

# Treasure Coast Ham News

SUMMER - 2024

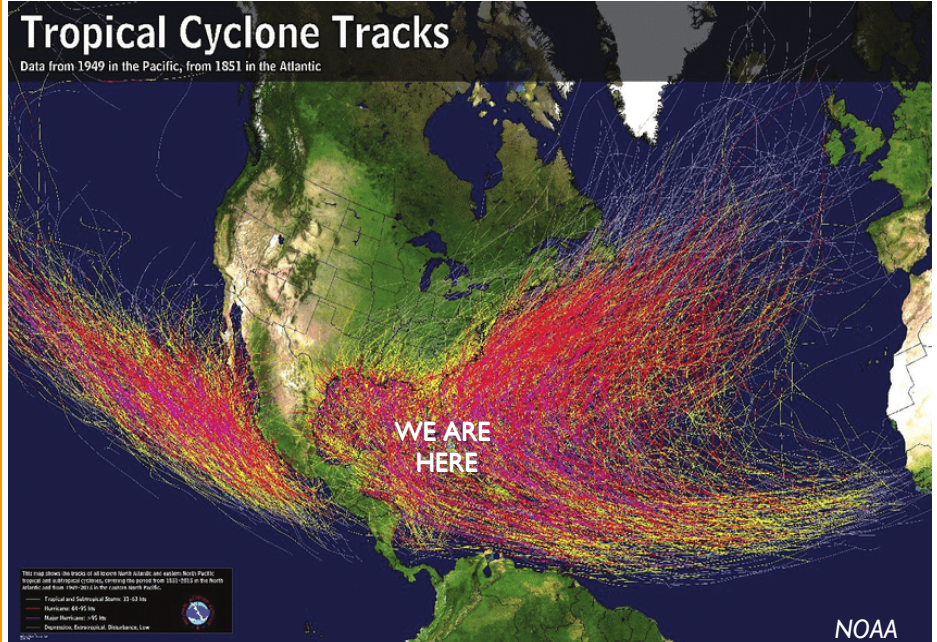
VOLUME 5, ISSUE 2

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## 2024 Hurricane Season Expected to be Extremely Active



According to CSU's 2024 Atlantic Seasonal Hurricane Forecast: "Current El Niño conditions are likely to transition to La Niña conditions this summer and fall, leading to hurricane-favorable wind shear conditions. We anticipate a well above average probability for major hurricanes making landfall along the continental United States coastline and in the Caribbean."

### In this TCHamNews issue:

- . Bruce, W8HW on Why HF is important to our safety
- . Ed, KIAP, provides insight on how to Work DX and Succeed
- . Parks on the Air (POTA): How to find activation opportunities
- . Ham Radio History returns with "Waking up, hams return from war"
- . ARES VHF/UHF Simplex Communications
- . FT8 Doctors, and more

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## From the Publishers



Announcing the end of an era in April, Martin Jue, K5FLU told the ham community that MFJ Enterprises, a USA company he founded 52 years ago would cease on-site production in Starkville, Mississippi. Remaining stock would be sold; but product support would continue for a limited period of time. In addition, other ham companies Jue saved from bankruptcy over the years would also cease production.

Jue, citing his age and wishing to spend more time with his family said changing times and COVID were contributors in his decision to close MFJ's doors.

Many hams have acquired MFJ products because they were affordable alternatives to more expensive offerings. Quality and support issues sometimes plagued MFJ over the years, but overall hams continue to use MFJ products today, and will do so in the future.

I acquired one of their first products, an audio filter kit in the early 1970s. Throughout the years MFJ tuners, antennas, QRP transceivers, linear amplifiers, etc. have occupied my shack. They always performed as expected; and when, or if, they needed repair (which was very seldom), MFJ was always there to provide support or guide me if I chose to fix myself.

Like many hams, seeing MFJ go out of business is depressing. Love them or hate them, MFJ represented USA entrepreneurship that so many companies no longer have or care about. I will miss them.



We are now at the start of the 2024 Atlantic Basin Hurricane Season. Unlike *El Niño's* typically dryer hurricane blocking conditions, *La Niña's* are more wet with much less wind shear, and could give hurricanes a green light to strike us.

A typical hurricane season might have 14 named storms, of which 7 are hurricanes with 3 being of major significance. Hurricane prognosticators are forecasting 20 to 29 named storms for 2024. Sea surface temperatures (think high octane hurricane fuel) are the warmest in recorded history, meaning the Gulf of Mexico region and the east coast of the USA, including Florida, could experience a very bumpy ride.

What does this all mean? Simply that you should prepare sooner, rather than wait until a hurricane is approaching. By then it will be too late.

This TCHN issue includes preparedness articles we hope you enjoy. Please let us know your thoughts.

73, [TC Ham News Publishers](#)



### TREASURE COAST HAM NEWS

The editors like to reserve the last few pages of *Treasure Coast Ham News* for you, the readers. With your help these pages will include:

**For Sale Section** – Have something to sell or trade? Send us a description and/or picture to have it listed in this section. Looking to buy something? Provide a description and we will print your request.

**QSL Card Section** – Hams enjoy viewing QSL cards, especially those with colorful pictures. Send us scans of your favorite QSL cards. We will include some in each issue as space permits.

**The last few newsletter pages are yours.** Help make them a success by submitting your photos, For Sale listings and QSL cards to [tchamnews@gmail.com](mailto:tchamnews@gmail.com).

**Want to be published?** Treasure Coast Ham News invites you to write about your ham radio activities, kit building, DX operations, or any other amateur radio subject. You don't need to be a polished writer. We will help you edit your work. While we can't pay for articles, you will receive a full byline. Contact us at: [tchamnews@gmail.com](mailto:tchamnews@gmail.com).

## Volunteer Examiner Updates



### Local License Exam Contacts

Vero Beach ARC  
Bud L. Holman  
(772) 559-3342  
[budholman@earthlink.net](mailto:budholman@earthlink.net)

Port St. Lucie ARA  
Robert Brown  
(772) 201-5485  
[brownpsl@comcast.net](mailto:brownpsl@comcast.net)

Find an Exam Session  
Near You  
[ARRL Exam Search](#)

VE Teams:

*If your club is testing, please let us know the location, date and examination results*

Send your VE news to  
[tchamnews@gmail.com](mailto:tchamnews@gmail.com)

### PSLARA License Exam Update

The Port Saint Lucie Amateur Radio Association held a license exam session on Saturday, May 11, 2024.

Attendance was good, with four participants passing exams and earning licenses. Earning Technician licenses were:

Sonia Plewa  
John Croft  
Brian Sokolowski

Also, passing both the Technician and General exams, and thus earning a General class license was:

John Plewa

Congratulations to the successful candidates. (Due to an ARRL system outage, new callsigns were not available as of press time - 5/30/24 at 6:00 PM.)

### Future Exam Dates

PSLARA offers exam sessions on a quarterly schedule. Our next session is scheduled for August 10, 2024 at 10:00 AM. Watch the club website, [www.pslara.org](http://www.pslara.org) and future email announcements for updates. Sessions are held at the Veterans' Center of Excellence on the IRSC campus in Saint Lucie West.

While walkups are always welcome at PSLARA exam sessions, candidates planning to attend are encouraged to contact us ahead of time by sending an email to [brownpsl@comcast.net](mailto:brownpsl@comcast.net).

### Amateur Extra License New Question Pool Released

The new 2024 - 2028 Question Pool for the Amateur Extra License Exam has been released. The new question pool becomes effective on July 1, 2024 and must be used for all Extra Class exams beginning on that date.

The new question pool can be reviewed and downloaded [here](#).

### FCC Registration Number (FRN)

The VE team cannot administer an exam without your FCC Registration Number (FRN) appearing on the exam paperwork.

If you don't already have an FRN, obtain one before showing up to take a license exam. The [FCC.gov web site](http://FCC.gov) provides details on obtaining your FRN.

### IT'S TRIVIA TIME!

#### Answer to Last Question

In the last issue we asked you a question from the Technician Class License question pool. How did you do?

**Question:** Which of the following is a source of loss in coaxial feed line?

- A. Water intrusion into coaxial connectors
- B. High SWR
- C. Multiple connectors in the line
- D. All these choices are correct

The correct answer is:

**D. All these choices are correct**

(This is question T9B08 in the Technician License question pool.)

#### June Question

Try your hand at this question, which is also from the Technician License question pool.

Which of the following operating activities is supported by digital mode software in the WSJT-X software suite?

- A. Earth-Moon-Earth
- B. Weak signal propagation beacons
- C. Meteor scatter
- D. All these choices are correct

*(answer in next issue)*



## Ham Radio History: Waking Up - Hams begin to return home from war *by Chris Codella, W2PA*



[Editor's note: The author, Chris Codella, W2PA, maintains a web site full of interesting stories about the development and evolution of radio communication. This is the nineteenth in a series of articles about the earliest days of radio history. The stories are reprinted here with permission of the author. Be sure to visit [Ham Radio History](#) for some fascinating reading.]

As amateur stations fell silent, the airwaves continued to carry commercial and military signals, many from the fingertips of former radio amateurs. But despite their contributions, there were some in government who still sought to limit or eliminate the use of wireless by private individuals.

As the battles ceased in Europe, amateur radio came under renewed attack at home. Bills introduced in both houses of Congress shortly after the armistice sought to turn control of all use of radio over to the Secretary of the Navy who, with others, had been trying to restructure radio law along these lines for some time.

The previous spring, Maxim had personally appealed to the sponsors of one bill, successfully obtaining an exemption for amateur radio stations. And that summer there was yet another new bill pertaining to commercial radio, with amateur operation again specifically exempt. Present at a hearing for the bill, the League had accepted at face value the Navy's assertion that they did not want to kill amateur radio. But now at the war's end, their attitude had clearly changed. This new bill would indeed have had just that effect. The League did not protest the Navy ownership issue, only the specific provision eliminating amateur radio.

This time, with *QST* out of print, the ARRL sent out "Little Blue Cards" to all licensed amateurs alerting them to the new threat and asking for support. To cover the cases where an amateur was away from home, deployed with the military - and there were very many of those - the cards were addressed to "any member of the family" of the amateur. The re-

sponse may have exceeded even Maxim's expectations. Letters and telegrams poured into Washington in opposition to the bills, sent by amateurs and their families including those of hams killed in the war. The League's Board of Direction sent Maxim to testify before a hearing of the Committee on Merchant Marine and Fisheries, the body in charge of the House bill. Several prominent clubs also attended to speak in opposition. The bill never made it out of committee.

Years later DeSoto took note of what an extraordinary thing this really was.<sup>1</sup> A well-backed bill had been defeated at a time when there were no amateurs on the air and radio as a hobby no longer existed. This stood in stark contrast with what happened in 1912 when there were thousands of individuals involved in radio and yet a law was passed imposing severe restrictions on them. The difference lay in strong organization on a nationwide scale.

□□□□□

With \$33 in the treasury, the ARRL board began to meet again in the spring of 1919 and got to work reorganizing. That included drawing up a new constitution, electing officers and putting a plan in place to finance starting up again.

The abrupt end of amateur operations had been reflected in kind by the equally abrupt end of *QST* a few months later, a victim of expired subscriptions and cancelled contracts with advertisers. The magazine's own success in recruiting amateurs to enlist in the military had ironically resulted in a lack of amateurs left to support it. All ARRL memberships expired during the war along with all amateur licenses.

At a meeting in New York on 29 March, a group including Maxim, Tuska, Hebert, and eight others decided to donate the \$100 necessary to publish a "midget" issue of *QST* as a first step in getting the journal back into its pre-war form. That issue emerged as *The American Radio Relay League Special Bulletin* - only eight pages - with a stated purpose of "Getting Together Again." It was folded in thirds like a business letter, sealed and mailed with a one-cent stamp. *(continued on page 5)*



**Ham Radio History: Waking Up - Hams begin to return home from war** by Chris Codella, W2PA

(continued from page 4)

One of those eight pages was written by The Old Man. Surprised by a telegram from the editor, he wondered if it could mean the end of these “wireless-less days” was coming at last. His code was rusty, his grasp of technical details was rusty. And how would his equipment have fared being in storage all this time? Everything was “Rotten Rusty.”<sup>2</sup>

**THE AMERICAN RADIO RELAY LEAGUE SPECIAL BULLETIN**



**GETTING TOGETHER AGAIN**

This midget issue of QST is sent out by certain good old scouts of the A.R.R.L. who, at a meeting held in New York on the evening of March 29th, chipped in the necessary coin to pay for the printing and postage.

Its object is to broadcast the latest amateur radio news, and to start the work of getting our membership together again. It was thought that the best way to do this would be to get out the simplest bulletin we could think of, which would be up to our A.R.R.L. standards, and to trust to the loyalty and spirit of our members to come back with financial help so that we might gradually get “QST” back to its original form. Therefore, fellows, accept this little bulletin in the spirit in which it is offered and remember that we want your help. Just how you can give this help, you will see by the time you have read the bulletin through.

At this writing no one knows when the Government will let us open up again, although the best information we are able to get from Washington is to the effect that the Navy Department will unlock the door just as soon as the peace treaty is finally signed in Paris. Just when this will be is another question which no man seems to want to answer. All we have is what we read in the newspapers, and the signs seem to be that the documents ought to be signed up sometime early in the month of May. Provided the anarchists and Bolsheviks have not got the upper hand of us to the ex-

tent that they constitute a “public peril”, we are led to infer that we would not have to wait until the United States Senate had ratified the peace treaty.

For the benefit of those who were not able to be present at the meeting, it should be said that this bulletin has been made possible by the following gentlemen: H. P. Maxim, A. A. Hebert, Lt. C. D. Tuska, Radio Gunner R. H. G. Matthews, J. O. Smith, Lt. V. F. Camp, H. L. Stanley, W. S. Browne, Lt. K. B. Warner, A. F. Clough, and H. E. Nichols. When it was decided that we ought to have a bulletin, these gentlemen went down into their pockets and brought up the cash and placed it on the table in the form of a pure donation for the good of amateur radio in general. By practicing the strictest economy and doing as much of the work as possible by volunteer effort, we hope that with the money donated we can awaken enough interest among the amateurs to induce them to come back with the necessary financial help to resume “QST” in its full size.

Now, therefore, we want as many fellows as possible to buy A.R.R.L. bonds. These are described later on in the bulletin. They constitute a formal and regular loan to the A.R.R.L. and will bear interest at the rate of 5% per annum, payable semi-annually, and to be retired within two years' time from income derived from membership dues. Read the special article, by Mr. Maxim on these Bonds.

There you have the explanation of this

**A. R. R. L. BONDS**

Maxim, as himself, explained how the restart would be paid for. With the war over, the Board of Direction anticipated an influx of amateurs in much greater numbers than before it started, all having been trained in radio by the government, a dividend of their earlier recruiting effort. The board therefore set a goal to not simply resume publication but also set up an office with a paid secretary. The directors estimated that \$7,500<sup>3</sup> would be needed to get it all

in place, including the purchase of QST magazine from Tuska, its present owner, for \$4,700, which in turn included printing charges left unpaid since just before the war shut everyone down.

The ARRL would raise the funds by selling “regular bonds” to members, ARRL Bonds that paid 5% interest and would be retired after two years. Voted on by the Board at its March 29 meeting, \$2,500 had already been raised by the time of the bulletin’s printing.

On Saturday, 12 April, to the delight of amateurs, the Navy unexpectedly announced the lifting of the ban on receiving effective 15 April.<sup>4</sup> ARRL HQ was immediately flooded with telegrams. The editors noted that, “The news caused an electrical impulse to instantly pervade the entire country. It was like the news of the Armistice. It seemed to fill the breasts of thousands of us with a wireless enthusiasm that had not been experienced for many a long day.” Spring had sprung and the wireless bugs were coming out of hibernation.

QST officially returned in June. Billed as the “Reopening Number,” it still had no cover. In its main headline Maxim announced that the ban on receiving had been lifted and that the Navy indicated that transmitting would be allowed as soon as the president declared the end of the Great World War<sup>5</sup>. The ARRL extended the “hand of good fellowship” to all amateurs, member or not.

New editor and General Manager Kenneth Warner wrote the editorial that month and added his own plea for a restart to funding. In doing so, he stated that QST’s purpose and its value to amateurs was “... to foregather and improve their knowledge and have a hearty laugh,” officially asserting the importance of humor, and to serve an (organization that was “of amateurs, for amateurs, and



Kenneth B. Warner in uniform during the war

(continued on page 6)

## Ham Radio History: Waking Up - Hams begin to return home from war *by Chris Codella, W2PA*

(continued from page 5)

by amateurs,” possibly coining for the first time the phrase that later became an ARRL motto,<sup>6</sup> Then this:

*“Somehow or other, we wireless bugs seem to have a better fraternal spirit and a more highly developed sense of humor than other mortals, as our A.R.R.L. history has shown in the past. Let us keep it up, and let every fellow who has anything to loan from a dollar up come across with it and help the game along.”*

The Old Man obviously was in agreement. In the same issue he described the frantic rush to set up equipment again, largely starting from scratch, causing a shortage of supplies such as wire and soldering materials.<sup>7</sup> He wrote about the trials of new antennas, masts and ground systems, finding the whole process pretty rotten as usual.

Before the war and its shutdown, he had written about the prevalence of QRM while trying to relay messages, mentioning the “little boys” yet again - and complained about bad operating that he’d overheard, citing several examples. He puzzled about one particular message he copied that had been especially garbled by the operator’s bad sending:

*Listen to this: – ‘Yes yes jst wyd glucky wait a rnt muddy wouff hong blifstyf monkey motor.’ We assume from this msg that Glucky is being asked to wait a minute while Blifsky seeks a wouff hong with which to wallop a monkey the next time the latter faces toward the motor. I do not think I know just exactly what a wouff hong is.’*



*Wouff hong – the definitive specimen*

Quite fond of nonsense words like “rettysnitch” and “ugerumpf,” this was his first reference to a wouff hong in QST<sup>8</sup> - a particular term that would live on in ARRL and amateur radio lore. At no point did he suggest using a wouff hong (whatever it might be) on a person.

Now that the war was over, The Old Man judged the whole starting-up process to be quite rotten. Clearly

it was time to revisit the wouff hong idea.

No longer simply a string of letters in a garbled message, it took on a new life of its own as a solid object. He closed his article writing that he had sent the ARRL an actual wouff hong, which he found among his junk. In his column, Warner wrote of being shocked upon opening the package from T.O.M. to see the “authoritative specimen.” Displayed at the Board meeting, no one seemed to know quite how it was intended to be used, though The Old Man’s stories told of its use on spark coils and QRM creators in the Midwest where he lived. The editors invited the membership to comment and offer any insight they might have about it. Meanwhile, the nasty implement was framed and hung on the wall at headquarters in Hartford<sup>9</sup> for all to see, and pictured that month in QST.

While the ARRL treasury had yet to reach a sufficient level for normal operation, humor was in abundant supply.

In the Operating Department, J. O. Smith as Traffic Manager, a new position, recapped the current structure of division managers. A new section of QST was established to cover on-air activities each month, primarily in traffic handling. Stations were directed to keep a log to accurately report to superintendents each month. Smith pointed out that once transmitting was again permitted, all licenses will have expired, requiring new licenses to be issued.

He reminded everyone that a transmitting station could not be operated without a license under current law,<sup>10</sup> something still not obvious to everyone.

In one of the biggest post-war changes, many amateurs were preparing to operate by installing equipment for transmitting un-damped (later called continuous wave or CW) signals. This would certainly make issues such as decrement irrelevant, and would also help solve the QRM problem.

The pre-war trunk line system was no longer in place. Though many active relayers were still in the Navy or Army, several had already returned and volunteered as superintendents.

(continued on page 7)



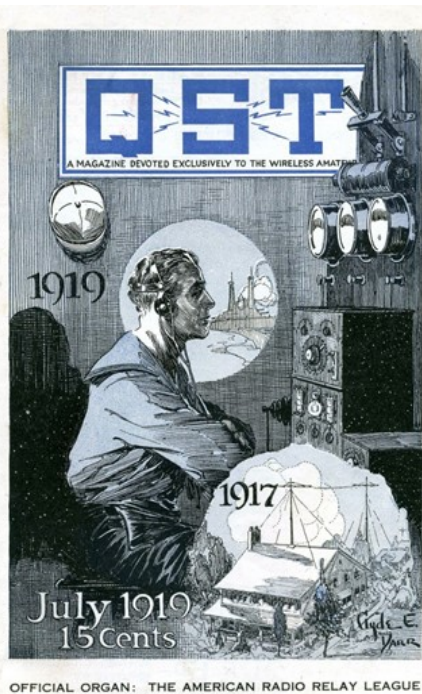
**Ham Radio History: Waking Up - Hams begin to return home from war** by Chris Codella, W2PA

(continued from page 6)

Each division office called for stations to register interest so that the relay system could be reconstituted. A "Personal Notes" section of QST summarized where some well known operators were now, having moved or taken new jobs during or after the war.<sup>11</sup> At the end is a framed note from the mother of William Woodcock, 8SK, telling of her son's death from pneumonia while serving at the Great Lakes Training Center.<sup>12</sup> She enclosed a donation in memory of him.

Finally, Warner noted that "QST will be issued regularly from now on." As if to corroborate, the magazine was back to its familiar format with 36 pages for July and reported that the ARRL was halfway to its financing objective.

The cover art by Clyde E. Darr, 8ZZ, showed an operator in a Navy uniform sitting at the controls of a station clearly not his own—the only on-air reality for hams in 1919. By contrast in a small inset drawing, a house with an aerial appears—the home and station he left in 1917. Hams' lives had changed dramatically in just two years and it all stemmed from their passion for wireless and its relevance to the war effort.



□ □ □ □

de W2PA

Footnotes:

<sup>1</sup> Clinton B. DeSoto, "200 Meters and Down," The American Radio Relay League, Inc., 1936, 55.

<sup>2</sup> The Old Man, "Rotten Rusty," QST, April 1919 (the

"Midget" issue of QST), 5.  
<sup>3</sup> About \$100,000 in 2013.  
<sup>4</sup> "Receiving Permitted," Editorial, QST, June 1919, 14.  
<sup>5</sup> ibid  
<sup>6</sup> "A.R.R.L. Loan," Editorial, QST, June 1919, 13.  
<sup>7</sup> The Old Man, "Rotten Starting," QST, June 1919, 8.  
<sup>8</sup> The Old Man, "Rotten QRM," QST, January 1917,  
<sup>9</sup> Still at HQ, it hangs in a glass case in Newington today.  
<sup>10</sup> J. O. Smith, *The Operating Department*, QST, June 1919, 17.  
<sup>11</sup> "Personal Notes (on staff)," QST, June 1919, 22.  
<sup>12</sup> "In Memory of William D. Woodcock, Ex-8SK, Silent Key," QST, June 1919, 25.

(Next issue: Naval Maneuvers - Amateur radio comes under renewed threats)

(Are you enjoying this series? Please let us know. Send your comments to [tchamnews@gmail.com](mailto:tchamnews@gmail.com).)

**CQ Publisher Dick Ross K2MGA (SK)**

It is with great sadness that we report the passing on April 27 of Richard A. "Dick" Ross, K2MGA (SK). He was 84.



Dick was Publisher of CQ magazine since 1979, and was its editor in the 1960s. As President of CQ Communications, Inc., Dick was also publisher of multiple magazine titles, including Popular Communications, CQ VHF, CQ Contest, World Radio Online, Communications Quarterly, CB Radio, Electronic Servicing and Technology, Modern Electronics, Micro Computer Journal, and Music and Computer Educator. In addition, Dick oversaw the production and publication of CQ books and calendars, the CQ Video Library and more. In 2010, Dick received the Dayton Hamvention's Special Achievement Award.

He is survived by his wife, Cathy, daughters Kate and Jennifer, their husbands and five grandchildren. A memorial service will be scheduled at a future date.

RIP, K2MGA



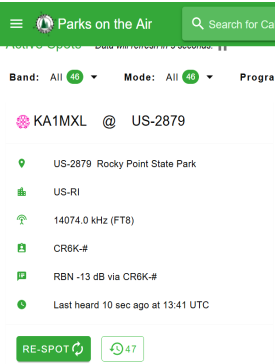
# POTA with Dick, K4NJ & Chris, KQ4GGA



Dick, K4NJ and Chris, KQ4GGA discuss POTA at PSLARA meeting [TCHN is excited for Dick, K4NJ and Chris, KQ4GGA, his frequent operating partner to share their POTA activities. Dick and Chris have activated many local and regional parks. If you need help getting started, you can find their email addresses on QRZ. They are always ready to answer your POTA questions.]

Summer is here. Numerous local, regional and national POTA opportunities await hams.

Whether you walk, drive, fly or use other means, the [POTA web page](#) has a lot of information about parks that have been, or can be, activated.



On the main [POTA web page](#) is a list of parks and current activations. Take some time to read the individual park activations. Has another ham already activated your park?

To get started find the 3 horizontal lines in the upper left corner of the

[POTA web page](#). Clicking the lines will display a dropdown list of options.

If you know a park name or POTA #, click **Park**. Another dropdown list will display. Enter your park name or # to search.

You can investigate possible USA park activations by clicking the **Map** option. You can use the map tools to zoom and pan to your area of interest. For me, the map display was centered off the western part of

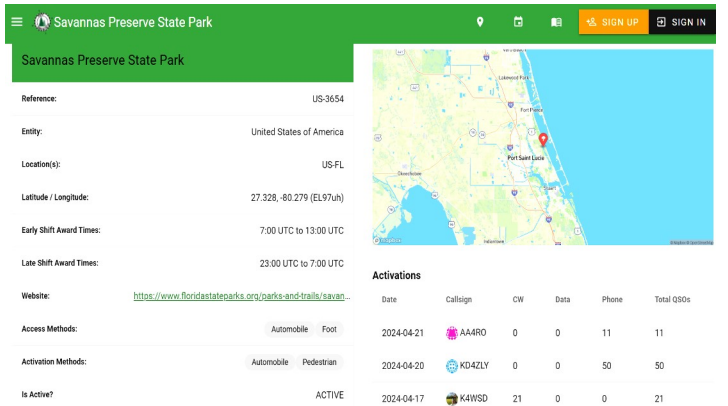
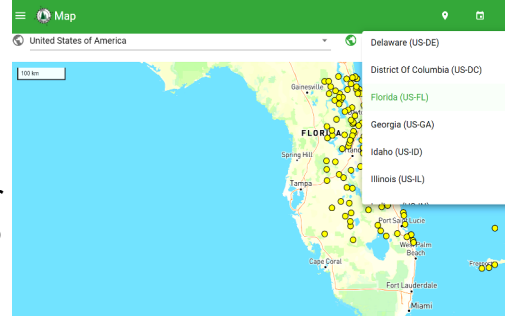
Africa, south of Ghana. A long way from the USA.

I found it easier to use the drop down lists. On the left you can

select a DXCC entity. I selected United States of America. On the right are individual states. I scrolled down and selected Florida. A map of Florida was displayed with a series of yellow dots. If have a specific area and know your park location exactly, you may be able to click on park's yellow dot.

However, many of Florida's parks can be very close to one another. Map tools are available for zooming and panning. If your mouse has a wheel or similar, you can zoom in using that method as well.

After you have zoomed to your area of interest, your park location may be identifiable. If you are lucky after clicking the yellow dot, a box will be displayed with the park name and #. Next, click the **More Info** button and a map will be displayed. The map gives you information about the site, including who has or is activating it and much more.



What if you are traveling and see an interesting state or federal park or area for possible activation? Using the steps outlined above, it will be easy to find your park.

Operating POTA is a fun experience. Try it and you will be hooked!



## HF & DX Group Notes

The HF & DX Group continues to meet monthly. Our most recent meeting was held on May 10, 2024 at the Bob Evans restaurant in Saint Lucie West.

Attendance was good and everyone had an enjoyable get together. The restaurant staff saw to it that coffee cups were kept full, while everyone enjoyed a hearty breakfast.

There was discussion concerning the impacts of the less than ideal propagation conditions DXers have been experiencing in recent weeks. Despite the less than ideal conditions some successes were reported.

Upcoming DXpeditions were also a topic of discussion. Watch the spotting networks for clues as to who is on the air at any given time. And don't forget about Antarctica. The southern summer is winding down, but there are still a few stations on the air.

Improved solar conditions are expected to continue into summer, offering the prospect for good DX opportunities in the coming weeks.

## Upcoming Meetings

Do you have interest in DX, or HF operating in general? If you answered Yes, then what are you waiting for? Come join us at our next meeting. The group meets over breakfast on the second Friday of every month.

**Next meeting: Friday, June 14th at 9:00 AM at the Bob Evans restaurant, 1830 SW Fountainview Blvd, St. Lucie West.**

Future meeting dates: July 12 and August 9, 2024.

Meetings are informal. Come and join us.

*(Note: You will be responsible for purchasing your own breakfast. The restaurant allows us to meet in their space. Please show them respect by ordering something.)*

## Short Takes

Mostly DIY RF-Hardware for hardware-defined RF  
<https://mostlydiyrf.com/>

Soldersmoke  
<https://soldersmoke.blogspot.com/2021/06/soldersmoke-podcast-231-travel-sst.html>

Ham Radio Crash Course  
<https://hamradiocrashcourse.com/about-ham-nation/>

Ham Nation-Founded by Bob Heil (SK)  
<https://twit.tv/shows/ham-nation>

Space Weather Prediction Center (click dashboards to go to radio prediction)  
<https://www.swpc.noaa.gov/>

Name That Core – Carl Luetzelschwab, K9LA  
[https://ia801408.us.archive.org/20/items/Name\\_That\\_Core/Name\\_That\\_Core.pdf](https://ia801408.us.archive.org/20/items/Name_That_Core/Name_That_Core.pdf)

Ferrite Toroid Baluns - John Portune – W6NBC  
[https://www.youtube.com/watch?v=\\_p4DcQT2l0g](https://www.youtube.com/watch?v=_p4DcQT2l0g)

How to make the easiest 2 Meter Dipole Antenna for your HT- handheld Radio using a BNC binding post  
<https://www.youtube.com/watch?v=EZ5T4lpTFH0>

VKIAD: Get Out of the Shack and Live Life  
<https://vk1nam.wordpress.com/>

RAREWARES-Hard-to-find software  
<https://www.rarewares.org/index.php>

## Email & Chat Groups

(Note: some groups may require registration.)

For DXers: About the DXLab software suite:  
<https://groups.io/g/DXLab>

Getting started with Logbook of The World:  
<https://www.arrl.org/LoTW>

See an interesting web site or group? Tell us about it. Send link to [tchamnews@gmail.com](mailto:tchamnews@gmail.com)

## Why HF is Important to Our Safety *by Bruce, W8HW*

[Editors note: It is ironic that as we are inserting this latest article by Bruce, W8HW into the newsletter template, announcements by NOAA and NASA alert us to a significant solar event. Read on to learn about the dangers of solar events and Electromagnetic Pulse radiation.]

**Ed, KIAP** gave a well prepared talk at the April Treasure Coast HF and DX Group breakfast meeting. Ed's talk was loaded with valuable information. As I looked around the room I noticed that some of the facts Ed covered were **NEW** to many of those attending the meeting. Thank you Ed for a job well done. More on Ed's talk later.

**This brings up the question...** Why aren't these valuable communication skills passed on by "Elmer's" or being taught in the larger club meetings? I wonder... Is it because today, many hams put too much faith in VHF and UHF communications, and do not recognize the limitations? Perhaps they do not understand the need, value and assurance of both long & short range simplex communications (*direct, antenna to antenna*) that only HF can provide? Let's unpack this.

**What does HF provide that VHF/UHF can not provide?** Many scenarios exist. Today let's use the example of **EMP** (*Electromagnetic Pulse*). Why is EMP so dangerous? It is **not radioactive** and by itself will not hurt humans directly. However, it can be a very efficient killer of both man and machine.

**How efficient?** Even a low-yield nuclear blast will kill. The key phrase is "*low-yield nuclear*." Some estimates state that perhaps 80-90% or more of our population will die in the affected area within months or weeks ([View EMP maps](#)). Also, missile guidance does not need to be accurate. The point is that even a small country with low technology could make it happen. What does it take to be a survivor? Let's examine some of this report, "[North Korea Nuclear EMP Attack: An Existential Threat](#)."

**Yes, you can be one of the survivors.** Whatever the survival rate, the point is **there will be some survivors**. This could be you and your family. Two things are required to survive: **1** - An attitude or will to live. Believe it or not, "will to live" is considered the most important ingredient; and **2** - Preparation.

The experts tell us that only people who are prepared will survive. Remember that EMP is slow to kill and may take many days or weeks to kill. Preparing must happen before the EMP event. **Bonus 3** - A strong motivating factor and a hope builder happens upon discovering that others have also survived (*Related to factor 1*), perhaps in other parts of the world.

**The questions that we need to answer:** What will EMP destroy; how can it kill us; how can we protect ourselves; and how can HF ham radio help?



**Why HF?** Let's unpack this one piece at a time. We will look at what our government and other experts say. Many links will be provided.

**What do the experts tell us?** For starters, large EMP can happen even with a low yield nuclear and would be expected to shut down our power grid for **possibly many years**. It will kill most communications. Loss of phones and internet are expected. News and broadcast stations will not work. Satellites most likely will be destroyed **on at least one side of the earth**, possibly more.

**Years to repair the problems**, if ever. Public Broadcasting had a great report written by Matthew John O'Dowd (PHD-astronautics) on [What if we Nuke Space](#). This report will amaze you.

**NOTE** - Emergency power sources and other issues will be discussed at another time. Today we will focus on the ability and the need to communicate. One point on power consumption, energy will be in low supply. In this case, energy consumption must be reduced to bare minimum. A computer can consume 33 to 200 times the power that an efficient radio, such as an IC-718, consumes. That is a major point. **Radio modes requiring a computer like-ly will not be possible.** Additionally, unprotected online computers can be destroyed by EMP.

**Banks and food stores** will not be able to operate because they rely totally on internet communications for financial transactions.

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## Why HF is Important to Our Safety *by Bruce, W8HW*

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### Water systems are not expected to work.

Even cars are not expected to work. And, they will **NOT be able to be repaired.** That is because most cars have microprocessors that are now destroyed. Microprocessors will be in short supply or no supply, so do not expect any kind of repair. Microprocessors will not be the only problem. I have seen videos on government testing where cars stopped dead. Nothing worked. They were totally dead and not repairable.

**EMP kills microprocessors.** Therefore, only cars in good Faraday shields might survive. A few very old cars (1960's or older) that don't use microprocessors or electronic ignition, might survive. Gas stations are also not expected to work, perhaps across half of the world. Fuel will exist only with those who have large storage and people on the other side of the earth. The only 2 ways to reach out for help will be our legs and simplex radio.

**Why one side of the earth?** It has been reported that shortly after a significant EMP exposure many people will die on the side of the earth exposed to the event. There is a possibility electronic equipment on the other side of the earth might not be exposed to EMP and may continue to serve its public. Science is not sure about impacts on the other side of the world.

**Will the earth block the EMP on the other side?** They could have fuel, food, water and other supplies. This means that the only people who can help will be long distances away, perhaps on the other side of the ocean. However, the people who caused this problem may also be on the other side of the earth. How do we know? What caused the EMP and what can we do about it? Sharing information using HF communications will be the key to knowing and surviving.



**Causes of EMP** - Man made and natural causes.

**I- Man made causes** can come from any of the many countries that have nuclear power. Each country has a leader who has control of the nuclear launch

button. Even a low yield nuclear detonation is a very efficient way to generate a strong and devastating EMP. Maximum kill for a nuclear bomb is not on the ground, but high in the air. Above ground is also the easiest. Why?

**If a nuclear bomb exploded around 150 miles above the ground,** it may not kill us at first; but it could bring our life (*as we know it*) to a halt very quickly and for a very long time. Our ability to survive after an EMP event is now the question. The press tells us such events may be closer than we think. Newscasts remind us who is at war and who has nuclear weapons. Tensions grow higher each day. Who will push the button first? What can we do to protect ourselves? The question seems to be



**NOT if it will happen, but when.** But, man made causes are not the only way.

**2 - Natural causes** such as CME (Coronal Mass Ejections) from the sun. Not all CME hit the earth, but many do. Let's take a look at five EMP events you may not know about. One major EMP event happened in 1859 during solar cycle 10. Humans survived as they were not dependent on cell phones, internet and public water systems. Most ate food direct off the farm. Cash was king and transportation was mostly horses. There were no electronic payment systems. Today, food and other stores shut down if electronic payments do not work. Few people today plant gardens or live on a farm.

**Strong natural EMP events** of this magnitude are said to happen every 170 to 200 years. Many scientists say another could happen soon. Smaller CME events also happen. Let's look at some of the past EMP events and see what happens, starting with a closer look at the [Carrington Event](#).

**I- The 1859 EMP,** also known as the [Carrington Event](#). This was the strongest one on record. If this were to happen today, very few people would be expected to survive EMP at this level. However, some will survive. How? We will talk the about the "how to survive" later in this article.

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## Why HF is Important to Our Safety *by Bruce, W8HW*

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**Damage was amazing.** No electronics existed in 1859 other than telegraph. Telegraph stations were only relays (*the clicker*) and contacts (*the sending key*).

**You would think nothing could happen to them, but it did.** Sparks flew, stations caught on fire and communications were lost. The lesson here is that the wires connecting stations acted as antennas. EMP loves wires. A wire as short as a foot acts as an antenna. If EMP can cause that much damage to simple relays and contacts, what can it do to modern day electronics and our way of life today? That is how serious the problem is. We will cover choices and prevention later in this article.

**2 - The 1921 storm.** The storm's electrical current sparked a number of fires worldwide. HF radio propagation was enhanced during the [geomagnetic storm](#) due to ionosphere involvement. For more information, click the link above.

**3 - The 1972 storm.** Luckily this was not a strong [solar storm](#). Not all satellites were destroyed, just a few. The strength was around 1/30 of the 1859 Carrington Event. Wide spread electric grid and VHF communication disturbances occurred, as well as some satellite disruptions. HF radio propagation was enhanced during the storm due to ionosphere involvement. The U.S. Air Force's Vela nuclear detonation detection satellites mistook the EMP as an explosion, but this was quickly dealt with by personnel monitoring the data in real-time. I often wonder what would happen today if AI was in control? What would happen next? Alas, an on-orbit power failure ended the mission of the Defense Satellite Communications System (DSCS II)

**4 - The 1989 Quebec incident.** The entire Quebec, Canada grid collapsed in 93 seconds. Small CME events like this **will not be life threatening**. However, about 6 million customers were without power for roughly 10 hours. Cost estimates ranged from \$1 billion to \$2 billion even though there was very minor equipment damage. Sources pegged the 1989 storm responsible for the Quebec outage to be about only a fraction of the 1859 event, 1/10 or less the intensity of the 1859 Carrington Event.

**5 - The 2003 incident.** In 2003, a very low level

event occurred that affected South Africa's grid. McClelland said it was 1/50 (one-fiftieth) the size of the 1921 event, but it stayed active for a period of days. The grid did not collapse. Instead, equipment saw prolonged exposure to the event and, over a period of months, 12 transformers were lost as a result of the event. Ham radio survived. I have found no reports of ham radio damage.

**What do these incidents tell us?** It is a question of EMP size. It is Important to understand that it is the strength of the EMP that matters. EMP is not poison to your radio or to you. You do not need to completely isolate your radio from EMP, just reduce EMP's strength or power into it. This is measured in db of protection. To put it in simple terms, disconnecting the antenna and power source, and placing the radio into a faraday shield or bag is all you need to do. No external wires of any kind can remain connected to your radio. The EMP bag must be completely sealed. I will break this down for you in the section "How much protection is needed?"

**Do not be fooled** by the EMP bag ads. I have seen many ads that advertise 99% protection. That sounds like a lot, but it is not. That is only 20db of protection. Others at 99.9% protection would be around 30db of protection. Stick to db ratings and not percentages. What is a db? Below we give you all the information you needed to be safe, using everyday terms. I will do the math for you as many hams do not know how to convert power to db.

**How much EMP protection is needed?** The experts give us many answers. No problem. The average answer for south Florida is around 10,000 to one (40db). I would suggest **50db or higher** of protection. To put this in perspective, you will get 20-30db just by disconnecting **all external wires** including antenna, power supplies and computers. Add that number to what bags can do, and you are safe. Most bags designed for EMP protection will add an additional 40-100 db of protection depending on the bag. The amount of protection will be given in the ad. I recommend that you play this YouTube [video](#) for a greater understanding.

**Online systems.** Let's be clear, if your radio is  
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## Why HF is Important to Our Safety *by Bruce, W8HW*

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connected to antennas and other stuff, it probably will not survive an EMP event. To survive this kind of event, you will need a stand-by radio that is disconnected and stored into a faraday shield or bag. Only a few hams will have this and it is likely that they will be many miles apart. Simplex will be queen after an EMP event and HF will be king.

**It is a well understood fact** that after a major EMP event, many (*if not all*) life supporting services will become unusable for a very long time, **perhaps years**. This too is because they are online and connected. It is not just broadcast stations and news that will be off the air, many other communication services will fail as well. Most radios that are connected to computers and other electronics will be destroyed and un-repairable; both radio and computer destroyed. This is because all connections (*including power connections*) act as antennas allowing EMP to destroy. **Only protected stand alone simplex communications** are expected to survive EMP. It is a question of the size of the EMP. Why is that? How do you protect? We break it down one step at a time for you.

**What does this mean to hams radio operators?** Any ham radio that has a microprocessor or requires an attached computer is extremely vulnerable to EMP. All digital radios use a microprocessor. Without special EMP protection, a radio containing a microprocessor **is not expected** to survive a large EMP event. Even if you do protect your radio, what if your radio is only a link in a larger relay system? That system is not expected to survive any EMP event similar to the one in 1859. What if your radio is not capable of long range on its own, direct antenna to antenna? Simplex at both near and far range will be needed.

**Anything that is dependent on internet or satellites** is expected to be rendered useless. All forms of "online automated communications" are expected to be permanently unusable. Repair is not expected for many years, if at all.

**Computer damage.** As you may know, computers have microprocessors, thus they have EMP vulnerability. Any mode that requires a computer

should not be relied upon. Without computers, it is quite probable the only modes of communication would be SSB and CW (manually operated). This [ARRL video provides training for manual traffic handling on SSB and CW](#). Please note that when the video speaks of relay, they are speaking of human relay, hams passing traffic to other hams manually. EMP does not affect humans or protected radios.

**Can we make a difference?** Yes, we can; but we must be prepared. That means we must know what the pitfalls are and how to avoid them. In other words, **do not put our communication eggs in the wrong basket**. The largest pitfall is relying on automated relay systems that science tells us will fail after a large EMP event.

**It does not matter** if the system is digital or analog. Both have vulnerability to EMP. There is lots of confusion on this. What matters is that relay or remote stations must be online to operate. **That is the problem**. Ironically, because they are connected and operating they are vulnerable. Simplex HF does not have this problem as it does not require automatic relay systems or other online systems. Why?

**I will explain why in a moment**, but first understand that ground wave bands (*VHF & UHF*) **have never been fully tested** for this kind of problem, **nor can they be fully tested**. Why? The reason for this is that a valid test would require the entire internet to be turned off for an extended period of time. And we all know shutting the internet down (*worldwide*) would not be possible.

**The problem with VHF & UHF ground wave bands...** A large EMP is expected to burn out online relay systems. If connected to antennas or power, they are likely destroyed. Simplex communications will remain only if your radio is both disconnected and has been EMP protected. Simplex is important.

**The problem with ground wave bands** is limited range when using simplex. Most hand radios have a simplex range of 1-5 miles. Home station range is estimated to be 2-20 miles depending on antenna.

**If you have participated** in a VHF/UHF Simplex  
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## Why HF is Important to Our Safety by Bruce, W8HW

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test, you know it has been shown to be insufficient. If you have not done a simplex test, then I suggest you do one. A good simplex test frequency is 146.520. You will be shocked. A few strong stations exist, but they have a tall tower and antenna with gain. Most VHF/UHF stations do not.

**HF is the only communication that has been tested without IP (internet).** HF passed by serving well on its own with no active internet or phone service available. HF served well long before the internet existed. HF does not require online relay stations. Simplex on HF can be worldwide. Ask a good HF Elmer like ED how to do this. A Good HF Elmer is able to do this on a daily basis.

**How can HF operate under these conditions?** You might ask... Would it not be true that any HF radio in service would also be destroyed by an EMP event? The answer is... Any HF (or other radio) connected to an antenna, power, computer, or control circuitry, would risk being destroyed and most likely be un-repairable. Every connection is a wire and wires act as antennas. So what is the answer?

**Why is HF the only answer?** This requires us to examine two factors. Both factors are needed to get the full picture.



**Factor 1 – Protect communication equipment** by disconnecting both power and antennas, and then placing the equipment into a Faraday container for storage.

These can be purchased at Amazon or other web locations. See pictures for examples. Personally, I protect two spare radios from EMP and bring them out only for testing or other short use.

**Factor 2 – Few hams are willing to go to this extent.** The ones who do are often hundreds, if not thousands, of miles apart. VHF & UHF cannot do this in a single hop. Yet that is exactly what will be needed. Only HF (**Sky-wave**) can communicate long distances Simplex direct antenna to antenna.

**Why is long range needed?** (Bonus Factor 3) – Remember that large EMP can wipe out ground communication systems over half of the earth. Ad-

ditionally, the answer to our emergency problems is likely to be on the other side of the ocean. Only simplex, direct antenna to antenna can be relied upon. Only HF.

**Satellites on the same side of the earth** will be damaged or destroyed as well. This all happens with no warning and at the speed of light. No pun, it is truly at the speed of light. One moment everything works, then without warning it doesn't. At first, we will be left guessing what happened. Getting the answers will require reliable communications.

**Connected and ready.** Most people have not thought about this problem. We have all heard it said, "This system is connected and ready." The key words are "*connected and ready*." Ironically, that is the problem. Because it is connected and online, it most likely would be destroyed by the EMP. Anything that is connected is vulnerable to EMP, thus should not be counted on. Always pay attention to similar kinds of statements.

**Note:** All of my life I have worked in professional commercial VHF & UHF repeater and simplex communications (*Both digital and analog*); and I have seen how they can fail.

**MYTH #1 - "We have no need to communicate with people long distances apart."** Nothing could be further from the truth. Don't kid yourself. Because any EMP problem will be wide spread, we will be forced to make some serious decisions and make them quick. The person in the next city or state might not be able to shed much light, offer help or even be active.

**How do we make decisions?** For those of us who have had survival training, we know that "**job one**" is to fully ascertain the problem and be honest with ones-self. Only then you can determine how to obtain the assets needed to survive. Only then can you be an aid to yourself, your family and others. **This can not be done in a vacuum.** Because of the EMP damage, only protected simplex communications will be operational.

**What just happened?** In the first moments, we will have no idea what happened. Nothing works,  
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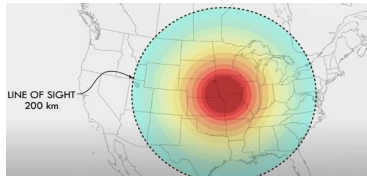
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including our phones. How to figure it out? We have no information, just that nothing works. **Fear and depression begin to hit us.** We can't let that happen. Combating fear requires information.

### Probable above ground attack area.

This map shows only South Florida may be on the safe side of the line.



Perhaps some things will work, while others won't. But that is not the main problem.

**The problem is... Not protected** would be North Florida, Georgia, Texas, S. Carolina and much of the USA. It is likely the people we will need to communicate with will be thousands of miles away from us, perhaps even overseas. HF would be the only answer.

**Ascertain the problem** – When the lights go out, it will surprise us. Nothing works. We will be in information “black out.” The most used phrase will be “WTF.” The first question that will need to be answered is... What is going on and how wide-spread is the problem? Is the problem City wide? State wide? Country wide? World wide?

**Understanding the problem** is the first step to decision making. Only after that can we determine what happened, why and by whom. Then, by knowing who our allies are, and who are not our allies, we can trade assets and knowledge needed to survive. Only then can we start our plans for survival.

**So what does all of this have to do with Ed's talk?** How do you know if the HF station you are relying on will cover the long range needs? Everyone believes that their HF station works well, but does it? In many cases the answer is no. Be honest with yourself. How do you know? Did you know there is a test? What is the test?

**The ARRL understands this problem.** The ARRL knows that the best test of your long distance radio system can only be by chasing DX and contesting. Why? **DX and contesting give a numerical evaluation of station and operator** under varying conditions. Thus, it is the only way to

be honest with yourself. If your station's simplex range is only a few states away or less, you may wish to listen to the DX Elmer's such as Ed. You will find that true Elmer's are friendly and helpful.

**The question becomes** who should be your Elmer? Let's put it into common terms. Ask yourself, would you take your car to be repaired to a man that only repaired one car in his life, or to someone who has repaired thousands of cars?

**The same is true with the science of HF.** Why is an Elmer like Ed a good choice? Answer - Ed has the numbers to prove it. As a matter of fact, Ed is on the ARRL DX honor roll. Few hams have made that level. Ed is one those hams who knows how to make an HF station work well. So now you know how to find an Elmer to ask questions about the science of HF and get the best answers?

**The problem with HF** is that it requires much operator experience and knowledge. This causes newer hams to avoid HF, including many ham radio leaders. **It is not your fault** if no one has taken the time to explain HF to you. This should not be a problem, since you now know how to find the HF Elmer's for club talks and general HF advice.

**The answer remains... Knowledge is power.** Now ask your local club to provide this kind of information and ask who the true HF Elmer's are. That is the only way to learn the science of HF. The ARRL DX counting system tells us who & what theories are correct. Just like the car repairman, if DX experience is low, then DX count will be low. So always ask about that. **It is the question** that tells you who to go to for HF information.

**The Treasure coast is lucky** to have the *Treasure Coast Ham News* team working hard and providing a forum for this kind of information. They provide this newsletter as well as organize the HF-DX group that meets every second Friday. This group shares lots of helpful information. Watch for emails announcing upcoming DX Group meetings.

**When you consider** what the world news is telling us these days, it is clear that now may be the time to tune in and tune up to HF.

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**Remember:** Near or far, HF does it all.

**MYTH #2 - HF can have blackouts and you can't communicate.** This is a big myth! I have been a ham for 60+ years and have seen many so-called "MAJOR HF blackouts." I have never found a time when I have not been able to work anyplace where comms were needed. How? Remember that each HF band is different. **Choosing the correct band or antenna type is the key.** This newsletter had some past articles on propagation, band selection and antenna angle of radiation choices. Be sure to check them out. Blackouts do not have to stop you from HF communications.

**Conclusion -** If I have caused you to talk about EMP and HF, then I have done my job. All conversations about communication choices must include the question, **"Has the system being considered ever been tested under conditions of total absence of internet and electrical power?"** How was it tested? No excuses... These are the conditions that we will be faced with. Do not let the questions be avoided. If the answer is no, or the speaker avoids by poo-pooing the question, then you know the system can not be trusted. Hams must be willing to talk about these issues.

**The threat of EMP is real.** Make no mistake about it. Listen to the news. Who is at war and who has Nuclear? **We can not trust our family's lives on a theory that has not and can not be fully tested under all conditions.** A very important point is that HF **has been fully tested under all conditions.** It is known to work. The only requirement is an experienced operator that understands the science of HF.

73, Bruce, [W8HW@comcast.net](mailto:W8HW@comcast.net)

PS: Ask your leaders for more information about EMP protection. It is a large topic with many myths. Be cautious with YouTube - it is full of EMP myths.

\* \* \* \* \*

### Read More of What the Experts Say

- . [PBS report on EMP](#) (strongly recommended)
- . [EMP Weapons - government report](#)

. [Congressional Report: A North Korean EMP Attack Would Kill "90% of all Americans"](#)

\* \* \* \* \*

## FCC to Require Two Factor Authentication for CORES Users

The Federal Communications Commission (FCC) has announced an upcoming change to the Commission Registration System (CORES) that licensees use to pay any application or regulatory fees, manage or reset a password on an existing FRN, or request a new FRN. Beginning March 29, 2024, multifactor authentication will be implemented.

Users will be prompted to request a six-digit secondary verification code, which will be sent to the email address(es) associated with each username. The user will then need to enter the code into CORES before they can continue.

In a public notice, the FCC said this change will make the system more secure. "This additional layer of security will further safeguard against unauthorized access, thereby enhancing the overall integrity of information contained within the CORES system and improving the security of user data," it read.

The Public Notice can be found in PDF format at <https://docs.fcc.gov/public/attachments/DA-24-219A1.pdf>.

The FCC recommends that users confirm they have access to their username account email and to add a secondary email address, if need be.

Resources are available for those who need assistance with the system. For inquiries or assistance regarding the implementation of multifactor authentication on CORES, submit a help request at <https://www.fcc.gov/wtbhelp>, or call the FCC at 877-480-3201 (Monday to Friday, 8 AM to 6 PM ET).

*From the ARRL Letter*



## OpEd– The Frequency Grabs by WSJT Developers, Planners & Leadership

With several current release candidates of the WSJT-X software by Joe Taylor, the group of developers and leadership have programmed into the WSJT-X software a set of *NEW* default frequencies. These new frequencies are in addition to their current pre-programmed frequencies that the amateur community now identifies as **The FT8 Sub-bands**.

The new proposed frequencies are **right on top of other sub-bands** where other modes have been operating for decades (such as PSK, Olivia, and many others). There was no community discussion, except within the WSJT community. And, when someone protested the take-over of other well-established sub-bands, those protests were shot down. The stated reasons included, “Well, those other modes are not very active or popular, because spots are not showing up on various spotting networks.” Such reasons break down on deeper consideration – for instance, most spotting networks are not programmed to automatically identify Olivia transmissions. CW, PSK, and FT8 are programmed into scanners, but other modes are ignored.

*This behavior, considered rude, arrogant, presumptuous, and anti-gentlemanly (referring to well-established gentlemen’s agreements) has happened before, with the initial release of FT8.*

They (the WSJT-X developers and leadership) simply picked a frequency slice of each sub-band, without true collaboration with the wider amateur radio community.

When this columnist and fellow amateur radio community member, attempted a discussion, the retort from an official representative was an absolute dismissal of any protest against the choice and method of frequency options within the WSJT software. While the software marks the frequencies as suggestions only, these defaults are used without question by the operators of said software. And, the mode is so fast that there’s no human way of truly monitoring the frequency before use, to see if some other mode is in operation. Besides, weak-signals that are present but cannot be heard by one’s ear, might well be in operation. Sub-bands exist to keep QRM from

covering up the weak signals of the mode expected at that frequency.

**Enter the IARU... The IARU has decided to step in and join the discussion.** “The [International Amateur Radio Union](#) has been the worldwide voice of radio amateurs, securing and safeguarding the amateur radio spectrum since 1925.” The IARU guides regulating bodies like the FCC, regarding the administration and rule-making pertaining to amateur radio.

The IARU states, on their website, *“The radio spectrum is a priceless natural resource. Because radio waves do not respect borders, the use of the spectrum must be regulated internationally. This is accomplished through the International Telecommunication Union (ITU), a specialized agency of the United Nations. Through World Radio Communication Conferences (WRCs) held approximately every four years, the ITU revises the international Radio Regulations, which have the force and effect of a treaty. The Radio Regulations allocate the spectrum to different radio communication services such as broadcasting, mobile, radar, and radio navigation (GPS).”*

Recent World Radio Communication Conferences were held in October - November 2019 and November - December 2023. The next conference is scheduled for 2027.

New uses of the spectrum are being developed every day. This puts enormous pressure on incumbent users who are called upon to share their spectrum access with new arrivals. The allocation process is extremely complex, especially when satellite services are involved. Reportedly, from [first-hand communication from one IARU representative](#), **WSJT-X RC3 lists 14074 kHz again for FT8. IARU is intervening.**

Stay tuned. I am asking for further suggestions.

73 Tom DF5JL  
IARU RI HF Manager

If you have suggestions, please [contact the IARU managers with your suggestions](#). If you use FT8 and FT4, also voice your concerns and ideas.

# News Updates of Interest

**ARRL Reports Outages:** On 5/16/2024, ARRL reported, “We are in the process of responding to a serious incident involving access to our network and headquarters-based systems. Several services, such as Logbook of The World® and the ARRL Learning Center, are affected. Please know that restoring access is our highest priority, and we are expeditiously working with outside industry experts to address the issue. We appreciate your patience.”

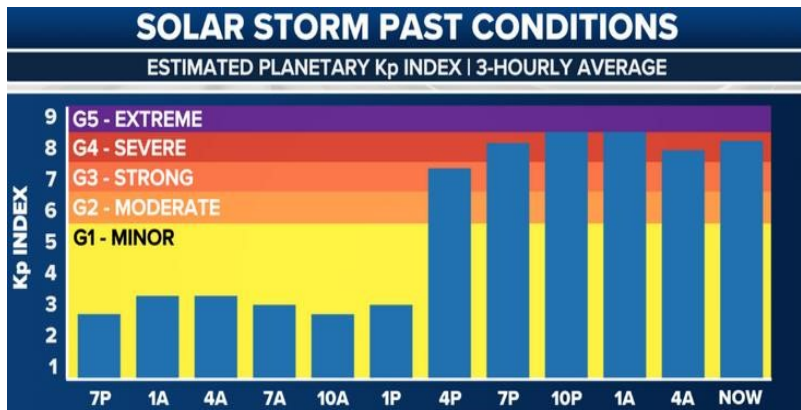
A further update on 5/17/2024 assured members that no credit card or social security numbers were stored on the impacted systems. The ARRL member database contains only publicly available information.

Late on 5/29/24 some systems, including the VEC operations, were returning to service. As of press time (5/30/24 at 6:00 PM), Logbook of The World was still down. No further information is available.

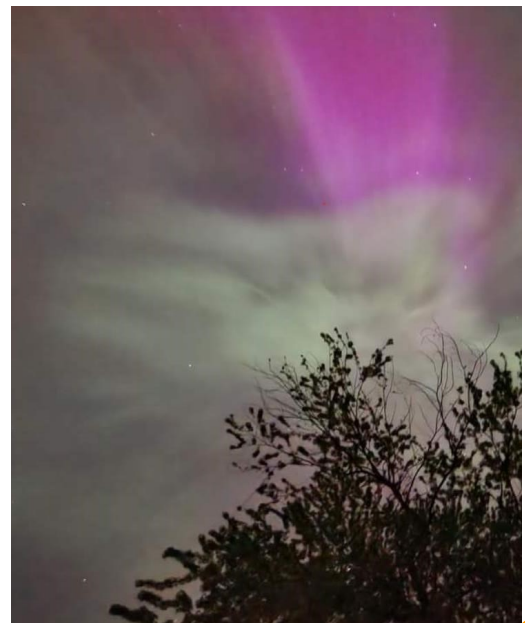
\* \* \* \* \*

**Solar Storm:** With the recent solar storm in the news, Bruce, W8HW’s article on page 10 of this newsletter about the importance of HF turns out to be quite timely. Bruce is currently in Michigan and sends the following comments and pictures of the Aurora Borealis as seen in Southeast Michigan.

*“Thank God this did not rise to a Carrington event, but did rise to a very high level as seen in chart below. This was real and still was extreme. We were lucky that it missed us by a little bit. It could have been much worse.”*



Photos taken in Michigan by Bruce, W8HW

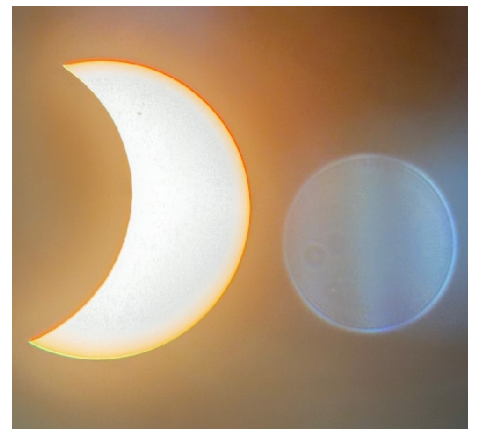
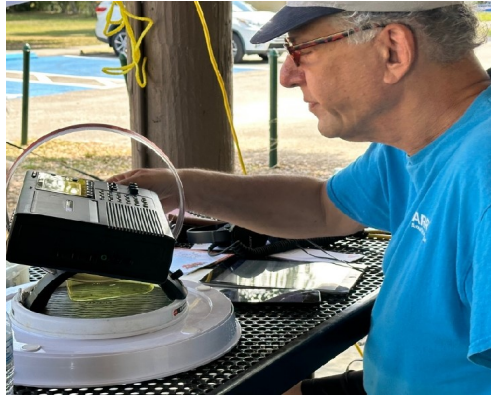




# PSLARA Solar Eclipse QSO Party

On Monday, April 8, 2024, members of the Port St. Lucie Amateur Radio Association (PSLARA) participated in a Solar Eclipse QSO Party at River Place Park. Four portable stations were set up. Contacts were light in number at first, but picked up as the eclipse progressed. One member brought a telescope with sun filters for viewing the partial eclipse (57%). Another member graciously played chef and cooked up hamburgers and hotdogs for the group.

The logs of the stations were forwarded to the Ham-Sci organization ([www.hamsci.org](http://www.hamsci.org)), which will compile them along with the logs of other stations around the world who also operated during the eclipse. This information will help astronomers and scientists to better understand the effects the solar eclipse had on the ionosphere and radio propagation.





## Tips on Working HF DX *by Ed, K1AP*

[Editor's Note: Ed was first licensed in early 1977 as WN1WSK. A year later he became an Extra Class. Ed worked in the telcom industry until his retirement. He was QRT for a time, becoming active again in 2011. Ed has 336 DXCC countries and entities in his log.]

### DX DEFINITION

Communications (QSO) with another country as defined by the ARRL (340 countries).

### DX ACTIVITY

DX-world.net: Weekly bulletins, expeditions, future activity (e.g. Peter island next Jan), and countries with very little or no activity (e.g. VP6G). Expedition Web Page: What's up (info, operating bands and modes, pictures, operating frequencies, QSL info, etc.). A good example: A80K (Liberia).

### DX SPOTS (Who is presently on the air)

Where to find DX: DX Cluster, My DX Summits, and VE7CC web pages. General format for DX spots: DE (Spotter) - DX Station - Freq - Mode - Time - Date - Country - Info. You can set the band and/or station (e.g. T32EI on 10m, or just T32EI). Sometimes an expedition web page / club log will show band and mode (e.g. CW) operation in real time, plus who they just worked (e.g. A80K).

Unfortunately, some hams spot with local QSOs (e.g. K1xx with W4xx), POTA, and high speed test contest QSOs.

### ON THE AIR DX

Headphones: Have a good set of headphones (XYL will be happy.)

Check for band conditions: Daytime: 20M, 17M, 15M, 12M, 10M, and 6M. Nighttime: 20M, 30M, 40M, 60M, 80M, and 160M (check the upper bands you may be surprised). Also look for grey line propagation (signal peaks at sunset/sunrise (e.g. FL to Asia)). Simon's World map web page is great for grey lines / sunset and sunrise. Also use the VOACAP web page to check for band propagation (not always 100%). Sometimes there is long path propagation.

Pile ups: A few to hundreds of callsigns calling all of once spread out in freq. It's not unusual these days.

For CW: tune down 1 KHZ or more and listen for the station (if not sure, check DX spots). For SSB: tune down 5 KHZ or more and listen for the station (if not sure, check DX spots). Sometimes a DX station is not working split and no one will stop calling (not unusual). What happens: usually the strongest station works the DX stations, they go QRT, or they go split.

### How the DXpeditions (rare DX stations) operate:

CW operators will usually send at 25 wpm or higher. A code reader helps. CW operators: up, up 1, up JAs (NA, SA, EU); (bandwidth is usually 1 to 3 KHz or more). SSB: up 5, up 5 to 10, sometimes by the numbers (callsigns stating with 1 QSOs, or 10 stations). Preferred freq's (e.g. CW 25 KHz up from low end).

### HOW TO WORK DX, AN EXPEDITION OR A RARE ONE (CW AND SSB)

*Please do not call on an expedition freq. They will not hear you and you will just create QRM. All hell breaks loose with stations (police) saying "up" and other "not so nice" comments which just adds to the QRM.*

Listen to an expedition operating pattern (try to find a clear freq) and send at about the same CW speed; the operator is trying to make as many QSOs as possible. I found it does not pay to be on the same frequency the operator just worked on CW. For SSB it is a mixed bag.

Sometimes a DX station will go QRT without a warning. Do not be surprised. Some reasons: operator break, too many stations or no stations calling. I also find that the operator may go to FT8/FT4 or another mode, along with a band change.

If a DX station is working another station do not break in. Wait until the QSO is over. Check who was first on the freq.

For an expedition or rare one after their call sign they will say "tu" or with listening up, etc.

For an expedition call once, then listen. If they have not found a station, then call again. For SSB they will say spread out; go 10 KHz up ASAP. You may be the only one calling.

(continued on page 21)

## Tips on Working HF DX *by Ed, K1AP*

(continued from page 20)

Do not give your name, state, wx, etc; just a signal report (CW: 599, SSB: 59). For example you send: for CW R 599 K or TU, they send TU; for SSB QSL ur 59 - QRZ/up etc.

*Please note: for an expedition (and any rare one) everyone is 599 for CW and 59 for SSB.*

**JA/EU** walls (e.g. EU stations working an expedition): Operator will sometime ask for NA stations only. Otherwise you have to be a big gun, running 20kw, or darn lucky to break the wall. Wait for propagation changes (e.g. 17m closed for EU but open for NA).

Sometimes the expedition station will be weak in signal strength along with QRM/QRN. If you hear (or think you hear) part of your call sign send a report (CW or SSB), then check their log. You may be surprised.

**Avoid dupes** if possible. An expedition will be on the air usually a week or more. At the end of week they often have no one working them. Be patient.

**Be on freq** when an expedition or rare one starts to operate (e.g. 7p8EI). Thus, you can work the station without the pileup starting. Better chance to work an expedition or rare one on CW than SSB (less stations). Some rare ones will only operate FT8/FT4 or CW (e.g. 9N7AA). *Please Note: FT8/FT4 or RTTY procedures are different. I only operate CW and SSB.*

### AM I IN THE LOG?

**Not for normal DX contacts** (JAs, EU, etc.) Trust your log for the QSO.

**Club Log/web page:** Expeditions and rare ones (e.g. Z68BB, 5B4AOF, etc.) use web logs. Log updates may be in real time, once/twice/three times a day, or after the expedition is over. Rare ones may not use log downloads, so you must trust your log.

**Don't forget** they may be on an island or country where Internet or satellite is not available 24 hours a day, or they have very limited access. Sometimes there are multiple stations and the logs are missing from one station or another because they are having to download them to a central point. Note: logs are

not missing. Please wait and check the log later, before working them again.

### QSLING

**Patience** (sometimes it's a waiting game). Sometimes it takes months for a QSL card. LOTW download is usually faster.

### QSL Cards

**Bureau:** (slow, send money to W4 bureau for your mailing). Note: this is okay for the usual DX contacts (JAs, EU, SA, VK etc.).

### QSL Manager

**QRZ:** (send SASE with your QSL card). Great if the manager is in the states.

**LOTW** (Logbook of The World) download: Check to see if station will download, sometimes after the expedition. Note: some rare stations don't use LoTW. Check QRZ etc.

### Dxpeditions and rare ones

**Club Log, M0OXO, Direct** (see QRZ for info)

**Donations** (recover QSL card cost, mailing, etc.). It's not cheap to run an expedition. Donation is via PayPal and usually CHASE credit card. Some rare ones ask for an SASE and a few dollars (QSZ) (e.g. FK8IK). Cost is usually 3 dollars and up for n number of QSOs (bands and modes). I will sometimes add additional dollars. Sometimes with no donations you may have to wait 6 months or more (or never) for a QSL card via the bureau and/or LoTW.

\* \* \* \* \*

*[Editor: I listened intently to Ed's April Treasure Coast HF & DX breakfast talk about effective ways to work DX and get confirmed. Ed's proven methods were not hypothetical. With 336 DXCC countries and entities he knows what it takes to work DX and get confirmed.*

*That afternoon, I saw A80K (Liberia) on 20 meters using FT4. Many stations were trying to work him. I was operating low power, about 25 watts. My first and second attempts were unsuccessful. Then I remembered Ed's methods. Using them, I gave Liberia another call. This time he came back to me. Bingo!*

*Working DX can be very chaotic. We test people to get a ham license, but what about learning the practical aspects of making contacts? Thanks to Ed, I learned valuable information and successfully put it into practice.]*

We are just at the beginning of hurricane season. All is quiet now, but that can, and probably will change as we near the season peak in late August and September. Whether you shelter in place, evacuate, or operate in your community in support of CERT, now is the time for you and your family to get prepared and be ready. If you plan to evacuate know your route, leave in plenty of time and make sure you have enough fuel. **Be prepared by getting prepared!**

**HAVE A FIRST AID KIT**

- . Non-latex Surgical Gloves
- . Cleansing agent – soap, antimicrobial towelettes or hand sanitizer.
- . Breathing Barrier with one-way valve for use during CPR.
- . Space Blanket
- . Sterile Dressings – 3" x 3", 4" x 4"
- . Roller Bandages for sterile dressings
- . Adhesive Cloth Medical Tape
- . Adhesive Bandages (Band-Aids)
- . Triangular bandages for arm slings
- . Scissors & Tweezers
- . Petroleum jelly or other lubricant
- . Cold Compress
- . Antibiotic Ointment
- . Burn Ointment
- . Insect Bite Cream
- . Eye wash solution to flush eyes
- . Aspirin, Ibuprofen, etc.
- . Snake bite kit
- . Prescription medications. Periodically rotate medicines to account for expiration dates.
- . Power Bars or Candy Bars for quick energy.
- . First Aid Instruction Booklet
- . Personal Emergency Contact Info and a copy of your ID – in case you become injured.
- . Think about any other items you may need and add them to your kit.

**Hurricane Preparation**



**A 72 HOUR KIT**

- . 1 gallon of water for each person per day
- . Non-perishable food easy-to-prepare
- . Mess kit or light weight cook pot
- . Sharp knife, cups, plates, utensils
- . Gasoline for generator & car/truck
- . Flashlight & extra batteries
- . Cell phone, chargers / battery packs
- . Radio (with NOAA Weather Channels)
- . Whistle/horn to signal for help
- . Paper and pencils
- . Insect repellent and sunscreen
- . Sanitation & personal hygiene items
- . Portable shelter – Tent or large tarp . . . Bedding or sleeping bags
- . Change of clothing
- . Rain gear
- . Pet care items & IDs
- . Compass (needs no batteries), GPS
- . Duct Tape
- . Extra set of car and house keys
- . Cash
- . Pictures of family members for ID
- . Matches in a waterproof container
- . Fire starter (ferrocium rod)
- . Magnifying lens (wallet size)
- . Family and emergency contact information & documents (a USB stick)

**MAKE A RADIO GO-KIT**

A radio go-kit can be a duffle bag, backpack, or carry case. Many hams use hard sided Pelican style cases. These cases come in different sizes and are waterproof. If you are deployed to a shelter your radio needs may be different than if you shelter in place. Some hams build a portable station in a box that includes radio, power supply/battery pack, meters, antenna, microphone, digital interface, radio and programming manuals, etc.

Items to have in your possession at all times are your official FCC Amateur Radio License and if an ARES member, your County issued Communications Response Volunteer credentials.

Make sure your VHF/UHF radio is programmed for your county ARES repeater and your local radio clubs. SARNET repeaters (our SARNET repeaters are Martin Co. and Sebastian) are a must as well as designated simplex frequencies.

Are you Winlink Express / VARA savvy? If not, get training now from your ARES Group.



## Portable Generator Usage & Safety



**Hurricanes can be very devastating.** Our electrical infrastructure is not always resilient to the force of a hurricane. Many of us could find ourselves without electricity during,

and for many days after, a hurricane passes.

**A portable generator is one solution** when the electrical grid is temporarily interrupted. Portable generators are good, but that does not mean you should not understand a generator's capabilities before a hurricane strikes, nor not take precautions when using a generator during and after the event.

**How much critical wattage you need** will help size a portable generator. Running a portable generator at peak output for a long period of time is not always good. Estimate your total critical wattage needs and then add at least 25% spare capacity when looking to purchase a portable generator or when upgrading the one you have.

**During a storm is not the best time** to test

your generator. Test your generator on a regular basis. While most have low oil shutoff, performing regular oil changes is a must. Many of us learn how to operate the generator when it is new, but quickly forget as time passes. Have the generator manual and start-up procedure readily available. Review before the storm.

**Generators should not be run** in an enclosed area, such as a garage. They should always be used in an area with lots of outside ventilation. A covered screened porch can be used. Allow plenty of open space around the generator. Make sure you are using the right size power cords. You should never plug your portable generator into your home's electrical service. A permanently installed whole house generator is meant for that purpose and has approved home electrical switching capability. Always store fuel in an approved container and in a cool, dry, ventilated and secure area. Many generators now have built in carbon monoxide detectors and automatic shutoffs.

**Remember to ground your generator** according to the manufacturer's recommendations. Thoroughly read and understand all recommended safety precautions. Being prepared is always best. **BE SAFE!**

## National Amateur Radio Emergency Frequencies

Emergency communications networks in North / Central / South America and the Caribbean are encouraged to establish their operations within 20 kHz +/- of these frequencies (kHz): 3750 or 3985 LSB; 7060, 7240, or 7290 LSB; 14300 USB; 18160 USB; 21360 USB.

**Maritime Mobile Service Net** (and others):

14300 kHz USB ([mmsn.org](http://mmsn.org))

**Hurricane Watch Net:**

14325 kHz USB ([hwn.org](http://hwn.org))

**National Hurricane Center** (during hurricanes):

14325 USB (day/primary); 7268 LSB (night & alternate)

**Caribbean:** 3815 LSB; North FL: 3950 LSB; South FL: 3940 LSB

**IRLP Node:** 9219; Alternate Node: 9508 or 9123

**EchoLink Conference:** "WX-TALK" Node 7203

**EchoLink Alternate Conference:** "VKEMCOMM"

[w4ehw.fiu.edu/wx4nhc-contact.html](http://w4ehw.fiu.edu/wx4nhc-contact.html)

**Amateur Radio Calling Frequencies (MHz)**

80 Meters: 3.885 AM

40 Meters: 7.290 AM

20 Meters: 14.286 AM

6 Meters: 50.125 SSB; 52.525, 52.540 FM Simplex

6 Meters: 50.620 Digital (packet)

2 Meters: 144.200 SSB; 146.520 FM Simplex

1.25 Meters: 222.100 CW/SSB

70 Centimeters: 432.100 CW/SSB

70 Centimeters: 446.000 FM Simplex

33 Centimeters: 902.100, 903.100 CW/SSB

33 Centimeters: 927.500 FM Simplex

23 Centimeters: 1294.500 FM Simplex

23 Centimeters: 1296.100 CW/SSB

FM amateur calling frequencies use carrier squelch. A mixture of digital modes or mixed modes could be found locally (P25, NDXN, DMR, D-Star, etc.).

Source: [National Interoperability Field Operations Guide Version 2.01 MARCH 2022](#)

## ARES VHF/UHF Simplex Operating

*[The role ARES has performed for many years seems to be taking a different path these days. Yes, we can still be deployed, but now we are also asked to support our local community by providing disaster communications between the EOC and the locations where we live. While analog voice is still very important, WinLink Express is gaining in importance for transmission of textual data. You should be able to use both.]*

\* \* \* \*

St. Lucie County (SLC) ARES conducted a spring simplex drill this year. The drill started with net control giving the ARES communicators procedural details via a repeater. Net control then switched to VHF analog simplex and requested communicators to respond with their location and received signal strength of the SLC EOC on west Midway Road.

After the VHF portion of the drill was completed, net control switched to UHF analog simplex and repeated the check-in process. Most ARES communicators were able to use VHF simplex between their location and the SLC EOC. UHF simplex, however, proved difficult for some communicators despite their radios and antennas working fine on VHF.

Operating point-to-point simplex is something very different for many hams. Repeaters are typically used to insure effective VHF/UHF communication. Repeaters can have sensitive receivers, powerful transmitters and antennas installed 100 feet or more in the air. Repeaters are meant to do much of the VHF/UHF communications heavy lifting.

Unless operating for a special purpose, VHF/UHF communication does not use sky wave propagation like HF. Most VHF/UHF communications use ground wave. Because of this, long distance propagation can be limited and attenuated by vegetation, buildings, terrain and such.

With so many hams living in deed restricted communities where outside antennas are mostly prohibited, how can the ARES communicator work simplex in cases where repeaters are ineffective or unavailable?

VHF/UHF propagation is mainly vertically polarized. While horizontally polarized YAGIs can be used for

directional communications, most hams will use a vertically polarized antenna. These antennas can be ground plane, J-pole, co-linear, vertical dipole, or even a loop. The VHF/UHF bands are very wide in frequency. No matter the type of antenna used, it should be resonant to the center of the band and as high up in the air as possible. Using low loss (RG-213 or equivalent) coaxial feed line is paramount.

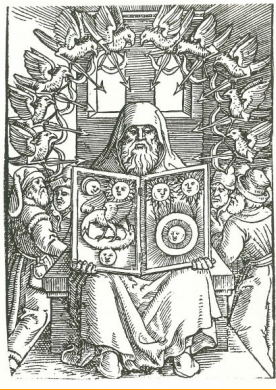
During the drill a few ARES communicators utilized 5 watt handhelds. Unless simplex communication is limited to a few miles, handheld radios may perform poorly on VHF and not at all on UHF. ARES simplex communicators should investigate using VHF/UHF mobile or base station radios to ensure effective simplex operating. Along with using a more powerful mobile or base station radio, the antenna must also be factored. It will do little good to use a higher power radio with an inefficient antenna.

Dual band analog mobile radios have come down in price over the last few years thanks to the Asian manufacturers. You can buy a Chinese analog 25 watt dual/quad band mobile radio ([Radioddity](#) or [Amazon](#)) for a little over a hundred dollars. Chinese DMR / analog dual band radios can sometimes be found for several hundred dollars. This has caused the Japanese ham radio vendors to rethink their prices. I use a Yaesu FT-7900R for analog VHF/UHF. This radio can output about 50 watts on VHF and 40 watts on UHF. Working simplex with this radio and a good antenna, I can easily achieve 10 to 15 miles under the right conditions. The FT-7900R analog dual band mobile can be found for around \$250 dollars with some searching. The other Japanese vendors have similar offerings and prices.

I also have a Yaesu FT-857D. In my opinion, this is probably the best HF/VHF/UHF mobile radio built. It is very rugged and in spite of its' 15 year age, still performs very well. The FT-857D is out of production, but can sometimes be acquired used in the \$500 price range. Finally, some base station transceivers are now including VHF/UHF.

For simplex communication due diligence is necessary. Don't be afraid to ask for help. 73, TCHN

## Ramblings of an Antenna Alchemist



In the beginning hams designed, built, and repaired their own radios. Unfortunately, today many hams don't have the expertise or skills to design much less repair their radios, amplifiers, tuners, power supplies or shack accessories.

When America was the preeminent amateur radio manufacturer, equipment was designed to last. Japan adopted this same approach. China's entry in the ham radio marketplace was - and still is - much different. For them, it is sell cheap; and when it breaks throw it away and buy another. Interesting.....

There is an area where the average ham can still experiment and build. It is called antennas. Antennas have changed some since our auspicious beginnings 100 plus years ago. We now have Yagis, Hex beams, etc. But a single band resonant dipole fed with 50 ohm coax cable works. That's about as simple as it gets.

Where it gets crazy is modern hams wanting an antenna to work on every band. They also want the antenna to be invisible to those pesky HOAs and take up little space in our vanishing urban landscape. Finally, they want to easily work every DXCC entity, or give arm chair copy for every QSO, no matter the propagation.

It's not really possible for an antenna to be everything, but vendors through the use of matching stubs, Gamma matches, baluns, ununs, 1/4 wave line transformers, etc. have made antennas "look" resonant, or nearly so, to the transceiver's 50 ohm output. The antenna is not necessarily a resonant antenna, but the transceiver likes the 50 ohms. Keep in mind if the antenna is not natively resonant for your band of operation, it may not propagate very well despite the impedance match. But wait! You say what

is this antenna tuner the vendors include in their transceivers or hams are using externally? Hams today can get over stressed with standing wave ratios (SWR). Remember SWR does not tell us if the antenna is propagating. SWR merely indicates impedance by measuring reflected power. Keep in mind the shack antenna tuner is not tuning the antenna. Rather the ubiquitous antenna tuner is actually matching a 50 ohm feed line to the transceiver.

\* \* \* \* \*

I've had an interest in **S**mall **T**ransmitting **L**oops (aka: magnetic loops) since seeing Ted Hart, W5JQR show off his copper hexagon loop at the Melbourne Hamfest many years ago. I was mesmerized by his STL design.

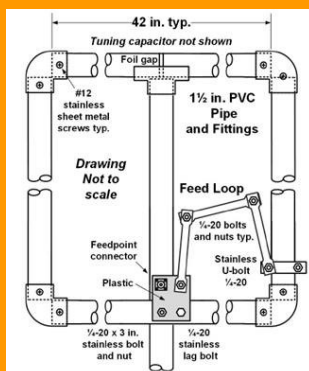
Ted's loop, while very interesting, was also complicated to build and its vacuum variable capacitor expensive to buy at the time. I put it out of my head until 1992 when I spied an AEA IsoLoop at the Miami Hamfest for \$100. It had been damaged by Hurricane Andrew. I took a chance and bought it. It turned out to be an easy fix. My next STL was a new MFJ that a DXpedition was selling for \$200. My final STL was from a club in NJ. Each of these loops had good and bad design features. I learned a lot about STLs by using them.

Recently, I watched a YouTube video from John Portune, W6NBC about his [Search for the Optimum Magnetic Loop](#), and viewed the [construction article](#) on his web page. Anyone who has talked with John at a hamfest, watched his videos, or perused his web page knows John is an Antenna Alchemist.

His square loop is innovative. Give it a try. You might find it meets your needs or at least provides some food for thought. 73, [The Antenna Alchemist](#)



IsoLoop™ 10-30 HF Antenna  
LC-2 Loop Controller





## Florida Division of Emergency Management

The Florida Division of Emergency Management encourages all Floridians to begin home, business and family preparations now ahead of any potential storms that may impact our state this coming hurricane season. You can find information on how to prepare for hurricane season at [FloridaDisaster.org](https://FloridaDisaster.org).

During the upcoming days, Kevin Guthrie, Executive Director will be traveling across the state and meeting with regional coordinators and emergency management personnel to make sure every county is ready for the season ahead. "I encourage every Floridian to take necessary steps to ensure that their families and businesses are preparing for the 2024 hurricane season as well."

The 2024 Atlantic Hurricane Season begins June 1 and runs through November 30, with the historical peak of the season beginning in September. In anticipation of potentially an extremely active hurricane season, it is imperative for residents to understand their risks and take steps to prepare for the many hazards that hurricanes can bring. Regardless of hurricane season predictions, it only takes one storm to harm a community.

### Understanding Hurricane Season

**Know Your Zone, Know Your Home** – It’s important for residents to know if their home is in an evacuation zone, a low-lying, flood-prone area, a mobile home or an unsafe structure during hurricane season. Residents should also take the time to know their home and its ability to withstand strong winds and heavy rain. This information will help residents better understand orders from local officials during a storm. For more information and to determine evacuation zones, visit [FloridaDisaster.org/Know](https://FloridaDisaster.org/Know).

**Have Multiple Ways to Receive Weather Alerts** – Residents should have multiple ways to receive weather alerts and follow all orders from local county emergency management officials. Every household is encouraged to have a battery-operated or hand-crank weather radio to ensure they can continue to receive alerts from the National Weather Service in the event of power outages or damaged cell towers.

**Sign up for alerts at:** [FloridaDisaster.org/AlertFlorida](https://FloridaDisaster.org/AlertFlorida).

**Turn Around, Don’t Drown!** – Flooding can occur with little to no warning and individuals should never drive or walk in flooded areas. Remember, it only takes one foot of floodwater to move most vehicles, and more than half of all flood-related deaths result from swept away vehicles. If flooding occurs, get to higher ground immediately!

**Build a Disaster Supply Kit** – Following the impact of a hurricane, residents may lose access to basic services, such as power and water, and be subject to limited or no access to essentials like food, drinking water and medicine. Households are encouraged to have enough essential supplies to last every member of the family, including pets, at least seven days. For a disaster supply kit checklist, visit [FloridaDisaster.org/Kit](https://FloridaDisaster.org/Kit).

**Keep Gas Tanks Half Full** – Residents and visitors should keep their gas tanks at least half full during hurricane season to ensure they have enough fuel to evacuate as soon as possible without worrying about long lines at gas stations and to avoid gas shortages prior to a storm. For Floridians with electric vehicles, it’s recommended that the battery be maintained between 50% - 80% capacity at all times, depending on the type of vehicle and what the vehicle’s manual recommends. Visit [FloridaDisaster.org/HalfwayFull](https://FloridaDisaster.org/HalfwayFull) for more information.

**Hurricane Hazards** – Hurricanes bring with them an increased threat of tornadoes, damaging winds, flooding, rip currents and severe thunderstorms, both before, during and post-landfall. These risks have the potential to affect the entire state of Florida. That is why it’s important to make a plan for each member of the family, pets included. For more information, visit [FloridaDisaster.org/PlanPrepare](https://FloridaDisaster.org/PlanPrepare).

\* \* \* \* \*

Visit [FloridaDisaster.org/Guide](https://FloridaDisaster.org/Guide) to download the 2024 Florida Hurricane Guide.

For weather updates and safety tips, follow the Division on [Instagram](https://www.instagram.com/floridadisaster) and [Facebook](https://www.facebook.com/floridadisaster).

# Radio at War

[Editor: Last issue we reported a true story from World War 2 documenting the use of shortwave radio by Germany to announce the capture of an American prisoner of war.

In this issue we document another incident from the World War 2 era involving radio – but this time it is an incident on the home front involving a radio of a different type - AM broadcast.

While the fighting was taking place on foreign shores, spying and sabotage were huge concerns on the home front. Virtually all industrial and manufacturing plants engaged in the war effort employed watchmen to guard their buildings during the overnight hours when the plants were closed.

The true incident documented below took place on December 7, 1942.]

## Was His Face Red!

### *Conscientious Watchman is Hero and Casualty of Radio Drama*

The best of intentions prompted an Akron, OH watchman to turn in a fire alarm, which not only proved false, but surprised even him. As a result, he turned out to be the only casualty, but not as the result of a fire.

At around 10:00 PM on the evening of December 7, 1942 the watchman at an establishment which will remain unnamed sat down to take a brief break from his duties.

As he was relaxing, he turned on his radio for a little diversion. Well, the fatigue from his earlier labors proved too much for him, and the soothing and comforting sounds of a string orchestra soon lulled him into a state of slumber.

Suddenly, the shrill shout of **Fire!** cut into his half-conscious mind. Having been thoroughly trained in his duties, he knew exactly what to do. But as he sprang from the chair his feet became entangled in the chair legs and he planted himself hard onto the floor, bloodying his face. Undeterred, he quickly picked himself up and vaulted to the door where he

pulled the fire box to turn in the alarm.

Within a few minutes the fire department arrived and after a quick search of the premises concluded there was no fire.

Soon after, it was determined that the shout of **Fire!** had come from the watchman's radio. It seems that the music show had ended and a radio drama was now being broadcast. It was one of the players in the drama who had shouted Fire!

The fire department response wasn't wasted, however, for the watchman was quite bloodied from his face plant. They took the watchman to the hospital ER where his face was stitched and bandaged. And being the trooper that he was, upon discharge from the ER the watchman returned to his post and finished his shift.

\* \* \* \* \*

## Bet you didn't know ....

Radio Operator was one of the most in-demand military assignments during World War II.

Every bomber and transport aircraft in the Army Air Corps required a radio operator. Navy ships required multiple radio operators in order to monitor the airways 24/7. And every Army unit from Headquarters staff on down to the platoon level required a radio operator. Even a unit as small as a squad often required a radio operator.

Qualifying as a radio operator was no easy task. The War Department's five month training program was an aggressive one, requiring an understanding of both radio theory and operating procedures.

In addition, students had to demonstrate competency in sending and receiving International Morse code. To graduate, students were required to accurately copy code at a minimum rate of 16 words per minute.

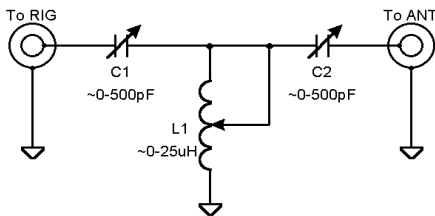
(Both articles on this page are from "Our Folks In The Service," a World War II publication for employees and families of ADT (the present day security company).

# What is in a Tuner?

[Editor's note: What hams refer to as an antenna tuner in reality is actually a feedline tuner.]

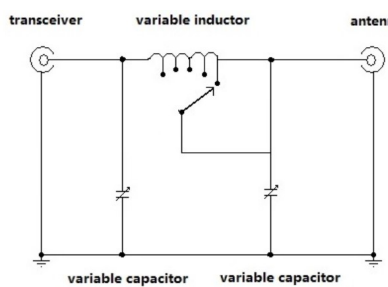
Many stations use antenna tuners. From amateur to AM broadcast stations. What is this device made of? And how efficient are they?

While there are several variations of tuners, there are 3 designs that are quite common: The "L" network, the "pi" network and the "T" network.



The "L" type tuner is quite simple. From the output of the transmitter you have a capacitor directly across to ground. After the capacitor there is an inductor (coil) in series to the antenna. Using the reactances of these components you can match an antenna to a transmitter where the antenna is not 50 ohms. Also, you can match an antenna that is not resonant.

The math concerning the reactances can be quite complex. To keep it basic, a larger C value indicates the antenna is of a higher impedance (Z) than the transmitter. The coil is used to cancel the reactance so the entire antenna system is resonant. The smaller the C, the opposite occurs. Results also depend on the frequency of the transmitter.



A "pi" network is the same as the "L", with a capacitor added to ground after the coil. This type of tuner has more range and can handle larger mismatches.

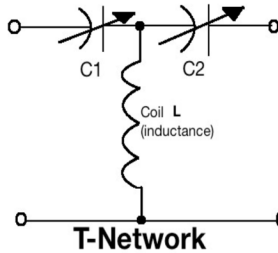
Usually the capacitors are variable and the coil is switchable by the operator.

The "L" network is popular in the automatic tuners. Normally you can hear relays switching rapidly on the automatic tuners. It is selecting through a variety of "L" networks to make the match. This circuit is quite efficient and offers little loss to a mismatched antenna when a match is made.

The "pi" network will do much the same, but you mainly use 3 components that are variable. Usually the operator does the adjusting. This circuit is also quite efficient.

When higher powers are used, the "L" and "pi" networks can get a bit large physically. Therefore, a "T" network or match is incorporated.

The "T" circuit has 2 capacitors in series between transmitter and antenna.



An Inductor is between the capacitors and connects to ground. With 2 reasonably sized (physically) variable capacitors and a variable coil, you can match a very wide range of values.

The "T" match is popular for the higher power capable tuners. The disadvantage is that it can have up to a 28% loss to the antenna. This is usually overcome with the higher power.

Tuners are an important device to have in any station. They actually match the mismatches. It does not fool the transmitter as some have thought. Used reasonably, the tuner will make your station more versatile and affective.

73, Ralph WD0EJA  
 BILAL COMPANY  
 137 MANCHESTER DR.  
 FLORISSANT, CO. 80816 U.S.A  
 PH/FX: 719/687-0650  
[wd0eja@isotronantennas.com](mailto:wd0eja@isotronantennas.com)

\* \* \* \* \*

[Ed: Ralph, WD0EJA has been designing and selling his antennas for over 4 decades. I have used several of them when I found myself in antenna challenging environments such as an HOA or portable operating.

Many hams believe bigger is better for antennas and there is some truth in their beliefs, but small resonant antennas can perform amazingly well. Just look at the amount of small transmitting loops (aka mag loops) being sold today.

Try Googling "Isotron antennas." You may be surprised by the many positive reviews Ralph has received.]



## Upcoming Hamfests

06/22/2024

**Dade City Lodge  
Pre-Field Day Hamfest**

Dade City, FL  
Dade City Lodge / Green  
Swamp Chapter NAQCC

07/26/2024 - 07/27/2024

**Milton Ham Fest**

Milton, FL  
Milton Amateur Radio Club  
<http://miltonarc.org>

08/24/2024

**TarcFest**

Tampa, FL  
Tampa Amateur Radio Club  
<http://www.hamclub.org>

**ARRL NORTH CAROLINA STATE CONVENTION**

**SHELBY 2024 HAMFEST**

AUG 30, 31 & SEPT 1 2024  
Cleveland County  
Fairground Shelby, NC

[chairman@shelbyhamfest.org](mailto:chairman@shelbyhamfest.org)  
980-295-5151

**68th Annual Grand-daddy of Them All**

### Hours of Operation

Friday August 30, 2024 — 9:00 AM until 5:00 PM (Buildings & Flea Market)  
Saturday August 31, 2024 — Gates open at 7:00 AM (Outside Vendors)  
Inside Vendor Buildings 8:00 AM - 5:00 PM  
Sunday September 1, 2024 — Gates open at 7:00 AM (Outside Vendors)  
Inside Vendor Buildings 8:00 AM - 1:00 PM

### Location

1751 E Marion St, Shelby, NC 28152  
Approximately 35 miles West of Charlotte Douglas International Airport

### Tickets

Tickets are \$10.00 and all tickets bought in advanced will be will call only (meaning to be picked up at arrival at the event).

Buying Early also gets you into a Pre-Registration drawing is AnyTone AT-778UV II (drawing Friday at 1600). Main Prize is ICOM 7300 (On Saturday at 1600). We also have ALINCO Dual Band HTs (model TBD) we are giving away every other hour on Saturday! You do not have to be present to Win these club sponsored prizes.

For info email: [chairman@shelbyhamfest.org](mailto:chairman@shelbyhamfest.org)

### Amateur Radio Emergency Service® (ARES)



**ARES** members are licensed amateurs volunteering with local emergency management for communications duty when disaster strikes. All licensed amateurs are eligible for membership in ARES.

\* \* \* \* \*

### 2024 ARRL Field Day

The 2024 ARRL Field Day is coming up June 22-23.

Field Day is an excellent opportunity to practice emergency operation by contacting other participating hams and clubs.

While some think of Field Day as a contest of sort, other groups use the opportunity to practice their emergency response capabilities and demonstrate Amateur Radio to the organizations that Am-

ateur Radio might serve in an emergency, as well as the general public.

The contest part is simply to contact as many other stations as possible. Additionally, newcomers can use Field Day as an opportunity to learn how to operate their radio gear using emergency power and under less than optimal conditions. It is considered a premier on the job learning experience for hams.

With hams adopting ever increasing complex radio communication systems that use sophisticated digital modes and techniques, Field Day stresses the use of more fundamental modes that may be called upon in emergencies.

It goes without saying that amateur radio's motto "when all else fails" is part in parcel with Field Day operating.

If your club is doing Field Day, get involved. If they are not, do your own Field Day from your home or another location.

### ARES® Emergency Coordinators (EC)

Indian River County  
[Bud Holman, WA4ASJ](#)

Martin County  
[Brian Gibson, KN4YWW](#)

St Lucie County  
[Paul Horner, W4ISZ](#)

Okeechobee County  
[Jack Schwartz, KM4CRA](#)

Get involved. Volunteer for ARES.

**ARES® Resources**  
[Download the ARES Manual \[PDF\]](#)

[Emergency Communications Training \(ARRL\)](#)

(Send your ARES information to:  
[tchamnews@gmail.com](mailto:tchamnews@gmail.com))

# Welcome to the Treasure Coast Ham News Monthly Meetings, Nets, and Events Calendar

Events, nets and meetings are shown by week of the month (i.e. 1st week, 2nd, week, 3rd, and 4th week.)  
Should the month have a 5th week, refer to weekly nets as shown.

If you know of an event or meeting that would be of interest to Treasure Coast Hams, please let us know.  
Direct any changes to: [tchamnews@gmail.com](mailto:tchamnews@gmail.com).

|                                     | Sunday   | Monday   | Tuesday   | Wednesday  | Thursday  | Friday                                   | Saturday                                 |
|-------------------------------------|--|--|---|--|---|--|--|
| 1<br>S<br>T<br><br>W<br>E<br>E<br>K | TC R/T Net-8pm<br>146.775(-) (107.2)<br><br>SKYWARN Net-9pm<br>146.775(-) (107.2)  | Sunrise CW Net<br>7123mHz @ 1300UTC<br>IRC Emer. Net-8pm<br>146.640(-) (107.2)<br>MCARA R/T Net-8pm<br>145.150(-) (107.2)<br>OARC Club Net-8pm<br>147.195(-) (100.0)<br>PSLARA Board Mtg<br>(check PSLARA.ORG) | Sunrise CW Net<br>7123mHz @ 1300UTC<br>IRC ARES Net-7:30pm<br>145.130(-) (107.2)<br>FPARC R/T Net-8pm<br>147.345(+) (107.2)<br>D-Star Net-8:30pm<br>444.500(+5) Port B<br>OARC ARES Net-8pm<br>147.195(-) (100.0) | Sunrise CW Net<br>7123mHz @ 1300UTC<br>SLC ARES WinLink<br>Wednesday's   | Sunrise CW Net<br>7123mHz @ 1300UTC<br>PSLARA R/T Net-7:30pm<br>146.995(-) (107.2)<br>MCARA ARES-7:00pm<br>800 SE Monterey Rd<br>Stuart, FL<br>VBARC Mtg-7:30pm<br>Indian River Co. EOC<br>4226 43rd Av, Vero Bch | Sunrise CW Net<br>7123mHz @ 1300UTC      |  |
| 2<br>N<br>D<br><br>W<br>E<br>E<br>K | TC R/T Net-8pm<br>146.775(-) (107.2)<br><br>SKYWARN Net-9pm<br>146.775(-) (107.2)  | Sunrise CW Net<br>7123mHz @ 1300UTC<br>IRC Emer. Net-8pm<br>146.640(-) (107.2)<br>MCARA R/T Net-8pm<br>145.150(-) (107.2)<br>OARC Club Net-8pm<br>147.195(-) (100.0)   | Sunrise CW Net<br>7123mHz @ 1300UTC<br>IRC ARES Net-7:30pm<br>145.130(-) (107.2)<br>FPARC R/T Net-8pm<br>147.345(+) (107.2)<br>D-Star Net-8:30pm<br>444.500(+5) Port B  | Sunrise CW Net<br>7123mHz @ 1300UTC<br>FPARC Mtg-7:30pm<br>Indian Rive State College<br>Bldg R<br>3212 Virginia Av, Ft Pierce<br>SLC ARES WinLink<br>Wednesday's | Sunrise CW Net<br>7123mHz @ 1300UTC<br>PSLARA R/T Net-7:30pm<br>146.995(-) (107.2)<br>Vero Beach ARC Mtg<br>7:30pm<br>4227 43rd Ave, Vero Beach   | Sunrise CW Net<br>7123mHz @ 1300UTC      |  |
| 3<br>R<br>D<br><br>W<br>E<br>E<br>K | TC R/T Net-8pm<br>146.775(-) (107.2)<br><br>SKYWARN Net-9pm<br>146.775(-) (107.2)  | Sunrise CW Net<br>7123mHz @ 1300UTC<br>IRC Emer. Net-8pm<br>146.640(-) (107.2)<br>MCARA R/T Net-8pm<br>145.150(-) (107.2)<br>OARC Club Net-8pm<br>147.195(-) (100.0)   | Sunrise CW Net<br>7123mHz @ 1300UTC<br>IRC ARES Meeting<br>145.130(-) (107.2)<br>FPARC R/T Net-8pm<br>147.345(+) (107.2)<br>D-Star Net-8:30pm<br>444.500(+5) Port B   | Sunrise CW Net<br>7123mHz @ 1300UTC<br>SLC ARES WinLink<br>Wednesday's<br>SLC ARES -7pm<br>Zoom Meeting  | Sunrise CW Net<br>7123mHz @ 1300UTC<br>Indian River Co. ARES<br>7pm - Indian River EOC<br>4256 43rd Av Vero Bch<br>PSLARA R/T Net-7:30pm<br>146.995(-) (107.2)  | Sunrise CW Net<br>7123mHz @ 1300UTC      |  |
| 4<br>T<br>H<br><br>W<br>E<br>E<br>K | TC R/T Net-8pm<br>146.775(-) (107.2)<br><br>SKYWARN Net-9pm<br>146.775(-) (107.2)  | Sunrise CW Net<br>7123mHz @ 1300UTC<br>IRC Emer. Net-8pm<br>146.640(-) (107.2)<br>MCARA R/T Net-8pm<br>147.060(-) (107.2)<br>OARC Club Net-8pm<br>147.195(-) (100.0)   | Sunrise CW Net<br>7123mHz @ 1300UTC<br>IRC ARES Net-7:30pm<br>145.130(-) (107.2)<br>FPARC R/T Net-8pm<br>147.345(+) (107.2)<br>D-Star Net-8:30pm<br>444.500(+5) Port B  | Sunrise CW Net<br>7123mHz @ 1300UTC<br>SLC ARES WinLink<br>Wednesday's<br>PSLARA Mtg-7pm<br>500 NW California Blvd<br>Veteran's Resource Ctr<br>PSL              | Sunrise CW Net<br>7123mHz @ 1300UTC<br>IRC ARES Mtg-IRCEOC<br>PSLARA R/T Net-7:30pm<br>146.995(-) (107.2)<br>MCARA Mtg-7pm<br>830 SE Martin Luther<br>King Jr. Blvd, Stuart                                       | Sunrise CW Net<br>7123mHz @ 1300UTC      |  |
|                                     | TC: Treasure Coast<br>IRC: Indian River County<br>SLC: St. Lucie County<br>PSLARA: Port St. Lucie Amateur Radio Association ( <a href="http://www.pslara.org">www.pslara.org</a> )<br>FPARC: Ft. Pierce Amateur Radio Club ( <a href="https://fparc.org/">https://fparc.org/</a> )<br>MCARA: Martin County Amateur Radio Association ( <a href="https://mcaraweb.com/">https://mcaraweb.com/</a> )<br>OARC: Okeechobee County Amateur Radio Club<br>VBARC: Vero Beach Amateur Radio Club ( <a href="http://www.w4ot.com/">http://www.w4ot.com/</a> ) |  |   |  | R/T: Ragchew/Traders<br>Emer.: Emergency  | R/T: Ragchew/Traders<br>Emer.: Emergency | R/T: Ragchew/Traders<br>Emer.: Emergency |

# Cross Referencing dBm, RMS, Vp-p and PO at 50 ohms

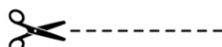
**dBm** is decibel in milliwatts (or dBmW) as a unit of level used to indicate that a power level is expressed in decibels with reference to one milliwatt.

**Vrms** is root-mean-square voltage, equivalent direct current (DC) voltage of an alternating current (AC) source.

**Vp-p** is the peak-to-peak Voltage shown in volts (V), millivolts (mV), & microvolts (µV) either as the peak voltage, the RMS voltage, or the average voltage.

**POut** is the RF power output in watts (W), milliwatts (mW), microwatts (µW), nanowatts (nW), & picowatts (pW)

| dBm | Vrms  | Vp-p  | POut  | dBm | Vrms  | Vp-p  | POut   | dBm | Vrms   | Vp-p   | POut   | dBm | Vrms   | Vp-p   | POut   |
|-----|-------|-------|-------|-----|-------|-------|--------|-----|--------|--------|--------|-----|--------|--------|--------|
| 53  | 100   | 282V  | 200W  | 25  | 3.98V | 11.2V | 317mW  | -1  | 200mV  | 562mV  | 794mW  | -27 | 10.0mV | 28.2mV | 2.00uW |
| 50  | 70.8V | 200V  | 100W  | 24  | 3.55V | 10.0V | 251mW  | -2  | 178mV  | 501mV  | 631mW  | -28 | 8.91mV | 25.1mV | 1.58uW |
| 49  | 63.1V | 178V  | 80W   | 23  | 3.16V | 8.91V | 200mW  | -3  | 158mV  | 447mV  | 500mW  | -29 | 7.94mV | 22.4mV | 1.26uW |
| 48  | 56.2V | 158V  | 64W   | 22  | 2.82V | 7.94V | 158mW  | -4  | 141mV  | 398mV  | 400mW  | -30 | 7.08mV | 20.0mV | 1.00uW |
| 47  | 50.1V | 141V  | 50W   | 21  | 2.51V | 7.08V | 126mW  | -5  | 126mV  | 355mV  | 317uW  | -31 | 6.31mV | 17.8mV | 794nW  |
| 46  | 44.7V | 126V  | 40W   | 20  | 2.24V | 6.31V | 100mW  | -6  | 112mV  | 316mV  | 251uW  | -32 | 5.62mV | 15.8mV | 631nW  |
| 45  | 39.8V | 112V  | 32W   | 19  | 2.00V | 5.62V | 79.4mW | -7  | 100mV  | 282mV  | 200uW  | -33 | 5.01mV | 14.1mV | 500nW  |
| 44  | 35.5V | 100V  | 25W   | 18  | 1.78V | 5.01V | 63.1mW | -8  | 89.1mV | 251mV  | 158uW  | -34 | 4.47mV | 12.6mV | 400nW  |
| 43  | 31.6V | 89.1V | 20W   | 17  | 1.58V | 4.47V | 50.0mW | -9  | 79.4mV | 224mV  | 126uW  | -35 | 3.98mV | 11.2mV | 317nW  |
| 42  | 28.2V | 79.4V | 16W   | 16  | 1.41V | 3.98V | 40.0mW | -10 | 70.8mV | 200mV  | 100uW  | -36 | 3.55mV | 10.0mV | 251nW  |
| 41  | 25.1V | 70.8V | 12.5W | 15  | 1.26V | 3.55V | 31.7mW | -11 | 63.1mV | 178mV  | 79.4uW | -37 | 3.16mV | 8.91mV | 200nW  |
| 40  | 22.4V | 63.1V | 10.0W | 14  | 1.12V | 3.16V | 25.1mW | -12 | 56.2mV | 158mV  | 63.1uW | -38 | 2.82mV | 7.94mV | 158nW  |
| 39  | 20.0V | 56.2V | 7.94W | 13  | 1.00V | 2.82V | 20.0mW | -13 | 50.1mV | 141mV  | 50.0uW | -39 | 2.51mV | 7.08mV | 126nW  |
| 38  | 17.8V | 50.1V | 6.31W | 12  | 891mV | 2.51V | 15.8mW | -14 | 44.7mV | 126mV  | 40.0uW | -40 | 2.24mV | 6.31mV | 100nW  |
| 37  | 15.8V | 44.7V | 5.00W | 11  | 794mV | 2.24V | 12.6mW | -15 | 39.8mV | 112mV  | 31.7uW | -41 | 2.00mV | 5.62mV | 79.4nW |
| 36  | 14.1V | 39.8V | 4.00W | 10  | 708mV | 2.00V | 10.0mW | -16 | 35.5mV | 100mV  | 25.1uW | -42 | 1.78mV | 5.01mV | 63.1nW |
| 35  | 12.6V | 35.5V | 3.17W | 9   | 631mV | 1.78V | 7.94mW | -17 | 31.6mV | 89.1mV | 20.0uW | -43 | 1.58mV | 4.47mV | 50.0nW |
| 34  | 11.2V | 31.6V | 2.51W | 8   | 562mV | 1.58V | 6.31mW | -18 | 28.2mV | 79.4mV | 15.8uW | -44 | 1.41mV | 3.98mV | 40.0nW |
| 33  | 10.0V | 28.2V | 2.00W | 7   | 501mV | 1.41V | 5.00mW | -19 | 25.1mV | 70.8mV | 12.6uW | -45 | 1.26mV | 3.55mV | 31.7nW |
| 32  | 8.91V | 25.1V | 1.58W | 6   | 447mV | 1.26V | 4.00mW | -20 | 22.4mV | 63.1mV | 10.0uW | -46 | 1.12mV | 3.16mV | 25.1nW |
| 31  | 7.94V | 24.4V | 1.26W | 5   | 398mV | 1.12V | 3.17mW | -21 | 20.0mV | 56.2mV | 7.94uW | -47 | 1.00mV | 2.82mV | 20.0nW |
| 30  | 7.08V | 20.0V | 1.00W | 4   | 355mV | 1.00V | 2.51mW | -22 | 17.8mV | 50.1mV | 6.31uW | -48 | 891uV  | 2.51mV | 15.8nW |
| 29  | 6.31V | 17.8V | 794mW | 3   | 316mV | 891mV | 2.00mW | -23 | 15.8mV | 44.7mV | 5.00uW | -49 | 794uV  | 2.24mV | 12.6nW |
| 28  | 5.62V | 15.8V | 631mW | 2   | 282mV | 794mV | 1.58mW | -24 | 14.1mV | 39.8mV | 4.00uW | -50 | 708uV  | 2.00mV | 10.0nW |
| 27  | 5.01V | 14.1V | 500mW | 1   | 251mV | 708mV | 1.26mW | -25 | 12.6mV | 35.5mV | 3.17uW | -73 | 50.0uV | 141uV  | 50.0pW |
| 26  | 4.47V | 12.6V | 400mW | 0   | 224mV | 631mV | 1.00mW | -26 | 11.2mV | 31.6mV | 2.51uW |     |        |        |        |





# Treasure Coast Ham Doctors



## FT8: Additional Frequencies Show Up in Band Selection List

**Question** - I recently updated my WSJT-X from version 2.1.1 to 2.6.1. I notice a lot more frequencies in the Band Selection pull-down list. What gives?

**Answer** - Much has changed since version 2.1.1, which was released in 2019. As early as 2020, it was recognized that the FT8 bands were becoming overcrowded. In an attempt to alleviate the problem, WSJT-X was modified by adding additional “overflow” frequencies to the Band Selection pull-down list. The hope was that some operators would start utilizing the alternate frequencies, and by doing so reduce congestion on the main frequencies.

Read the following from the WSJT-X release notes for version 2..2.0-rc2:

*“Increasing FT8 usage on the popular bands 40, 30, and 20m means that the default 3 kHz sub-bands are often wall-to-wall with signals. Overcrowding encourages some to turn on their amplifiers, which only makes things worse. We are trying to coordinate the suggested frequencies in WSJT-X with updated band plans being considered by IARU, ARRL, and other amateur radio societies.”*

*“On a trial basis, and in response to numerous suggestions from around the world, we have added a second set of suggested dial frequencies for FT8 on three HF bands and also on 6 meters. The new suggested dial frequencies are 7.071, 10.133, 14.071, and 50.310 MHz. These frequencies will appear in your drop-down band-selector list after you go to the "Settings | Frequencies" tab, right-click on the frequency table, and select "Reset". Alternatively, you can add the new FT8 frequencies manually.”*

*“When the conventional FT8 sub-band on 6, 20, 30, or 40 m seems too full, please try moving your dial frequency down 3 kHz!”*

*“Be aware that as currently implemented, WSJT-X will set your dial to the lowest frequency for the selected mode and band, when you switch bands.”*

(View full release notes for [WSJT-X ver 2.6.1](#) here.)

Controversy surrounds the assignment of the additional frequencies. Objections center on the fact that other digital modes already utilize the new frequencies. And also on the fact that the amateur community as a whole was not consulted when the new frequencies were chosen.

See the op-ed on page 17 of this TCHN issue for further discussion of the FT8 frequency grab.

73, [The Doctors](#)

## Updates to “The Grid Chaser’s Atlas of the DX World®”

Since initial release in August, 2023, there have been a number of minor adjustments to the Atlas. The updates were documented in the last issue of TCHN, which can be downloaded [here](#). Since the last issue there have been a couple of additional updates. These are listed below. For improved accuracy, users of the Atlas are urged to apply these updates to their copies. (Download the full Atlas [here](#) or [here](#).)

| DATE    | FILE NAME | SHEET NAME | CHANGE  |
|---------|-----------|------------|---|
| 2/15/24 | Oceania I | OC-2       | In the Australia - Queensland chart, added grids QH08 and QI10. |
| 2/15/24 | Oceania I | OC-3       | In the Australia – Western Australia chart, added grid PF05.    |

Send any questions or comments to [gridatlas@gmail.com](mailto:gridatlas@gmail.com).

73, Bob, AI4RB

# Treasure Coast Ham News 2 meter and 70 centimeter Repeater Frequencies, WinLink RMS and Net Listings

The listings below are compiled from club websites, the Florida Amateur Spectrum Management Association (FASMA), FCC, and other sources. It is believed to be correct as of date of publication; however is not guaranteed. Please review and email us at [tchamnews@gmail.com](mailto:tchamnews@gmail.com) with your suggested corrections and additions.

Treasure Coast Ham News 2m & 70cm Repeater Frequencies, Winlink RMSs & Local Nets

| Freq (input) | Freq (output) | Offset   | Tone/Color Code   | Call                      | Location                          | Sponsor                           | County       | Use  | Modes                      | Nets                         | Notes                           |
|--------------|---------------|----------|-------------------|---------------------------|-----------------------------------|-----------------------------------|--------------|------|----------------------------|------------------------------|---------------------------------|
| 144.5300     | 145.1300      | -0.6 MHz | 107.2 / 107.2     | <a href="#">AB4AZ</a>     | Vero Beach South                  | Treasure Coasters Repeater Assoc. | Indian River | OPEN | FM Fusion WIRES-X          | IRC ARES: Tues 7:30p         | Coordinated by FASMA            |
| 144.9900     | 144.9900      |          |                   | <a href="#">K4W0F-10</a>  | Sebastian                         | J E Lineback                      | Indian River | OPEN | VARAFM / VARA FM Wide      | Digipeat                     |                                 |
| 144.9900     | 144.9900      |          |                   | <a href="#">KG4ORQ-10</a> | Vero Beach                        | David A Wheatley                  | Indian River | OPEN | VARAFM / VARA FM Wide      | Digipeat                     |                                 |
| 145.3100     | 145.3100      | -0.6 MHz | 107.2 / 107.2     | <a href="#">W4IRC</a>     | Vero Beach, Indian River Med. Ctr | Treasure Coasters Repeater Assoc. | Indian River | OPEN | FM Fusion                  |                              | Coordinated by FASMA            |
| 145.4000     | 145.4000      |          |                   | <a href="#">W4ATCD</a>    | Not listed in Repeaterbook.com    | James K. Davis, W2JKD             | Indian River | OPEN | DSTAR                      | IRC D-Star Net: Tues 8:30p   | Coordinated by FASMA            |
| 146.0400     | 146.0400      | -0.6 MHz | 107.2 / 107.2     | <a href="#">W4PHJ</a>     | Vero Beach, North County          | Treasure Coasters Repeater Assoc. | Indian River | OPEN | FM EchoLink Fusion         | IRC Emergency Net: Mon 8p    | Coordinated by FASMA            |
| 443.4100     | 443.4100      |          |                   | No Call                   | Vero Beach                        | From W4OT website                 | Indian River |      | P25                        |                              | Not coordinated/listed by FASMA |
| 443.7000     | 443.7000      | +5 MHz   |                   | <a href="#">W4QT</a>      | Vero Beach                        | VBARC (Craig P Jerome, K4CPJ)     | Indian River | OPEN | FM                         |                              | Coordinated by FASMA            |
| 444.3250     | 444.3250      |          |                   | <a href="#">KJ4YZI</a>    | Vero Beach                        | VBARC (Craig P Jerome, K4CPJ)     | Indian River |      | DMR                        |                              | Coordinated by FASMA            |
| 444.3500     | 444.3500      | +5 MHz   | CC1, BrandMeister | <a href="#">W4JEA</a>     | Sebastian                         | Craig P Jerome, K4CPJ             | Indian River | OPEN | DMR EchoLink               |                              | Coordinated by FASMA as KJ4YZI  |
| 444.3750     | 444.3750      | +5 MHz   | 107.2             | <a href="#">WB4HIS</a>    | Sebastian                         | WB4HIS                            | Indian River | OPEN | FM (SARNET node)           |                              | Not coordinated/listed by FASMA |
| 444.8500     | 444.8500      | +5 MHz   | 107.2 / 107.2     | <a href="#">K44EPS</a>    | Vero Beach                        | AT&T ARA South Florida            | Indian River | OPEN | FM AllStar                 |                              | Coordinated by FASMA            |
| 447.6000     | 442.6000      | +5 MHz   | CC1 NAC 293       | <a href="#">KB1YBB</a>    | Vero Beach                        | Craig P Jerome, K4CPJ             | Indian River | OPEN | DMR EchoLink P-25          |                              | Coordinated by FASMA            |
| 144.5500     | 145.1500      | -0.6 MHz | 107.2             | <a href="#">WX4MC</a>     | Stuart, EOC                       | Martin Co ARES/RACES              | Martin       | OPEN | FM                         | MCARA R/T Net: Mon 8p        | Coordinated by FASMA            |
| 144.8400     | 145.4400      | -0.6 MHz | Module C          | <a href="#">KB4DD</a>     | Stuart, EOC                       | Martin Co ARES/RACES              | Martin       | OPEN | D-Star                     |                              |                                 |
| 144.9900     | 144.9900      |          |                   | <a href="#">WX4MC-10</a>  | Stuart                            | Martin County ARES EOC            | Martin       | OPEN | VARAFM / VARA FM Wide      | Digipeat                     |                                 |
| 146.0250     | 146.0250      | -0.6 MHz | 110.9 / 110.9     | <a href="#">W4JUP</a>     | Hobe Sound                        | Jupiter/Tequesta RG               | Martin       | OPEN | FM                         |                              | Not coordinated/listed by FASMA |
| 147.6600     | 147.0600      | +0.6 MHz | 107.2 / 107.2     | <a href="#">K4ZK</a>      | Stuart, Martin Mem. Hosp. North   | MCARA                             | Martin       | OPEN | FM                         |                              | Coordinated by FASMA            |
| 443.9000     | 443.9000      | +5 MHz   | 107.2 / 107.2     | <a href="#">N4PSK</a>     | Hobe Sound                        | N4PSK                             | Martin       | OPEN | FM                         |                              |                                 |
| 444.1500     | 444.1500      | +5 MHz   | 107.2 / 107.2     | <a href="#">K43COZ</a>    | Stuart                            | K43COZ                            | Martin       | OPEN | FM (SARNET node)           |                              | Not coordinated/listed by FASMA |
| 444.9000     | 444.9000      | +5 MHz   | CC7               | <a href="#">WX4MC</a>     | Stuart, Stuart Public Services    | Martin Co ARES/RACES              | Martin       | OPEN | DMR EchoLink               |                              | Coordinated by FASMA            |
| 444.9625     | 444.9625      | +5 MHz   | CC5               | <a href="#">KF4LZA</a>    | Stuart, Allapatah Flats           | KF4LZA                            | Martin       | OPEN | DMR                        |                              | Not coordinated/listed by FASMA |
| 444.9750     | 444.9750      | +5 MHz   | CC1               | <a href="#">N4IRS</a>     | Stuart                            | N4IRS                             | Martin       | OPEN | DMR DSTAR Fusion           |                              | Coordinated by FASMA            |
| 147.6900     | 147.0900      | +0.6 MHz | 100.0 / 100.0     | <a href="#">K4OKE</a>     | Okeechobee                        | Okeechobee ARC                    | Okeechobee   | OPEN | FM                         |                              | Not coordinated/listed by FASMA |
| 147.7950     | 147.1950      | +0.6 MHz | 100               | <a href="#">K4OKE</a>     | Okeechobee                        | Okeechobee ARC                    | Okeechobee   | OPEN | FM                         | OARC Net: Mon 8p             | Coordinated by FASMA            |
| 444.0500     | 444.0500      | +5 MHz   | 100.0 / 100.0     | <a href="#">K4OKE</a>     | Okeechobee                        | Okeechobee ARC                    | Okeechobee   | OPEN | FM                         |                              | Coordinated by FASMA            |
| 144.6700     | 145.2700      | -0.6 MHz | 151.4 / 151.4     | <a href="#">W3JFI</a>     | Port St Lucie                     | W3JFI                             | Saint Lucie  | OPEN | FM                         |                              | Not coordinated/listed by FASMA |
| 144.8400     | 145.4400      | -0.6 MHz |                   | <a href="#">KB4DD</a>     | Ft Pierce                         | Treasure Coaster Digital Group    | Saint Lucie  | OPEN | DSTAR                      |                              | Coordinated by FASMA            |
| 144.9900     | 144.9900      |          |                   | <a href="#">W4SLC-10</a>  | Ft Pierce                         | St. Lucie County ARES EOC         | Saint Lucie  | OPEN | VARAFM / VARA FM Wide      | Digipeat                     |                                 |
| 145.5300     | 145.5300      |          |                   | <a href="#">W4SLC-10</a>  | EOC (Midway Rd)                   | SLC ARES                          | Saint Lucie  | OPEN | W4SLC-RMS                  | SLC ARES                     |                                 |
| 145.5300     | 145.5300      |          |                   | <a href="#">W4AKH-2</a>   | Ft Pierce (Rock Rd)               | Ft Pierce                         | Saint Lucie  | OPEN | W4AKH-4 RMS                | FPARC                        |                                 |
| 146.3550     | 146.9550      | -0.6 MHz | 107.2 / 107.2     | <a href="#">K4PSL</a>     | Port St Lucie, WAVV tower         | PSLARA                            | Saint Lucie  | OPEN | FM Echolink Fusion         | PSLARA R/T Net: Thurs 7:30p  | Coordinated by FASMA            |
| 146.7750     | 146.7750      | -0.6 MHz | 107.2 / 107.2     | <a href="#">AF4CN</a>     | Ft Pierce                         | St Lucie Repeater Assoc           | Saint Lucie  | OPEN | FM                         | Treasure Coast R/T: Sun 8p   | Coordinated by FASMA            |
| 147.0150     | 147.6150      | +0.6 MHz | 107.2             | <a href="#">W4SLC</a>     | Port St Lucie, SLC *              | St Lucie Co. Public Safety ARES   | Saint Lucie  | OPEN | FM                         |                              | Coordinated by FASMA            |
| 147.3450     | 147.3450      | +0.6 MHz | 107.2 / 107.2     | <a href="#">W4AKH</a>     | Ft Pierce, WQCS-FM Tower          | FPARC                             | Saint Lucie  | OPEN | FM Echolink Fusion Wires-X | FPARC Net: Tues 8p           | Coordinated by FASMA            |
| 147.8400     | 147.2400      | +0.6 MHz | 107.2 / 107.2     | <a href="#">W4SLC</a>     | Ft Pierce, EOC                    | St Lucie Co. Public Safety ARES   | Saint Lucie  | OPEN | FM                         |                              | Coordinated by FASMA            |
| 443.6500     | 443.6500      | +5 MHz   | 107.2             | <a href="#">K4PSL</a>     | Port St Lucie                     | PSLARA                            | Saint Lucie  | OPEN | FM                         |                              | Coordinated by FASMA            |
| 444.0000     | 444.0000      | +5 MHz   | CC1, Time slot 1  | <a href="#">K4SRN</a>     | Port St Lucie                     | Kurt E. Ellmers, K4SRN            | Saint Lucie  | OPEN | FM DMR                     |                              | Coordinated by FASMA as K4SRN   |
| 444.0750     | 444.0750      |          |                   |                           | Ft Pierce                         |                                   | Saint Lucie  | OPEN | Packet                     |                              |                                 |
| 444.3500     | 444.3500      | +5 MHz   | 141.3             | <a href="#">KJ4YZI</a>    | Port St Lucie, Savanna Club       | Craig P Jerome, K4CPJ             | Saint Lucie  | OPEN | FM                         |                              | Coordinated by FASMA as KJ4YZI  |
| 444.5000     | 444.5000      | +5 MHz   |                   | <a href="#">W4AKH</a>     | Ft Pierce                         | FPARC                             | Saint Lucie  | OPEN | DSTAR                      | D-Star Net: Tues 8:30p       | Coordinated by FASMA            |
| 444.6000     | 444.6000      | +5 MHz   | 107.2             | <a href="#">W4SLC</a>     | Ft Pierce                         | St Lucie Co. Public Safety ARES   | Saint Lucie  | OPEN | FM                         |                              | Coordinated by FASMA            |
| 444.8000     | 444.8000      | +5 MHz   | CC1               | <a href="#">W4AKH</a>     | Ft Pierce                         | FPARC                             | Saint Lucie  | OPEN | DMR Echolink IRLP          |                              | Coordinated by FASMA            |
| 444.9875     | 444.9875      | +5 MHz   | CC14              | <a href="#">KF4LZA</a>    | Ft Pierce                         | KF4LZA                            | Saint Lucie  | OPEN | DMR                        |                              | Not coordinated/listed by FASMA |
| 445.7500     | 440.7500      | +5 MHz   | CC0               | No Call                   | Port St Lucie                     |                                   | Saint Lucie  | OPEN | DMR                        |                              | Not coordinated/listed by FASMA |
| 447.0000     | 442.0000      | +5 MHz   | 107.2             | <a href="#">W4SLC</a>     | Port St Lucie, SLC *              | St Lucie Co. Public Safety ARES   | Saint Lucie  | OPEN | FM                         |                              | Coordinated by FASMA            |
| 447.5750     | 442.5750      | +5 MHz   | 110.9 / 110.9     | <a href="#">W4RCC</a>     | Port St Lucie, St Lucie Med. Ctr  | R. Conrad Clark, W4RCC            | Saint Lucie  | OPEN | FM                         |                              | Coordinated by FASMA as W4RCC   |
| 448.4750     | 443.4750      | +5 MHz   | 107.2             | <a href="#">W4SLC</a>     | Port St Lucie, Port St. Lucie HS  | St Lucie Co. Public Safety ARES   | Saint Lucie  | OPEN | FM                         |                              | Coordinated by FASMA            |
| 144.2000     | 144.2000      |          |                   |                           | Nationwide **                     | US Dept of Homeland Security      | USA          | OPEN | SSB                        | SSB Calling Frequency        |                                 |
| 146.5200     | 146.5200      |          |                   |                           | Nationwide **                     | US Dept of Homeland Security      | USA          | OPEN | FM Simplex                 | FM Simplex Calling Frequency |                                 |
| 222.1000     | 222.1000      |          |                   |                           | Nationwide **                     | US Dept of Homeland Security      | USA          | OPEN | CW/SSB                     | CW/SSB Calling Frequency     |                                 |
| 432.1000     | 432.1000      |          |                   |                           | Nationwide **                     | US Dept of Homeland Security      | USA          | OPEN | CW/SSB                     | CW/SSB Calling Frequency     |                                 |
| 446.0000     | 446.0000      |          |                   |                           | Nationwide **                     | US Dept of Homeland Security      | USA          | OPEN | FM Simplex                 | FM Simplex Calling Frequency |                                 |

**NOTES:**

Repeater & Net information compiled from club pages, Repeaterbook.com, FASMA, & other sources. Believed to be correct, but is not guaranteed. To report an error, please email [TCHN@gmail.com](mailto:TCHN@gmail.com).

\* This repeater was located at Cleveland Martin Health Tradition Medical Center. It relocated to the SLC West tower in the southern portion of the county.

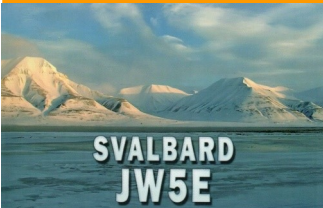
FASMA is the Florida Amateur Spectrum Management Association, Inc. Formerly the Florida Repeater Council.

Repeater call signs are hyperlinked to Repeaterbook.com where applicable.

\*\*These frequencies are not Public Safety. A valid Amateur Radio Operator License of the appropriate class is required in order to transmit on these frequencies.

FM amateur calling frequencies use carrier squelch. A mixture of digital modes or mixed modes could be found locally (P25, NDXN, DMR, etc.)





From the weekly *ARRL DX Bulletin* and other sources.  
[\(DX bulletin archives\)](#)

## COMING DX OPPORTUNITIES

**GABON, TR.** Roland, F8EN, is operating from Libreville as TR8CR until the end of June and possibly longer. CW only. QSL direct or via the REF QSL Bureau to F6AJA.

**IRAQ, YI.** Antonio, IZ5WPZ is QRV as YI9WPZ until August. Activity is on the HF bands using CW and SSB. QSL via IK2DUW.

**LAOS, XW.** Vincent, F4BKV is QRV as XW4KV until the middle of 2024. Active only on 15 meters. QSL to home call.

**SVALBARD, JW.** Andreas, DK6AS will operate from the Svalbard Amateur Radio Club station (JW5E) from July 11-15 using CW and FT8. QSL via home call.

**ST. PAUL ISLAND, CY9.** Look for station CY9C to be active from August 26 to September 5. Dates are tentative. No further details are available at this time.

**OGASAWARA, JDI.** Tosy, JA6VZB will be QRV as JD1BQW from May 22 to June 5, primarily 12M and 6M FT8. QSL via LoTW, eQSL or Club Log OQRS.

**JARVIS ISLAND, KH5.** A team will be operating with call sign N5J from Jarvis Island between August 5 and August 20. More details will be available closer to the start date.

**NIGER, 5U.** Elvira, IV3FSG will be QRV as 5U5K from Niger, June 8 - 20, 2024. She will operate on 160 - 6m using CW, SSB, FT8 and RTTY.

**GLORIOSO ISLANDS, FT4.** Marek, FH4VVK is active as FT4GL from Glorioso Islands, IOTA AF-011 until June 19, 2024. He is operating on various HF Bands.

**MINAMI TORISHIMA, JDI.** Take, JG8NQJ will be active as JG8NQJ/JDI from Minami Torishima, starting 20 June 2024.

For IOTA enthusiasts, he will be operating from Marcus Island, IOTA OC-073.

**PALAU, T8.** Nobuaki, T88PB will be active from Koror Island June 15 - 17, 2024. He will operate on HF Bands. For IOTA enthusiasts, Koror Island is IOTA OC-009. QSL LoTW and via JA0JHQ direct.

**ST. PIERRE & MIQUELON, TO.** A team will operate as TO8FP from Miquelon Island from August 10 to August 22, 2024. Find them on 80-6m, including 60m, and also satellites using CW, SSB and Digital Modes. QSL via ClubLog.

**PITCAIRN ISLAND, VP6.** Dave, WJ2O will be QRV as VP6DF from May 30 to June 9, 2024. Probably operating exclusively CW.

## DX SPECIAL EVENT STATIONS

**SERBIA, YU.** Special calls YT1ØØR and YU1ØØR will be on the air through December 1 to celebrate the July 15, 1924 founding of the "Society of Friends of Radio-Telegraphy and Radio-Telephony."

**INDIA, VU.** The National Institute of Amateur Radio in Hyderabad is operating special event station AU5J thru June 30 in celebration of World Telecommunication and Information Society Day 2024. QSL via VU2AOS.

**POLAND, SP.** Special event station HF25NATO is QRV until August 31 to commemorate Poland's membership in NATO since 1999. Activity is on 80 to 6 meters using SSB, RTTY, PSK, FT8, and FT4. QSL via LoTW.

**AUSTRIA, OE.** Sylvia, OE5YYN is QRV as OE20SOTA until October 31 to commemorate the 20th anniversary since Austria joined the Summits on the Air program. QSL via operator's instructions.

Know of an upcoming DX station or Special Event? Send info to: [tchamnews@gmail.com](mailto:tchamnews@gmail.com)





Special  
Event Stations

Museum Ships  
On The Air  
Weekend

June 1– June 2, 2024

**1300Z-2100Z, K3SAV**

Nuclear Ship Savannah  
ARC. 7.1 14.1 21.1 28.1.  
QSL: K3LU, 980 Patuxent  
Rd, Odenton, MD 21113.  
[www.qrz.com/db/k3sav](http://www.qrz.com/db/k3sav)

**0001Z-2359Z, NI6IW**

USS Midway Museum Ship.  
7.250 14.320 14.070 PSK3 I  
DSTAR. QSL: USS Midway  
Museum Ship COMEDTRA,  
910 N Harbor Drive, San  
Diego, CA 92101.  
[www.qrz.com/db/ni6iw](http://www.qrz.com/db/ni6iw)

**0001Z-2359Z, NJ2BB**

Battle Ship New Jersey ARS.  
7272 14262 7044 14044.  
QSL: Margaret Burgess, 150  
Schooner Avenue, Barnegat,  
NJ 08005. [nj2bb.org](http://nj2bb.org)

**0000Z-0359Z, W4BSF**

Big South Fork ARC & USS  
Tennessee Battleship Museum.  
40 20 15 10 m. QSL:  
W4BSF USS TN BB43, P.O.  
Box 5029, Oneida, TN  
37841. QSL SASE by July 15,  
2024. [bsfarc.org/museum-ship-weekend-2024](http://bsfarc.org/museum-ship-weekend-2024)

**1400Z-1830Z, K8E**

Toledo Mobile RA W8HHF.  
14.260 14.239 7.260 7.039.  
QSL: Col. James M.  
Schoonmaker, P.O. Box  
9673, Toledo, OH 43697.  
[www.qrz.com/db/K8E](http://www.qrz.com/db/K8E) or  
[www.w8hhf.org](http://www.w8hhf.org)

**1400Z-2000Z, NB9QV**

NB9QV Cobia Club. 7.240,  
14.240. Website for certi-  
ficate information. Please  
send call sign, name, band,  
date & UTC time of contact  
to [kc9yl@arrl.net](mailto:kc9yl@arrl.net). <https://www.qrz.com/db/NB9QV>

### Audie Murphy

**Jun 1, 1400Z-2000Z, W2A.** New River  
Valley ARC. 14.240. QSL: Danny Wylam, 710  
McDaniel Dr., Christiansburg, VA 24073-  
3848. Commemorating Audie Murphy,  
America's most decorated soldier from  
WW2. [dannywylam@gmail.com](mailto:dannywylam@gmail.com)

### Midway Island

**June 4 - 7, 1942 Sinking of USS York-  
town (CV-5).** Jun 4-Jun 7, 1200Z-1200Z,  
W2Z. Charleston ARS. 7.281, 14.281. QSL:  
K4KOA, 14 Camoground Rd., Yemassee, SC  
29945. [k4koa@arrl.com](mailto:k4koa@arrl.com) or [www.wa4usn.org](http://www.wa4usn.org)

### 80th Anniversary

#### Commemoration of D-Day

**Jun 6, 1500Z-2000Z, W2W.** South East  
Metro ARC. 7.040, 14.040; SSB General  
portion of 40 and 20 meters. QSL: Brian  
McInerney, 2523 Cochrane Drive, Saint Paul,  
MN 55125. SASE to N0BM. [semarc.org](http://semarc.org)

**Jun 7-Jun 9, 0630Z-2200Z, various calls.**

Torbay ARS. 3.744, 7.144, 14.144, 28.344.  
Certificate: E-qs1 to individual SES call signs as  
referenced. UNITED KINGDOM. Note:  
SES call signs will be listed before event.  
[www.torbayars.org](http://www.torbayars.org)

### Germantown Charity Horse Show 75th Anniversary

**Jun 6-Jun 9, 2200Z-0600Z, W4G.**  
Nashoba ARC. 14.275, 28.470. QSL: Fred  
Miller, 8265 Green Holly Cove, German-  
town, TN 38138. <https://nashobaarc.org>

### Honoring Pioneer Women at Fort Laramie, Wyoming

**Jun 9-Jun 10, 1400Z-2300Z, W7WYO.**  
High Plains ARC. 28.400, 21.375, 14.275,  
7.250. Certificate & QSL: Lee Milner,  
K7WY, 123 Arrowhead Road, Torrington,  
WY 82240. Honoring the pioneer women  
that traveled on the Oregon Trail. We will  
be operating from Fort Laramie National  
Historic Site which is a National Park. [ar-  
rowhead273@gmail.com](mailto:ar-rowhead273@gmail.com)

### Trail to Eagle

**Jul 1-Jul 5, 0100Z-0400Z, K2BSA/8.**  
Garden City ARC (GCARC) Boy Scouts of  
America / Michigan Crossroads Council.  
14.330, 7.270, 3.840. QSL: GCARC, PO Box

482, Garden City, MI 48136-0482. Will be  
teaching radio merit badge to scouters.  
<https://scoutingevent.com/272-TTE2024>

### Colonial Williamsburg

**Jul 6, 1400Z-2000Z, K4RC.** Williams-  
burg Area ARC. 7.265, 14.265. Certificate  
& QSL: QSL Manager, WAARC, PO Box  
1470, Williamsburg, VA 23187. To cele-  
brate the passage of the Declaration of In-  
dependence by Continental Congress, July  
4, 1776. Historic Triangle Certificate  
(Jamestown, Williamsburg, and Yorktown)  
Special Event Stations. Send QSO info from  
the three stations to [qslmgr@k4rc.net](mailto:qslmgr@k4rc.net).  
[https://www.k4rc.net/events/special-event-  
stations](https://www.k4rc.net/events/special-event-stations)

### W3A Commemoration of Live TV From the Moon

**Jul 19-Jul 21, 1300Z-2200Z, W3A.** ARC  
National Electronics Museum. 14.269,  
14.069, 7.269, 7.069. Certificate & QSL:  
ARCNEEM, 338 Clubhouse Road, Hunt Val-  
ley, MD 21031. Operation on 80M (3.869,  
3.569) & digital modes possible. QSL &  
Certificate available via SASE. Details [here](http://here).

### Pro Football Hall of Fame Enshrinement Festival

**Aug 1-Aug 5, 0400Z-0400Z, W8AL.**  
Canton, OH. Canton ARC. 7.200, 14.285,  
21.320. Certificate: Canton ARC, PO BOX  
8673, Canton, OH 44711-8673. [https://  
w8al.org](https://w8al.org)

### Field of Dreams

**Aug 16-Aug 17, 1020Z-0920Z,  
W0DBQ.** The Great River ARC. 7.282,  
14.282, 17m, 15m. QSL: GRARC, POB  
12384, Dubuque, IA 52004.  
[w9upk@arrl.net](mailto:w9upk@arrl.net) or <https://www.w0dbq.org>

### Ellensburg Rodeo and Kittitas County Fair, 2024

**Aug 31-Sep 2, 1600Z-2200Z, N7KGS.**  
Kittitas County ARC. 14.275 MHz, 21.335  
MHz, 14.055 MHz, 21.055 MHz. Certificate:  
KCARC, 110 West Sixth Avenue, El-  
lensburg, WA 98926.

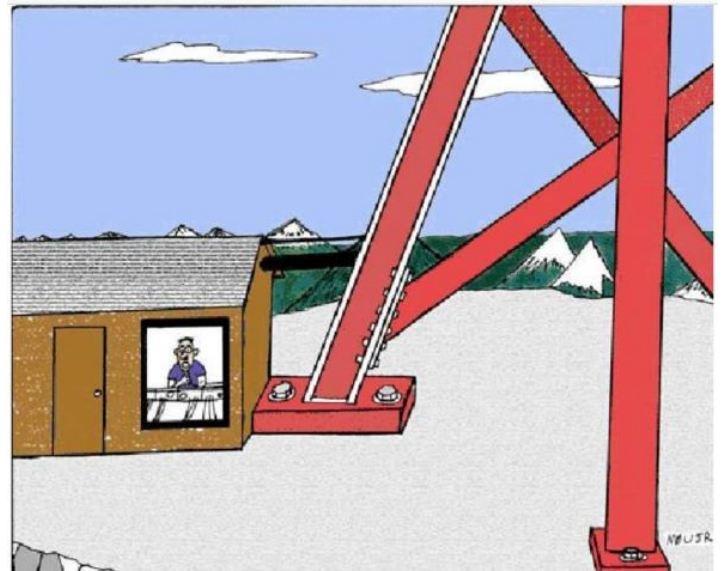
*For more info see ARRL and Internet sources.*

# Ham Humor



## ADVICE FOR THE CONSIDERATE HAM

Don't risk something like this happening to you. When shopping for a new radio, be sure to get your XYL's consent before purchasing it.



"Yes, I really am running 5 watts QRP ... although I suppose I do have an above average antenna system."



## REMEMBER LAST MONTH'S CAPTION CHALLENGE?

No further suggestions were received, so we'll go with, "To lighten his load, he moved to Florida where he shed his parka, snow boots and mittens."

## About TCHN - Who / What We Are (and are not)

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[The Publishers](#)



# Treasure Coast Club News

## Port St. Lucie Amateur Radio Association

Meetings are held monthly throughout the year. Next meeting: June 26 at the Veterans' Center at IRSC, Saint Lucie West. Check the club [web site](#) for details.

Recent club activities included an eclipse viewing party on April 8th and a license exam session on May 11th. There is a full page of eclipse party pictures elsewhere in this newsletter. Coming activities include POTA outings, field day and more.

Come to our next meeting. And bring a friend. Visitors are always welcome.



Candidates taking license exams: May 11, 2024

## Martin County Amateur Radio Association

MCARA serves the Martin County, FL amateur radio community and ARES. MCARA holds weekly Rag Chew nets, ARES nets and in-person / ZOOM meetings. Please click the ZOOM link on their [web site](#).

MCARA sponsors the annual Stuart Hamfest, held yearly in March at the Martin County Fairgrounds. Area hams owe MCARA a big **THANK YOU** for sponsoring this event every year. All are looking forward to the next event in 2025. Hope to see you there!

## Fort Pierce Amateur Radio Club

The club's officers are: President - David, KG4ORQ, Vice-President - Kevin, W4KKW, Secretary - Pete, KD4SPW.

FPARC is a general purpose amateur radio club with a digital emphasis. The club meets on the 2nd Wednesday of the month on the Main Campus of Indian River State College in Fort Pierce. Meetings are usually held in building "R" room R-124. The next meeting will be held on June 12. Additional information is available on the club's [web site](#). Visitors are always welcome. Come join us.

## Vero Beach Amateur Radio Club

VBARC was formed in November, 1961 with a small number of local hams. Today the club has over 100 members and encompasses all of Indian River County. Visit their [web site](#) to learn more about the club. Join them on the Treasure Coast Net, 7.153Mhz every morning at 8:00am.

If you are interested in QRP, VBARC has operating events for you. See the club web site for details.

## Okeechobee Amateur Radio Club

The club officers are: President/Treasurer - Mark, KF4EA; Vice President - Jack, KM4CRA; Secretary - Josh, K4JHI.

The Okeechobee Amateur Radio Club (OARC) is a general purpose amateur radio club. The club has been in existence over 30 years. For more information please contact [Jack, KM4CRA](#).

OARC nets include: Club - Monday nights at 8.00pm on 147.195, pl.100.0; and ARES - second Tuesday of each month at 8.00pm on 147.195, pl 100.0.

(Attention club officers: Please send an email announcing your upcoming events and activities to: [tchamnews@gmail.com](mailto:tchamnews@gmail.com).)

## EQUIPMENT BUY / SELL

**FOR SALE** - Al, NX2Q, has a vacant lot for sale at: 1160 SE Sandia Dr. Port St Lucie FL. The lot depth is 125ft and frontage is 80ft. For details, contact Al at 1-973-772-1279.

\*\*\*\*\*

**NEEDS SERVICE HELP** - Ken, N4VYV is looking for local repair of a Heathkit SB220 amplifier. Ken reports the amp was running fine, but after hearing a "pop" the relay continues to click, but there is no longer output. You can reach Ken via email to: [kjgruett@gmail.com](mailto:kjgruett@gmail.com).

\*\*\*\*\*

**FOR SALE** - Harold, W8PPI, has a 24-foot aluminum extension ladder for sale. Asking \$25. Contact Harold at [haroldbarr7501@comcast.net](mailto:haroldbarr7501@comcast.net).

\*\*\*\*\*

**FOR SALE** - Contact Bruce at: [wa3rhw@yahoo.com](mailto:wa3rhw@yahoo.com)  
Astron RS-20A 20 amp power supply. Very good to excellent condition. Very clean. \$65.00  
MFJ 941E Versa Tuner II.  
MFJ 940B Versa Tuner II.

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**LOOKING TO BUY** - Robert, K16MXT is looking for a recharging cradle for a Yaesu FT-60R. If you have one for sale, please contact Robert at 321-370-5417.

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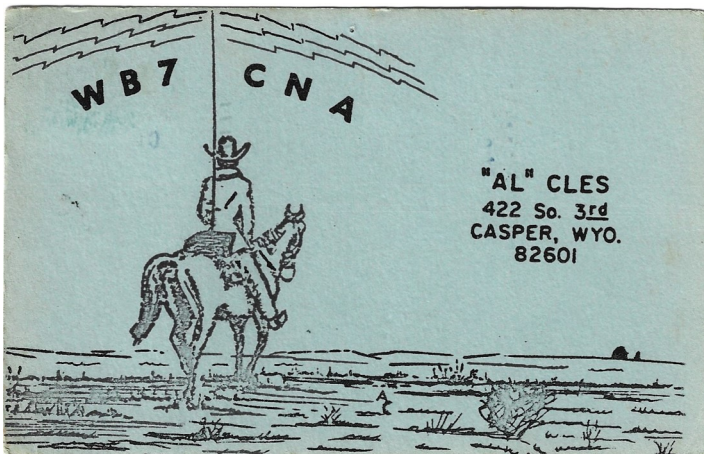
*Do you have something to sell or trade? Or perhaps you need help with an antenna or equipment problem?*

*Drop us a line and we will include it in our next issue.*

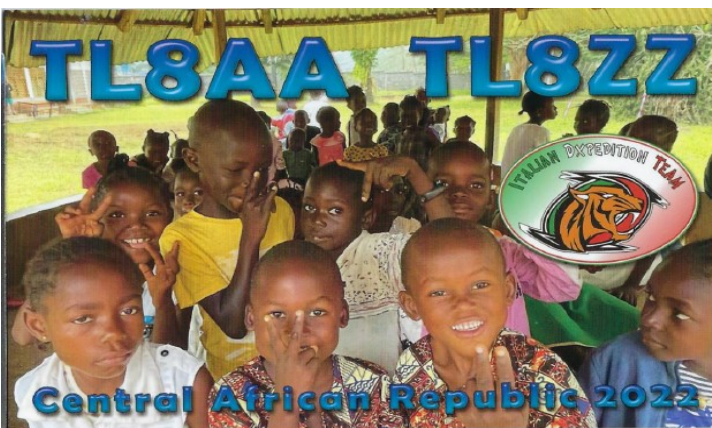
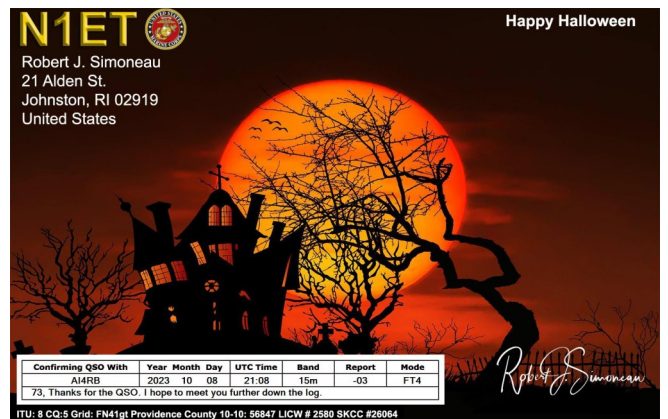
*Send your email to: [tchamnews@gmail.com](mailto:tchamnews@gmail.com)*



TCHamNews enjoys showcasing QSL cards received by our local amateur radio community. If you have an interesting QSL card to share with your fellow hams, please send a scanned image (jpeg) to [TCHamNews@gmail.com](mailto:TCHamNews@gmail.com) and we will include it in an upcoming issue. (If you send us a paper card, we will scan it and send the original back to you.)



(Queen Mary and Wyoming QSL cards provided by Cy, K3AYW)



(Central African Republic QSL card provided by Ron, W9GOL)



If you are considering QSL cards or need to refresh your old card, please discuss with Fabrice at [QSL Concept](http://QSL Concept). Email: [info@qslconcept.com](mailto:info@qslconcept.com), or contact Fabrice directly at [fertron@bftechnicarts.com](mailto:fertron@bftechnicarts.com). Phone 604-729-6454.



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