new and returning amateurs runs every Saturday morning at midnight UTC, that's 0:00 UTC. No confusion, no daylight saving, everyone can figure out if it's worth being awake for and I must applaud the amateurs from G-land and PA with their contributions in the very, very early hours of their morning.

So, next time you make some noise about a contest, or any amateur activity that goes beyond the people in your suburb, specify the time in UTC. Who knows, perhaps one day, even the likes of SpaceX, Apple and Google will start using UTC to announce their events

As Goldie Hawn put it: "Well, in my time zone that's all the time I have, but maybe in your time zone I haven't finished yet. So stay tuned!"

I'm Onno VK6FLAB

Dayton Hamvention expects to be live event in 2022

Dayton Hamvention® organizers are planning to mount the first in-person show in 2022, following 2 years of COVID-related cancellations. The event is set for May 20 – 22 at the Greene County Fairgrounds and Expo Center in Xenia, Ohio. Last January, Hamvention organizers from the sponsoring Dayton Amateur Radio Association (DARA) announced they were calling off the 2021 event after considerable planning was already under way. The Hamvention Executive Committee cited

lagging COVID-19 vaccine distribution in the US and the emergence of a m o r e communicable form of the virus.

Southgate Amateur Radio News quotes H a m v e n t i o n General Chairman Rick Allnutt, WS8G, as saying



that Hamvention committees "have been meeting, and volunteers are committed to making up for the time

lost to pandemic cancellations." The Hamvention website is already accepting bookings from vendors and inside exhibitors, and individual visitors can already buy tickets, which Allnutt said, "are all printed and ready to go."

Nominations for the 2022 Hamvention Awards opened on November 1. Hamvention seeks "the best of the best" nominees for its Technical Achievement, Special Achievement, Amateur of the Year, and Club of the Year awards. Nominations close on February 15, 2022. Submit nomination forms via email or USPS to Hamvention Awards Committee, Box 964, Dayton, OH 45401-0964

Contest University (CTU) will take place on May 19 in conjunction with the annual Hamvention Super Suite activities, which will be moving to the Hope Hotel in Dayton. In addition to CTU, these activities will include the Top Band Dinner, the Contest Dinner, and the KC DX Club's CW-copying competition, among other possible events.





CAARA MEMBER DUES FOR THE COMING YEAR CAN BE PAID ONLINE AT OUR CAARA.NET WEBSITE