



The RADIOGRAM

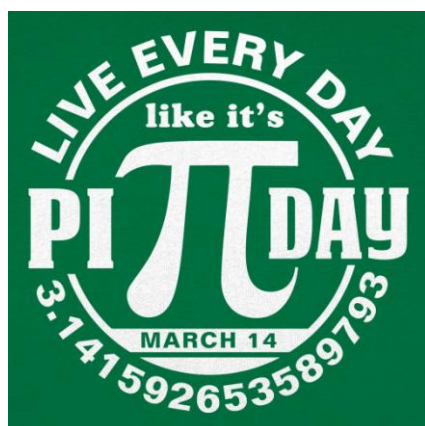
When All Else Fails ~ Amateur Radio Works

~ Official Newsletter of the Portage County Amateur Radio Service, Inc. ~

PCARS - the 2018 Hamvention® Club of The Year

March 2022 - Volume 17 Number 3

CA QSO Party Results



Pi Day 2022



PCARS K8BF
The Club that puts the FUN in Ham Radio!





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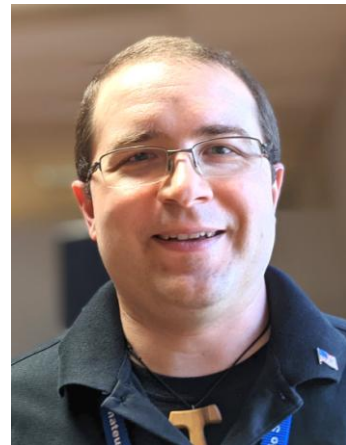
Portage County Amateur Radio Service



From the President



Nick, AC8QG
PCARS President



Two years ago, Tom, WB8LCD wrote in this column, "*Everyone should want to be a Ham!*" When I reread that line recently, it got me thinking about why I wanted to be a Ham. I mean, way back when I was a kid, why did I want to get my license?

For those of you who haven't heard my story, I first became interested in Amateur Radio when I was about 10 years old. My dad had just picked up one of Gordon West's books and I read it cover to cover multiple times. This was also about the time I started taking baseball seriously, and baseball won out. Fortunately, I had a great time playing ball for the next decade. Unfortunately, I didn't get my Amateur Radio license until about 20 years later.

But enough with the stories. Why did I want to be a Ham?

I suppose there were a bunch of reasons.

- * I was fascinated by electronics.
- * I grew up listening to shortwave.
- * I heard Hams on the scanner my dad gave me.
- * I knew a kid my age who had his license.

Ultimately, I think I just wanted to play. I wanted to play with technology and science. I wanted to play with the buttons and knobs. I wanted to play with radios.

After all, this is a hobby and hobbies are supposed to be fun. If it's not fun, why do it?

Sure, it's work to set up your station and hang an antenna. It's work to get started with fldigi or N1MM or D-Star or CW or whatever. It's work to put together a portable ops kit, drive to your destination, unpack it, set it up, operate, pack it back up, and drive home. Or maybe it isn't work.

Maybe it's an opportunity to learn. Maybe it's a chance to build something. Maybe it's a shot at an adventure. Maybe it's an excuse to play.

I hope you'll join me and all of PCARS as we "play radio." Whether you like getting into the technical stuff, contesting, teaching, learning, tapping keys, or just talking, I encourage you to bring that energy to our meetings, SIGs, and events. Show us what you're building or the new toys you found at a Hamfest. Tell us about your adventure activating a park or your personal FT-8 distance record. I look forward to learning about the neat stuff you're doing as a Ham.

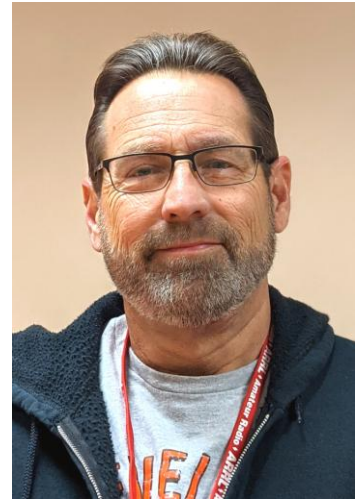
And whatever you're doing in our hobby, don't forget to have fun!



From the Vice President



Mike N8WCP
PCARS Vice President



We had nice turnout, both in-person and on Zoom to hear Michael Kalter, W8CI provide an update on Hamvention® 2022 and provide some history of this major ham radio event. I found it interesting how many women attended the event in the past and how well dressed everyone was. I couldn't imagine walking through the flea market today in a suit and tie!

Stan Broadway, N8BHL will be discussing amateur radio activities for the upcoming 2024 eclipse. I traveled south to get a better view of the last eclipse but we are in the direct path for the 2024 event so we can watch from our backyards while participating in the activities Stan will talk about.

The planned 2m/70cm antenna build is now scheduled for March 12th.

During the recent DX/Contest SIG there was discussion of a future 6M halo build. We'll see if we can make this happen in the near future.

If you haven't attended a SIG, I encourage you to give them a try. Very informative and a good way to interact with your fellow club members.

Do you have a suggestion for a presentation or build project? Send me an email to me at: vicepresident@portcars.org.

As I close, let's keep our fellow hams and the citizens of Ukraine in our thoughts. Their government has shut down amateur radio for 30 days so it will be a while before we hear Ukrainian stations on the air again.



Schedule of Events



*We plan to add to the schedule as we bring back more in-person events.
Look for announcements in QST emails, on the website,
on our weekly net, and in future newsletters.*

*If you're not feeling well, please stay home and join us by Zoom if instead. We'll
continue to offer Zoom as an option wherever it makes sense to do so.*

March 7th - PCARS Board Meeting at the club site & Zoom - 7 pm

March 12th - Dual Band Antenna Build Day at the club site - see the flier

March 13th - Set your clocks ahead 1 hour - Daylight Saving Time starts

March 14th - PCARS Meeting - Kent American Legion & Zoom - 7 pm

First Tuesday - **Digital** - Moderator: Rick, K8CAV - **On Zoom Only** -

Second Tuesday - **Portable Ops** - Moderator: John, WG8X

Third Tuesday - **Antenna** - Moderator: Tony, WA8AR

Fourth Tuesday - **DX & Contest** - Moderator: Chuck, W8PT

Fourth Thursday - Net Night at the Club Site - 6:30 pm - Moderator: Tom, WB8LCD



PCARS Patches & Stickers



PCARS logo patches (iron on) & stickers (stick on) are now available!!

Put the patch on your hat, your shirt, your jacket and show off that PCARS logo!! The patch is about 3". The embroidery on the white patch is in Red, Black



and Blue. Cost for a patch is only \$2.00 each and can be obtained at any PCARS meeting. There are 2 types of stickers available - a 4" x 6" oval and a 3" x 10" bumper sticker. Stickers are \$1 each. Show your pride in PCARS - Wear a patch, use the stickers! See the club Treasurer: **Greg, KA8TOA** or e-mail him at: Treasurer@portcars.org



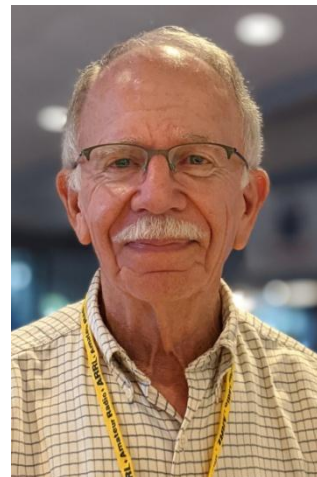
PCARS K8BF
The Club that puts the FUN in Ham Radio!



From the Great Lakes Division Director



Dale, WA8EFK
ARRL Great Lakes Division Director



Greetings, welcome to "Dale's Tales" for March 2022

Part 97.1(e) of the FCC Rules states that part of the Basis and Purpose of Amateur Radio is "...Continuation and extension of the amateur's unique ability to enhance international goodwill." Recently, this has been difficult for many of us as we watch recent world events unfold. The friends and family of many of us find themselves involved in a conflict that is endangering many and costing lives. It is difficult to sit here and think about the above rule while this situation continues.

Yet, I must remind myself that as a ham operator, I am obligated to adhere to these time-honored rules and not draw harsh conclusions or demean either side of the conflict. As s very difficult as may be, we simply must place ourselves outside of these hostilities while we are operating as hams and remember to offer what we can to promote international good will.

The Ukrainian Amateur Radio League (UARL) web page was still operating at the writing, <http://www.uarl.org.ua> . It is posted in Ukranian. We at ARRL would expect any official Amateur Radio related information to come from the UARL to the International Amateur Radio Union (IARU) and then to ARRL. With Amateur Radio in Ukraine temporarily shut down by their government, I would not anticipate any immediate requests for our involvement.

Just a reminder, while you are sitting here, take a look at your Personal ARRL Page and see if it needs an update. You will find everything accessible if you click on "Edit your profile" in the blue field at the top of the ARRL Web page. Here you will be able to verify that all of our contact information is still correct, check the Groups to which you belong, actually edit your profile, make sure you are subscribed to all of the electronic publications you wish to receive (like this newsletter, which is listed at "News and Information from your Division Director...") and you can add feeds to your page to keep you up to date with bulletins and announcements. I must also note it is surprising how many e-mail addresses have changed over the years: we all should insure that the one listed is correct.

From the Great Lakes Division Vice Director



Scott, N8SY
ARRL Great Lakes Division Vice Director



Scott's Notes for March 2022

Wow, we sure had some wild and wooly weather for February! Today is March 1st, Fat Tuesday (Mardi Gras). It is also the meteorological 1st day of spring! Yes, I know that March 20th is the actual spring equinox, but what the heck, we can have some fun with this, can't we? March 1st is also National Peanut Butter Lover's Day as well. March 13th is when we "Spring Forward" an hour as Daylight Saving Time takes effect and don't forget March 17th, Saint Patrick's Day! Yes, a day that I will have a green beer or two... After all I am 4 percent Irish! Rounding out the month, on March 31st we will celebrate National Clams on the Half Shell Day and National Tater Day!

Hamfests are on their way back! There is a bunch of them already scheduled in the Great Lakes Division. Dale has the complete list compiled and listed below.

OK, shifting gears... March 5th through 6th is the International DX–Phone contest. The Novice Rig Roundup is coming up this month as well, it starts March 5th through March 13th. There are a bunch more contests in March, too many to post all of them here, but if you are interested in just having some fun, here is a link to a schedule of all the contests for the month of March <https://www.contestcalendar.com/fivewkcal.html>

Now, for you really big contesters / DXpedition hounds, Crozet Island DXpedition Preparations are moving forward. The upcoming solo Crozet Island DXpedition spearheaded by Thierry Mazel, F6CUK, will likely arrive on the island around Christmas. While traveling aboard the Marion Dufresne, Mazel will make stopovers at other remote islands that are also rare DXCC entities, including Tromelin Island. The Crozet and Tromelin islands are administered as part of the French Southern and Antarctic Lands (abbreviated in French as TAAF).

Shifting gears once again... I'm sure by now many of you are wondering just what's going on with the newest committee formed by the ARRL Board, the EmComm Field Services Committee (ECFSC) for short. Well, as Dale announced last month both he and I are on that committee, Dale is the chairman, and I can tell you for a fact that we are moving things forward. In fact, the committee recently went through a grocery list of items that our committee has committed itself to get done to improve your experience with ARRL and to help those in leadership positions to be better trained and equipped.

That is going to do it from here this month. Stay safe and “Catch Me On The Air or at a hamfest”!!!

From the ARRL Ohio Section Manager



Tom, WB8LCD
ARRL Ohio Section Manager



The League offers a lot of services for Amateur Radio operators. Through the years they have had lots of publications that no ham would want to be without – such as the “Handbook” and the “Antenna Book”. They also put out hundreds of smaller books, handbooks, study guides, and project books on just about every Amateur Radio topic you can imagine. They provide a tremendous amount of programming and activities for all hams to participate in.

Probably one of the most important services the League provides not only to its membership, but to ALL Amateur Radio operators, is the Lobbying efforts with the FCC, the US Government, and many other interested players in the regulation of the Amateur Radio Service.

Most importantly, those involved with our frequency allocations. I would encourage you all to do some research on how the radio spectrum is allocated to the various services that use it.

When you get a chance to view an allocation chart up close, you will notice that the Amateur Radio Service has some very large sections of real estate on this map! You'll notice a pretty good sized block – that's the Amateur Radio 80/75 meter allocation. Just like “real estate”, they aren't making any more of it. What exists increases in value as more and more “users” of radio spectrum come into the marketplace. We, as Amateur Radio Operators, have exclusive use of this real estate. I wouldn't know how to put a value on it, but I'm sure it

would be somewhere in the Billions, if not Trillions, of dollars. The ARRL is the **only** organization that represents our interest to those who decide who gets to use the real estate. If for no other reason than that, I am a lifetime member of the ARRL, and continue to support them to the best of my ability. I also appreciate those who also support the ARRL, because without all of us working together, I'm sure our allocations would disappear in rapid fashion to the interests of Government, Military and business. All of which throw way more of their resources into their efforts than Amateur Radio could ever muster together.

So, for the reasons given here, every amateur should be a member of, and support, the ARRL! I know you can find a lot of reasons not to, but they all pale in comparison to how important our spectrum allocations are to the continued existence of the hobby. And, if there are some other reasons you don't hold the ARRL in a favorable light, then get involved and make a difference. I've seen too many examples of the mindset that if things don't go my way, I'm taking my ball and going home. Probably one of the most selfish responses you could have, and one of the most detrimental to the hobby overall.

It's hard to put an actual number to it, but in my estimation, membership in the ARRL is only about 20-25% of the entire amateur radio population. Having no other real way to measure, take a look at the numbers given for elections throughout the Sections and Divisions of the League for the people not only running the programs of the League, but representing *YOU* to the management of the League. Those numbers are dismally low. Again, on average, only around 20% of the represented membership. We can do better!

https://www.ntia.doc.gov/files/ntia/publications/january_2016_spectrum_wall_chart.pdf

UNITED STATES FREQUENCY ALLOCATIONS

THE RADIO SPECTRUM

RADIO SERVICES COLOR LEGEND		
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Life Memberships Awarded to Great Lakes Division Officers

The PCARS Board of Directors are proud to announce that the **ARRL Great Lakes Division Director - Dale Williams, WA8EFK** and the **ARRL Great Lakes Division Vice Director - Scott Yonally, N8SY** have been awarded a Life Membership in PCARS as our token of appreciation for all they have done to promote Amateur Radio in a positive and encouraging manner. During the February PCARS meeting, the certificates were read by our President, Nick, AC8QG and both Dale and Scott said they appreciate the recognition and the Life Memberships in PCARS. Their proclamations read as follows:

WHEREAS, Dale Williams, WA8EFK, ARRL Life Member, has demonstrated the highest level of commitment to the promotion of amateur radio and the advancement of the hobby throughout the ARRL Great Lakes Division; and

WHEREAS, Dale was licensed in May of 1962 has been representing Amateur Radio to the public in various capacities: Monroe County Michigan ARES® Emergency Coordinator, Michigan ARRL Section Manager, ARRL Great Lakes Division Vice Director and since 2014 has been serving as the ARRL Great Lakes Division Director, member of the ARRL Executive Committee and the ARRL Investment Management Committee, plus numerous Monroe County Michigan Board, Committee and Commission positions; and

WHEREAS, It is recognized that Dale Williams, WA8EFK, shares with PCARS, the highest commitment and promotes encouragement of those active in the hobby of amateur radio.

NOW, THEREFORE, I, Nick Wagner, AC8QG, President of the Portage County Amateur Radio Service, Inc., by virtue of the authority vested in me by the Constitution and by-laws of the Portage County Amateur Radio Service, Inc. am honored to hereby grant Dale Williams, WA8EFK an Honorary Life Membership with all member privileges in the Portage County Amateur Radio Service, Inc.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February 2022.

Nick Wagner, AC8QG President - Portage County Amateur Radio Service, Inc.



WHEREAS, Scott Yonally, N8SY, ARRL Life Member, has demonstrated the highest level of commitment to the promotion of amateur radio and the advancement of the hobby throughout the ARRL Ohio Section and in the ARRL Great Lakes Division; and

WHEREAS, Scott was licensed in January 1979 and for more than 40 years has been representing Amateur Radio to the public in various capacities. Past Ohio Section Manager in four consecutive terms from January 2014 through January 2021. Was awarded the Knight Distinguished Service Award for exemplary service by the ARRL Board of Directors in July of 2019. Has also served Ohio as an Assistant Section Manager; Public Information Coordinator; Affiliated Clubs Coordinator; District Emergency Coordinator, Assistant Emergency Coordinator and since January 2021 has been serving as the ARRL Great Lakes Division Vice Director; and

WHEREAS, It is recognized that Scott Yonally, N8SY, shares with PCARS, the highest commitment and promotes encouragement of those active in the hobby of amateur radio.

NOW, THEREFORE, I, Nick Wagner, AC8QG, President of the Portage County Amateur Radio Service, Inc., by virtue of the authority vested in me by the Constitution and by-laws of the Portage County Amateur Radio Service, Inc. am honored to hereby grant Scott Yonally, N8SY an Honorary Life Membership with all member privileges in the Portage County Amateur Radio Service, Inc.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February 2022.

Nick Wagner, AC8QG - President - Portage County Amateur Radio Service, Inc.



PCARS VE Testing Information & News

Tom, KB8UUZ
PCARS VE Team Liaison



Due to the COVID 19 concerns, PCARS had shut down in-person VE testing to ensure the safety of our VE team members and the applicants that wanted to take a test for their new amateur radio license or to upgrade.

Check the website for the latest information.

If you have any questions, don't hesitate to contact me at KB8UUZ@gmail.com. On behalf of the VE team at PCARS, we all look forward to seeing you at the PCARS club site in Ravenna so you can take your license test. Face masks are not State/County mandated at this time, but you are always welcome to wear one.

PCARS VE sessions are scheduled for **10:00 am** on the first Saturday of every even numbered month at the PCARS club site in Ravenna.

April 2nd, June 4th, August 6th, October 1st, December 3rd

WALK-INS will be accepted.

- **You must have your FRN prior to taking an exam** - No SSNs will be used on the Form 605 anymore.
- If you are sick, have a cough, a high temperature or have been exposed to COVID-19 or someone that has been infected - please, *do not* come to the club site. Use of masks is still encouraged.
- No food or snacks allowed.
- \$15.00 Fee Payment will only be by check or exact change. We cannot make change
- If paying by check, make check out to: "ARRL-VEC" The VE Fee is \$15.00
- Ensure you have the following:
 - A picture ID such as a valid Driver's License, State ID, School ID, or US Passport.
 - If you are under 16 years of age, a parent or guardian must be able to vouch for you and you need a copy of your birth certificate (you do not have to give us a copy, we just have to see and verify).
 - **FCC is requiring you have your e-mail address on the Form 605.**
 - **If you are taking a Technician test you must have your FRN number** (you can apply for an FRN on the FCC website). For hams having a license, your FRN is printed on your license.
 - **If you are upgrading to General or Extra - You MUST bring your original valid amateur radio license and a copy of your valid amateur radio license to turn in with your Form 605.**
 - Bring your own pencils and pens.
 - Calculators are okay to use (if you need one) as long as the memories are cleared.
 - NO cell Phones allowed



Any questions? Contact KB8UUZ@gmail.com

Additional Information - What to Bring to the Testing Session

- If you've already passed a test: The original (and one copy) of any document that you will use to prove you've already passed a test element.

These documents may include:

- An unexpired Certificate of Successful Completion of Exam (CSCE) indicating the credit(s) earned.
- Original and copy of a pre-March 21, 1987 Technician license (this provides credit for the Element 3 [General] exam) - you **must** be currently licensed to get this credit.

Expired License? **Original** and a copy of your expired Amateur Radio License - you must take and pass Element number 2 to re-instate your license.

ARE YOU GOING FOR YOUR TECHNICIAN LICENSE? READ THIS IMPORTANT INFORMATION

First-Time Exam Applicants **MUST** Obtain FCC Registration Number **BEFORE** Taking Exam

As of **May 20, 2021**, all amateur examination applicants are **required** to provide an FCC Registration Number (FRN) to the Volunteer Examiners (VEs) **BEFORE** taking an amateur exam. This is necessary due to changes the FCC has made to its licensing system. Applicants will create an FCC username and account, respond to the verification email from FCC, and then register for the FRN. Register on the FCC's Commission Registration System (CORES): <https://apps.fcc.gov/core/>

Social Security Numbers are ***NO LONGER ACCEPTED*** at Exam Sessions

Amateur candidates who already have an FCC license, whether for amateur radio or in another service, already have an FRN and can use the same number - it is printed on your current license. All prospective new FCC licensees, however, will be required to obtain an FRN **before** the examination and provide that number to the volunteer examiners on the Form 605 license application. An FCC instructional video (<https://www.fcc.gov/rofrn>) provides step-by-step instructions on how to obtain an FRN through the FCC's CORES system. The FRN is required for all new applicants to take an amateur exam and is used afterward by the applicant to download the license document from the FCC Universal Licensing System (ULS) (<https://www.fcc.gov/wireless/universal-licensing-system>), upgrade the license, apply for a vanity call sign, and to submit administrative updates (such as address and email changes) and renewal applications.



Email Addresses **REQUIRED**

As of **June 29, 2021** all applications will be required to contain an email address for FCC correspondence. Applicants will receive an email direct from the FCC with a link to the official electronic copy of their license whenever a license is issued or changed. ARRL VEC suggests that those without access to email to use the email address of a family member or friend. Licensees will be able to log in to the ULS using their FRN and password to download the latest version of their license at any time. The FCC no longer provides paper license documents.

New FCC Application Fees Information

08/16/2021

The schedule of FCC amateur radio application fees likely will not go into effect before **2022**. FCC staff confirmed during a recent virtual meeting with Volunteer Examiner Coordinators (VECs) that the agency is still working on the necessary changes to the Universal Licensing System (ULS) software and other processes and procedures that must be in place before it starts collecting fees from amateur applicants. Earlier this year, the FCC said it would not start collecting fees from amateur applicants before this summer. The new estimate is that the fees won't go into effect until early next year. Once it's effective, the \$35 application fee will apply to new, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications. All fees will be per application. Administrative update applications, such as those to change a licensee's name, mailing, or email address, will be exempt from fees. ARRL VEC manager Maria Somma, AB1FM, said Volunteer Examiner (VE) teams will not face the burden of collecting the \$35 fee. "Once the FCC application fee takes effect, new and upgrade applicants will pay the exam session fee to the VE team as usual, but they'll pay the \$35 application fee directly to the FCC using the **FCC Pay Fees** system," she explained. When the FCC receives the examination information from the VEC, it will email a link with payment instructions to each successful candidate who then will have 10 days from the date of the email to pay. After the fee is paid and the FCC has processed an application, examinees will receive a second email from the FCC with a link to their official license. The link will be good for 30 days. Licensees also will be able to view, download, and print official license copies by logging into their FCC ULS account. The FCC no longer provides printed licenses. Licensees can log into the **ULS** with their 10-digit FRN (FCC Registration Number) and password at any time to view and manage their license and application, **print their license**, and update anything in their FCC license record, including adding an email address.

FEE SCHEDULE INDIVIDUALS - \$35 FEE: New, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications. All fees will be per application. - NO FEE: Administrative updates, such as a change of name, mailing or email address, or license cancellation. **AMATEUR RADIO CLUBS** - \$35 FEE: New, renewal, trustee change, and vanity call sign applications. All fees will be per application. - NO FEE: Administrative updates, such as a change of name, mailing or email address, or license cancellation.

ARRL Volunteer Examiner Coordinator ([VEC](#)) Manager Maria Somma, AB1FM, said VECs and Volunteer Examiner (VE) teams will **not** have to collect the \$35 fee at exam sessions. **Once the FCC application fee does take effect, new and upgrade applicants will pay the regular \$15 exam session fee to the VE team as usual, and pay the new \$35 application fee directly to the FCC via the [Fee Filer System](#) or [License Manager System](#).** The new CSCE form now has information about fee payment,

New Technician Question Pool Released, Effective July 1, 2022

The National Conference of Volunteer Examiner Coordinators (**NCVEC**) Question Pool Committee (**QPC**) has released the 2022 – 2026 Technician Class FCC Element 2 NCVEC Question Pool Syllabus & Question Pool into the public domain. It's available as a *Word* document or PDF. The three graphics required for the new Technician question pool are available within the documents, or separately as PDF or JPG files.

The new pool incorporates some significant changes compared to the 2018 – 2022 pool. Its 257 questions were modified slightly to improve wording or to replace distractors; 51 new questions were generated, and 62 questions were eliminated. This resulted in a reduction of 11 questions, bringing the total number of questions in the pool from 423 to 412. The difficulty level of the questions is now more balanced, and the techniques and practices addressed have been updated.

The new 2022 – 2026 question pool is effective July 1, 2022 – June 30, 2026, and *must* be used for Technician-class license exams administered on or after July 1, 2022. — *Thanks to NCVEC Question Pool Committee*

Hamvention® 2022 - It's a GO

Dayton Hamvention® - It's a Go for 2022

Hams and vendors hoping to attend Dayton Hamvention® 2022 have been asking what, if any, COVID-19 regulations will be in place at the event. Hamvention management says it's monitoring the situation closely. **Hamvention General Chairman Rick Allnutt, WS8G**, issued a statement:

"We strongly anticipate that Hamvention 2022 is a go. We cannot guarantee what government may decide about unknown changes in the pandemic. It has become obvious that the State of Ohio is very unlikely to call a halt to large gatherings anytime soon. Despite a recent large spike in [Omicron-variant] COVID cases and hospitalizations, there is no move to restrict large indoor or outdoor events such as sports events,"

Allnutt added that he anticipates that the official state guidance may be to recommend -- not require -- face masks and social distancing, but does not expect to be checking attendees' vaccination status on site. Hamvention will support state guidance.

Some have asked whether COVID-19 testing will be available at Hamvention. At this time, there are no plans to have testing on site. Updates on Hamvention and COVID-19 regulations related to the event will be posted on the [Hamvention website](https://www.hamvention.com).

Hamvention, an ARRL-sanctioned event, will be held May 20 - 22, at the Greene County Fairgrounds and Expo Center in Xenia, Ohio.



Heil Sound Changes Hands

Heil Sound has changed hands

Founded by Bob Heil, K9EID, and based in Fairview Heights, Illinois, Heil Sound is a manufacturer of microphones, microphone accessories, and audio accessories for both professionals and amateurs. The new owners are Heil Sound President and CEO Ash Levitt and Director of Operations Steve Warford. Sarah Heil, who was co-owner of Heil Sound, has retired, but Bob Heil will continue to do outreach work and amateur radio product design as Founder and CEO Emeritus.



(L - R) Heil Sound President and CEO Ash Levitt; Bob Heil, K9EID, and Director of Operations Steve Warford.

“My life has been about achieving great sound, whether on the concert stage or in the amateur radio world,” Bob Heil recounted. “I’ve watched Heil Sound go from a regional sound company to a world-class microphone manufacturer. This company has been my passion, but it is time for me to step aside. There is no better team to carry the company forward than Ash and Steve, and I have the utmost confidence in them.”

Heil Sound is a name well known within the worldwide amateur radio community for its microphones and “boom set” microphone/headset combinations. The company marked its 50th anniversary in 2016. The company began in 1966 as Ye Olde Music Shoppe — a music store in Marissa, Illinois, Heil’s hometown.

Heil initially made a name for himself working with music performers to provide sound reinforcement for their live gigs, initially supplying full sound system packages for venues and festivals throughout the Midwest and later working with world-class acts such as Humble Pie, The Who, The Grateful Dead, and Joe Walsh, WB6ACU. Heil said it was the Dead’s Jerry Garcia who suggested the Heil Sound name. Among other innovations, Heil created the quadraphonic sound system for The Who’s “Quadrophenia” tour as well as the Heil Talk Box, made famous by Joe Walsh and Peter Frampton.

Levitt and Warford both started working with Heil Sound as teenagers, building and packaging products. Levitt took a different career path in academia for several years but continued to regularly consult with Heil Sound. He returned to Heil Sound full time in 2017 and assumed the role of president in 2020. Warford worked his way up in the company over the course of his tenure and, for the past several years, has been responsible for daily operations.

“Steve and I are honored to carry forward the legacy of Heil Sound,” Levitt said. “We care very deeply about Heil Sound’s role in the industry and intend to build on that going forward with new products and greater distribution. An important part of that role that we pride ourselves on is the connection we have with professionals and end-users. As a musician and former broadcaster, I have spent a lot of time on stages and in studios in front of a microphone and understand our users’ needs. I and everyone at Heil Sound share a passion for what we do because it helps others achieve their creative endeavors.”

Happy Birthday PCARS Members

PCARS members having their birthday in **March**:

KE8KCJ	Montie
KE8REF	Mark
WX4QZ	Daryl
K8QF	Russ
KE8BBI	Doug
N8KEV	Kevin

WB8LCD	Tom
N8FUM	Dan
W8CYN	James
W8KNO	Joe
K8SRR	Steve
Jennifer	KB3GXB



CQ POTA - CQ POTA - CQ POTA

Brandon, KE8ARB



There has been a lot leading up to my first POTA activation. Before figuring out what did work, I had to try a few times to see what did not work! My initial attempt was on a very cold day and my mag-loop was not functioning correctly. With some help from Jim, AC8NT I was able to get it going and learned some things along the way.

One thing I did not know is that during two of my trips, the temperatures were below the operating range of my ic-705. I'm unable to comment if that had anything to do with my operations for the day or not, but I did note it. While operating during winter field day, the mag-loop seemed to be doing okay because I was able to make a few contacts. It was a challenge because I had to manually retune and there were a lot of people on the band! Even though I had some success, I was unable to activate the park.

After coming home from winter field day I was fairly frustrated with the result. As some of you may already know, I wear my emotions on my sleeve. Instead of being big fun, the day had seemed more like a big fail. Not being one to stay down for long, and not (usually) one to be too proud, I took some very sound advice from David, KE8QEP Rick, KD8WCK and Brian, N8ZPS and built myself a 20M dipole antenna. The design is a very small, light, 3d printed chassis that has a SO-239 socket, studs for the antenna wire to attach, strain relief, and hooks to wind your wire and paracord! Not really understanding how dipoles work I adjusted the wire so that the resonant point was around 14.1 Mhz. The SWR dip was somewhere down near 13 MHz because, apparently these antennas will pick up capacitance from the ground. I wouldn't really know what the SWR dip looked like until it was in the air. It seemed like a reasonable starting point so it was time to plan another trip!



Up until this point, I had been rushing to get to the park and setup after I got off work. This was not allowing enough time to hike there, yet alone setup. So for this attempt, we ventured out on a sunny Sunday afternoon. We left early enough in the day to be able to take our time hiking in and enjoy nature as we went. Before getting the radio and antenna put together, I started some water for tea. If I was going to be in the cold I was going to enjoy myself! After tea was under way, we took our time performing the initial setup of my new 20M dipole. After the initial fiddling with attaching the ends to some trees a few feet off the ground, and pulling the center up over a branch, I attached the nanovna to see if we would need to make any fine tuning adjustments. The antenna looked absolutely perfect after I folded about 3" off of each side and re-attached the insulators. The SWR was 1:1 for what felt like the entire 20M band. This is a pronounced difference from the mag-loop. I call this out not to criticize the mag-loop, but it was more difficult to tune around the band to respond to other parks calling CQ, or find a clear frequency. So the SWR is low, but does the antenna work?



It was finally time to give everything a shot! The first station I heard was calling CQ from another park. So I quickly replied with an enthusiastic "park-to-park!" Only to be beat out by ANOTHER park-to-park! They wrapped up their QSO and I called out another "park-to-park!" This time they heard me! We were able to get

the QSO logged and then he told me that he was actually in two parks, and had another operator! It felt like a very strong start to the afternoon. After I wrapped up with them I started calling CQ and was able to get 3 or 4 contacts that way. I say 3 or 4 because while I was logging a QSO with one operator, another one jumped in with their call. I replied to them politely telling them I'd be right with them. Being new to all this I'm not sure of the etiquette, but I did jot their call in the log so I knew who to call when I was done. From there I danced around and heard a handful of other parks calling CQ and I was able to log all of them. I shared with a few operators that I was working on my first activation. They shared in my enthusiasm and encouraged me to do well. All you hunters out there, thank you for replying! You make days like this very special!

It is very rewarding to be able to build a simple antenna and hike into the woods and play radio. Special thanks goes to all the people who gave me advice on what antenna to use, and helped me fix my mag-loop. A few people recommended a dipole and it's not an antenna I was familiar with. It works like a dream and I thank you all for your recommendations! I'm looking forward to many more activations... hopefully a few of us will be able to head out together and operate.

Hamvention® Youth Speakers (from PCARS)

Carole, WB2MGP
Hamvention® Youth Forum



Carole Perry, WB2MGP has invited two of the fabulous Wagner family young hams to speak at her Hamvention® Youth Forum this May.



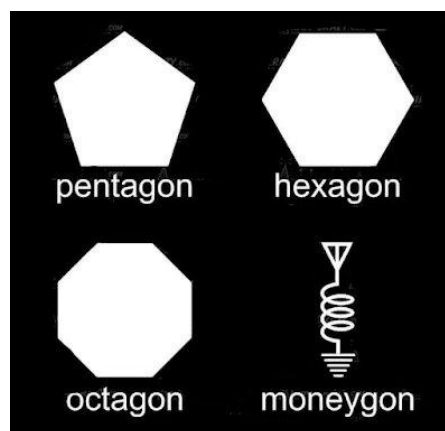
Carole reports that both PCARS members Benedict, AD8FQ, 13 years old, and Agnes, KE8LWP, 12 years old will speak on:

"Unexpected Opportunities: Our Ham Radio Adventures During Lockdown."

All PCARS members are invited to attend the Youth Forum to show support for these talented young hams.



"On FT8, no one knows you're a dog."



Useful Definitions

John, KJ3X



For those new to ham radio, here are some useful definitions, pertaining to antennas and DX-ing.

- S.W.R. -- A term, applied to any part of the antenna system, which means: "Savings-to-Watt Ratio". Based on the inverse relationship of dollars in the bank and effective radiated power.
- Characteristic Impedance The usual reaction of your spouse when told about the proposed antenna system.
- Traps -- Devices installed in antennas to collect rain-water, to keep it from running further down the antenna.
- Wind Loading -- The measure of how much more awkward it gets to handle a big beam as you ascend the tower.
- Balun -- (Pronounced: "balloon" by many). An anti-surveillance device, installed in coaxial lines at the antenna, to prevent nosy neighbors from eavesdropping on you through their TV sets.
- Transmatch -- A device mistakenly believed to decrease S.W.R.. The premise is that this device allows you to load up into a mis-matched antenna. Unfortunately, it the cost of one that lowers your S.W.R.
- House Bracket -- A device which secures the house and the tower together. It lets the tower do double-duty by holding up the house during severe windstorms.
- Rotator Control Box -- A device which is designed to let you monitor antenna "windmilling".
- Windmilling -- A technique whereby prevailing winds are allowed to rotate the antenna, enabling the operator to "scan" the radio horizon.
- Dummy Load -- A measure of the stress exerted on a tower by a ham who climbs the tower without a safety belt.
- Coax -- (Usually mis-pronounced as two syllables). A term applied to the maneuvering of a piece of transmission line through the attic or walls of a house.
- Db's Gain -- A bunch of yellow-jacketed wasps found a great place to build their nest, at the bottom of the rotator housing on my tower.
- Db's Loss -- Fortunately, lightning struck the tower and the wasps were totally destroyed.
- Vertical -- A much-maligned antenna, said by some critics to "radiate equally poorly in all directions". This is not true, as many who have built one know. In fact, the vertical can have directional characteristics, and not radiate at all in some directions. I hope this clears up that myth once and for all!
- Sloper -- A variation of the vertical, where high winds have affected thin-walled aluminum tubing used in the construction.
- Inverted Vee -- A clever, but inferior, reverse adaptation of the true, "upright Vee", which allows the use of a single support instead of the usual two.
- Dipole -- Another modification of the true "Vee", and used where it is not possible to get the center feed point close to the ground.

- **Ground Plane** -- Usually, an array of 1/4-wavelength arms extending from the base of some verticals (or "slopers"). These arms are not recommended unless a rotator is also used, to take advantage of their directional features.
- **Directional Coupler** -- A device inserted into the transmission line which monitors the environment outside the shack, by utilizing the antenna as a remote sensor. For example, when the antenna responds to weather conditions such as severe icing or heavy winds, the coupler will produce indications of these responses. A special directional coupler has even been designed, presumably, to tell you when BIRDS are sitting on your antenna!
- **Smith Chart** -- An alias, to be used when you don't want people to know what chart you really used to design your antenna.
- **Long Path** -- The direction you are told to aim your antenna, to work a rare DX station, as suggested by the other fellows in the pileup.
- **Element Spacing** -- A critical antenna design factor which is optimized to place the tunable traps on a beam as far out of reach as possible, from the tower.
- **Diversity Effect** -- A property in which the quad-type antenna far excels over the yagi-type antenna. It relates to the number of directions an antenna can collapse into, under heavy winds.
- **Selective Fading** -- A quirk of propagation, whereby a signal arrives at a distant point by multipath, and where the different signal components arrive with varying phase relationships. This causes the signal to be "cancelled out" at some points. This wonderful effect helps eliminate some of the QRM from distant DX stations when you are trying to copy the pileup.
- **"Off the back of the Antenna"** -- A technique used by more experienced DX-ers, where the antenna is pointed away from the station being contacted. This creates a challenge similar to running QRP.
- **QRP** -- Restricting final input power to the transmitter to anything less than 500 watts, on 20 meters.
- **Speech Processor** -- A "state of the art" device which permits one to communicate with as many others at the same time as possible. However, beginner operators need to learn how to use one properly, to expand the signal beyond a narrow, 3 KHz bandwidth.
- **"IMOKINCALLBK"** -- An expression used in a CW QSO, to say: "you send me your QSL card first, turkey, and then I'll send you mine".
- **IRC** -- An economic instrument, administered by the Postal Service, to control the balance-of-trade deficit.
- **Parasitic Element** -- A person who takes lists for DX-stations.
- **LISTS** -- A method of making DX contacts, where some self-appointed person takes a list "on the air" (aka: his buddies on 2-meters) of people who wish to "work" a person in some DX location. This makes it easy for hams who do not have the patience or time to learn real DX skills to get a quick, easy contact. In fact, if you can't hear the actual report from the foreign station, the list-controller will often help ("...OK, there, WB6xxx, did you hear Jose give you a '59' signal report?").
- **QSL Manager** -- The station you worked in Juan De Nova tells you to send a "Green Stamp" to a ham in Germany who is called a "QSL Manager". It is his duty to send your card to a ham in California, who then (after holding it for 8 months) sends you a QSL card.



APRS Developer WB4APR - SK

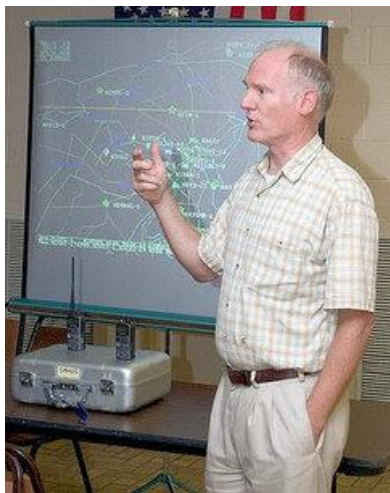


APRS Developer Bob Bruninga, WB4APR, SK

The father of the Automatic Packet Reporting System ([APRS](#)), Bob Bruninga, WB4APR, of Glen Burnie, Maryland, died on February 7. An ARRL Life Member, Bruninga was 73. According to his daughter, Bruninga succumbed to cancer and the effects of COVID-19. Bruninga had announced his cancer diagnosis in 2020. Over the years, Bruninga readily shared his broad knowledge and experience in APRS and other topics in the amateur radio and electronics fields.

While best known for APRS, Bruninga, a retired US Naval Academy senior research engineer, had an abiding interest in alternative power sources, such as solar power. In 2018, he authored *Energy Choices for the Radio Amateur*, published by ARRL, which explores developing changes in the area of power and energy and examines the choices radio amateurs and everyone else can make regarding home solar power, heat pumps, and hybrid and electric vehicles. Bruninga drove an all-electric car and had experimented with a variety of electric-powered vehicles over the years.

What became APRS had its origins in 1982, when Bruninga wrote his first data map program that plotted the positions of US Navy ships for the Apple II platform. A couple of years later, he developed what he called the Connectionless Emergency Traffic System (CETS) on the VIC-20 and C-64 platforms for digital packet communications to support an endurance race. The program was ported to the IBM PC platform in 1988 and was renamed APRS in 1992. The recognized North American APRS frequency is 144.39 MHz and APRS is linked globally via the internet. Bruninga founded the Appalachian Trail Golden Packet event, which fields APRS nodes from Stone Mountain in Georgia to Mount Katahdin in Maine each July.



ARRL Contributing Editor Ward Silver, NOAX, remembered Bruninga this way: "Bob kept pushing APRS beyond its origins as a position reporting system. He developed and helped implement numerous other uses of APRS in support of what has become the 'Ham Radio of Things,' with great potential for future amateur radio applications. Bob's far-reaching vision and imagination were as good as it gets."

Bruninga mentored US Naval Academy midshipmen in building and launching amateur radio satellites and CubeSats, beginning with PCSat in 2001. PCSat was the first satellite to report its precise position directly to users via its onboard GPS module. Subsequent USNA spacecraft included PSK-31 capability (HF to UHF) and other innovations.

Amateur Radio on the International Space Station (ARISS) ARRL liaison Rosalie White, K1STO, recalled that Bruninga attended many ARISS-International meetings and contributed "enormously" to ARISS APRS activities, leading a team in developing protocols and software for rapid message exchange via a packet "Robot."

Last year, ARRL CEO David Minster, NA2AA, on behalf of ARRL, honored Bruninga with a brick in ARRL's Diamond Club Terrace at ARRL Headquarters. Read [an expanded version](#)



Detection of the 8.4 GHz signal from Voyager 1

The video of the Voyager 1 presentation given by radio amateur **Daniel Estévez M0HXM / EA4GPZ** at the Fosdem 2022 event is now available

Voyager 1 is the furthest spacecraft and the first ever to exit the solar system. Fueled by its radioisotope generators, after more than 40 years of flight it is still sending us data about the interstellar medium using its 3.7 metre dish antenna and 8.4 GHz transmitter. In this talk we report two adventures regarding the reception of the Voyager 1 signal.

In the first part, we show the successful detection of the Voyager 1 signal using one of the 6.1 metre dishes at the Allen Telescope Array in November 2020. Calculations show that using stable frequency references and accurate Doppler correction, this feat might also be possible for amateurs with smaller dishes if they integrate several hours of data to pull out the very weak signal from the noise. In the second part, we use some recordings done by the 100 metre Green Bank Telescope in 2015 and 2020 to decode the data transmitted by Voyager 1. The spacecraft predates the modern CCSDS standards, so its data has some interesting aspects.

All this work has been done using GNU Radio, Python, and other open source tools. The data and results are publicly available.

Watch the video at https://fosdem.org/2022/schedule/event/radio_voyager1/

From: http://www.southgatearc.org/news/2022/february/detection-of-the-8-4-ghz-signal-from-voyager-1.htm?utm_source=feedburner&utm_medium=email#.YgVZcd_MKHs

First ever Svalbard QO-100 DXpedition JW100QO

A DXpedition to Svalbard (78° North) is planned for April 19-26 with the callsign **JW0X**. In addition to the five HF stations (FT8/FT4/RTTY/SSB/CW) the team will activate the first QO-100 satellite DX Station callsign **JW100QO** April 22-24

Making the first ever QO-100 calls from Svalbard is the biggest challenge of this DXpedition. ON4CKM Cedric, ON4DCU Patrick and ON5UR Max will make a rugged snowmobile ride of almost 100 km in temperatures of -20° – 25° Celsius to reach their goal. Kapp Linné is the only place in the area that allows a view of the QO-100 satellite at only 3° above the horizon. Svalbard also lies on the edge of the satellite area (footprint), which makes the challenge even greater. We want to give as many radio amateurs as possible the opportunity to work this first QO-100 DXpedition. For this unique challenge we also have a special callsign JW100QO.

Further info at: Svalbard QO-100 JW100QO April 22-24 <https://www.dx-adventure.com/en/qo-100-our-goal/>
Svalbard JW0X April 19-26 <https://www.dx-adventure.com/en/svalbard-dx-pedition/>
QO-100 geostationary amateur satellite transponder provides coverage from Brazil to Thailand, see <https://amsat-uk.org/satellites/geo/eshail-2/>

New World Wide Digital Contest

From the ARRL

ARRL Announces New World Wide Digital Contest

02/09/2022

The **ARRL World Wide Digital Contest** will debut at 1800 UTC on June 4, ending at 2359 on June 6, 2022. All non-RTTY modes are permitted. Going forward, RTTY will be the sole mode for the ARRL RTTY Roundup, which will continue to take place in January.

In broad strokes, this will be an HF – 6-meter event, on 160, 80, 40, 20, 15, 10, and 6 meters, with single-operator and multi-single entry categories. These are Single Operator, One Radio (SO1R), Single Operator, Two Radio (SO2R), and Multi-Single (MS). Overlays in the single-operator categories will include “all enclosed antennas” and “maximum of 8 operating hours.” Single-operator entries may operate for 24 hours (with off times taken in one or two breaks that are at least 60 minutes long), while MS entries may operate for the full 30 hours.

Operating assistance is permitted for all operating categories.

Power categories will be QRP (5 W transmitter output or less) and low-power (maximum 100 W PEP transmitter output).

The exchange for the World Wide Digital Contest will be a station’s four-character grid square designation. Stations may work each other once per band, regardless of digital mode. Participants will earn 1 point for each contact, plus 1 point for each 500 kilometers (310 miles) between stations. So, a contact between stations 1,000 kilometers apart would be worth 3 points. The total score is total contact points.

ARRL makes available a grid-center **distance calculation tool**. Options include kilometers (always rounded up), distance between pairs, and points.

For instructions on how to **submit logs**, visit the ARRL Contest page. Logs will be due 7 days after the event has concluded.

In succeeding years, the World Wide Digital Contest will take place on the first full weekend of June.

Full details on the new operating event are on the ARRL website.

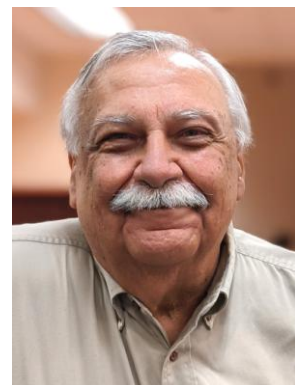


PCARS K8BF
The Club that puts the FUN in Ham Radio!



California QSO Party 2021 - Results

Chuck, W8PT



While my XYL, Jeanne, and I were vacationing in Cape Cod and Plymouth, MA, 8 PCARS members manned the station positions at the club site to put K8BF on the air in the 2021 CA QSO Party. I want to thank W8KNO Joe; AD8FQ Ben; N8QE Bob; KA8TOA Greg; KB8TUY Mike; KE8LWP Agnes; WA8LRW Ken; and AC8QG Nick for doing such a great job representing PCARS. I'm sure they had fun doing it.

I was pleasantly surprised when I saw the results, given the type of year we were all having. We ended up with 50 CW contacts, 135 Phone contacts, and 44 multipliers (California counties).

California QSO Party

This Certificate of Achievement Is Awarded To

W8KNO AD8FQ KB8TUY
N8QE KA8TOA WA8LRW KE8LWP AC8QG

K8BF

Class: MM-L Rank: 1-Ohio 2-USA Portage County Amateur Radio Service
Ohio

56th Running of The CQP - October 2-3, 2021

185
Contacts

44
Multipliers

18480
Total Points

John Miller
K6MM, CQP Webmaster

Dean Wood
N6DE, CQP Chairman

Tom Epperly
N5ET, CQP Log-Checking

California QSO Party

CQP 2021
Top 10: Multi-Operator Multi-Transmitter Low Power

Place	Call Sign	QTH	CW QSOs	PH QSOs	Mults	Score
1	W5NN (K5MXG, K5NZ ops)	TX	167	0	51	25,551
2	K8BF (W8KNO, AD8FQ, N8QE, KA8TOA, WA8LRW, KE8LWP, AC8QG, KB8TUY ops)	OH	50	135	44	18,480
3	WA7ID (KG7PQJ, NQ6S, KD7RBX, KK7AAM, WB7RWS, KC7NOC, K10E, K17PWR, K37NNW, AB7XX, KK7AAN, KK7AKI ops)	ID	0	89	42	7,476

Redwood, and Channel Islands. K8BF was in this last category based on the number of logs submitted. **We ranked 15th out of 102 clubs** in this category.

One other item of interest is that in setting all-time records, we were **4th among all Multi-Multi/LP entries with 53,911pts in 2014**. We were not that far off the all-time record of 61,074 pts set by a Missouri club in 2011.

I again want to thank the team for a really great job. And I hope that we can do even better this year when we gather for the CAQP this October.

Our total score was 18,480 pts. Now that seems low compared to past years but you will see why I was so pleased with the results when I tell you that:

K8BF finished FIRST in Ohio – FIRST in the 8th Call Area – and Second in the USA.

The folks who run the contest had changed the rules from previous years regarding Club Competition. They made up 5 categories of both California and non-California clubs based on the five US National Parks located in the state. The five Club Categories were Yosemite, Joshua Tree, Sequoia,

California QSO Party

Hassayampa Amateur Radio Klub			
KE6GFI	7,052	60,000 (YL)	67,052
TOTAL	7,052	60,000	67,052
Portage County Amateur Radio Service			
K8BF	18,480	10,000	28,480
W8KNO	10,185	10,000	20,185
KA8TOA	2,600	10,000	12,600
TOTAL	31,265	30,000	61,265
CREO DXCE			
XE1AY	765	60,000	60,765



Young Ham Lends a Hand Contest - 2022

Carole Perry, WB2MGP
Director RCA, Youth Activities



We want to reward a young ham who has volunteered to help an elderly person, a military person, his or her community somehow, or a young ham actively involved with recruiting other young people into ham radio. There's no red tape; it's just me and my RCA Youth Activities evaluating the application forms. You will smile to know that we have had high caliber and terrific young hams who get nominated every year.

I am still accepting nominees for this contest to encourage volunteerism in our young hams. Forms may be submitted up until April 1st. The winner is usually announced at the Hamvention® Youth Forum. A \$100 stipend is awarded to the winner.

This is sponsored by RCA and QCWA. Please contact me with any questions. All forms should be submitted to: wb2mgp@gmail.com

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Young Ham Lends a Hand Contest

Carole Perry WB2MGP wb2mgp@gmail.com

Please fill in the following requests for information about your nominee for this year's contest.

Information about your nominee:

Name and call sign

Age

Address

Home Number and Cell number

Please fill in YOUR name, relationship to the candidate and contact info.

Please describe reasons why this nominee is deserving of the award that looks for a young ham who gives back to the community by participating and helping in local events, assisting the elderly, assisting military personnel, or is instrumental in recruitment and/or training of more young hams.

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Youth Activities Program

The Youth Activities program is chaired by RCA Director Carole Perry WB2MGP and has Richard Somers, Stan Reubenstein, Gordon West and Charles Kirmuss as committee members.

A major event for the committee is to moderate and to sponsor the annual Dayton Youth Forum where RCA Young Achievers, age 18 and below, give presentations highlighting their technical abilities and enjoyment of radio.

The RCA Young Achiever is a youngster 18 and below who has demonstrated technical excellence and creativity in wireless communications. We are always interested in receiving nominations for these talented young people. Please contact Carole at wb2mgp@gmail.com to nominate someone as a Dayton Hamvention® presenter or as a student deserving the RCA Young Achiever award.

We are also always interested in supporting schools, scout groups, and museums that incorporate radio/technology in their programs. Support can be in the form of books, equipment, or curriculum. Please contact Carole at wb2mgp@gmail.com for further information.

The Youth Activities members travel across the country to speak at radio conventions, to moderate Youth Forums, and to vet large organizations enlisting our help in motivating and supporting young hams and in introducing wireless technology to school curriculum.

Tax deductible donations specifically to RCA Youth Activities can be made through the Richard G. Somers Youth Scholarship Fund. Please contact Carole at wb2mgp@gmail.com for further information.



FOR SALE: Heil HM-10-XD microphone. Used once, in box. \$100 (Brand new ones are selling for \$139,)

Contact Deron, N8XTH deronmb@gmail.com or text 330-715-8552 [5/02/22]

FOR SALE: Weller 921SX1 soldering station this is definitely used in Fair condition. Asking \$25 or offer **Tri-Magnet Roof Mount** new in the box. NMO antenna mount, PL-259 on cable. Asking \$45 or best offer **Astron RS-20 power supply** used – puts out +13.8v (not tested under load) Asking \$45 or best offer. Estate of Terry - KB8AMZ-SK All items are “cash and carry”. Any and all offers will be seriously considered, as we need to get this settled asap. All items are sold “as is”. All money received will be sent to Terry’s sister to use for final expenses per Terry’s wishes.

Contact: Tom WB8LCD email: tomsly29@gmail.com or call: 330-554-4650 [04/02/22]

FOR SALE: Reconditioned Heath Kit SB-200 Amplifier \$500.00 with new tubes. **WANTED: Cheap 2M/70CM FM Mobile Transceiver and Single Band 10 Meter Vertical** with elevated radials attached.

Contact: Bob, N8QE email: rhajdak@aol.com [5/02/22]

FOR SALE: Chameleon CHA F Loop 3 - Loop Antenna \$280.00 **Icom 703**, 500hz filter with **Icom Back Pack** and **Separation Cable** \$225.00 **TenTec 20-40 meter** 3 watts, Apache 1800 case \$125.00 **Samlex Switching Power Supply**, Sec 1235 \$135.00 **LDG AT 200 ProII** tuner \$145.00 **TenTec 554**, 5 watt radio, 4 Modules 10,15,20,40 \$100.00

Contact: Dave, WV8P - wv8p@roadrunner.com [05/02/22]

FOR SALE: Astron RS-50 power supply. 50 Amp supply, no meters - \$200.00

Contact: Richard, KA8OAT - phone 330-506-7068 [03/02/22]

FOR SALE: Rick Tenan WA8TSI - SK Estate Items for sale. Complete Drake “B-Line” station in museum quality condition: R4B Receiver, T4XB Transmitter with custom cover, MS-4 Speaker and Cabinet with custom cover, MN-2000 Tuner with custom cover, AC-4 Power Supply and connecting cables, Drake W4 wattmeter, Shure 444 Microphone, Items were serviced and brought up to top operating condition by Jeff Covelli. **\$1080.00 for the complete set. Separate items are not for sale.** Most manuals included. **Yaesu FT-990** HF Transceiver in excellent condition. MD-1 mic and manual included. \$675 **Kenwood TS-820** HF Transceiver in excellent condition with manual. VFO-820, SP-820 and MC-50 mic and connecting cables included. \$ 585 **Heathkit SB-1400** HF transceiver and SBA-1400 speaker/ps in mint condition. \$200 **Heathkit HX-30** 6 meter transmitter and HA-20 Amplifier in average condition. Includes Comair LM-6N2C 6 and 2 meter manual tuner in fair condition. \$400. **Heathkit HO-10** Monitor Scope in good condition. \$ 45. **Astron RS-50M** DC pwr supply in excellent condition. \$250. **Radio Shack 22-510** 25a switching power supply. \$75. **Allied-Radio Shack AX-190** HF ham band receiver in very good condition. \$100 **Siltronics (SWAN) FS-301** SWR meter with 1000w and 20w scales in good condition. \$45 **Radio Shack Pro-2044** Scanner. \$30 **Royce 2-100** Field Strength & SWR meter. \$15 **Midland 23-135B** Field Strength meter. \$10 **Lafayette Telsat SSB-75** SSB and AM transceiver. \$45 **Radio Shack HTA20** 2 meter mobile transmit amp. \$55. **DSI-5500** 50hz-512mhz frequency counter. \$55 **MFJ-260C** dummy load. \$40 **MFJ-1702** 2 position coax switch. \$35 **MFJ-945D** Mobile tuner. \$80 **MFJ-945E** Mobile tuner. \$115 **MFJ-949E** Deluxe Versatuner II. \$115 **“On the Air”** sign Large backlit. \$25 **RCI-5054** 6m SSB transceiver. \$170 **J-38** style straight key mounted to heavy base. \$20 **CSH-A4S Beam** with optional A-744 driven element for 40 meters. It may need some adjustments. \$75. **Diamond X200** vertical for 2M and 70CM. \$100 **Ham IV rotator and controller.** \$450.

Contact: Ken Starcher at 330-475-2630

Leave a message if I am not available. All proceeds go to Pam Tenan. [03/02/22]

For Sale or Want Ad policy reminder: This is a PCARS **members only** benefit. Please don’t ask to list items for a friend, relative or SK estate unless they are/were a member of PCARS. Requests come in from all over the USA (and beyond) to list items for sale or wanted items and we just cannot dedicate that much space to non-members. Listings are good for 3 months unless canceled or changed earlier. The date listed after the contact information tells you when the ad expires - example: [05/02/22] indicates the ad will run until May 2, 2022.

Hamfest Calendar



Here is the current listing of local hamfests. Please note that all are **subject to change**, so stay current by checking the sponsoring club's web page before making your travel arrangements.

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03/13/2022 - The Northern Ohio Amateur Radio Society Winter Hamfest - Northern Ohio Amateur Radio Society
- **Location:** Lorain County Community College - 1005 N. Abbe Rd. - Elyria, OH 44035 - **Website:**
<http://www.wp.noars.net/hamfests/winter-hamfest/> - **Public Contact:** Carl, W8KRF 3821 West 152nd St. Cleveland, OH 44111 Phone: 216- 256-9624 - **Email:** winterhamfest@noars.net

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03/20/2022 - CANCELLED - Toledo Mobile Radio Association - CANCELLED Location: Owens Community College- 30335 Oregon Road - Perrysburg, OH 43551 - **Website:** <http://tmrahamradio.org> - **Public Contact:** Brian Harrington, WD8MXR - 4463 Holly Hill Drive Toledo, OH 43614 - Phone: 419-385-5624 - **Email:** wd8mxr@gmail.com
NOTICE - TMRA's March 2022 Hamfest has been canceled due to COVID-19 variants. Out of an abundance of caution, TMRA's Hamfest Committee has decided to cancel the March 2022 Hamfest.

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04/09/2022 - Sixty-Sixth HAMFEST, Electronic and Computer Show - Cuyahoga Falls Amateur Radio Club, Inc. -
Location: Emidio & Sons Party Center - 48 E. Bath Road - Cuyahoga Falls, OH 44221 -
Website: <https://sites.google.com/cfarc.org/cfarc/hamfest> - **Public Contact:** Bruce Ferry, AK8B - 2907 Lee Rd. Silver Lake, OH 44224 - Phone: 234-206-0270 - **Email:** hamfest2022@cfarc.org

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05/20/2022 - Dayton Hamvention® 2022 - Dayton Amateur Radio Association - Location: Greene County Fairgrounds and Expo Center - 120 Fairgrounds Road - Xenia, OH 45385 - **Website:** <http://hamvention.org> - **Public Contact:** Henry Ruminski, W8HJR - PO Box 44 Dayton, OH 45401-0044 - Phone: 1-937-232-9272 -
Email: henry.ruminski@wright.edu

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07/09/2022 - Intercity Amateur Radio Club - Mansfield - Location: Richland County Fairgrounds - 750 North Home Road - Mansfield, OH 44901 - **Website:** <https://iarc.club/> - **Public Contact:** Danny Bailey , W8DLB - 70 Euclid Street Shiloh, OH 44878 - Phone: 419-541-8557 - **Email:** W8dlb113@gmail.com

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09/25/2022 - The 47th Annual Cleveland Hamfest And Computer Show - Hamfest Association of Cleveland -
Location: Cuyahoga County Fairgrounds - 164 Eastland Road - Berea, OH 44017 - **Website:** <http://www.hac.org> -
Public Contact: Glenn Williams, AF8C - 4134 Stoney Ridge Rd. Avon, OH 44011 - Phone: 440-934-5566 -
Email: af8c@ARRL.net



PCARS Thursday 2 Meter Nets

Greg, KA8TOA
Net Control Coordinator



Thank you all for helping with this! Anytime you are unable to take the net, please give me as much advance warning as possible! **Check-in using the receiver located in Sugar Bush Knolls ~ 146.895 with a PL tone of 118.8. We also use EchoLink node K8BF-L**

The net control dates will be posted on the Club website. An email will be sent out after the posting. As usual if there are issues please contact me via the roadrunner email address.
Thanks to all of you for helping out.

For the 4th quarter of 2021 OCT, NOV, and DEC a total of 253 check ins for 12 weeks

3 month weekly average of 20 check ins

Oct 4 weeks 85 check ins average 21 / Nov 3 weeks 67 check ins average 21 / Dec 5 weeks 101 check ins average 20

2020 4th quarter 3 month weekly average of 26 check ins

We could use another net control volunteer always looking for some help. It is good training and not that hard, please let me know.

March	
3	N8WCP
10	WB8LCD
17	K8YLK
24	KE8BWA
31	KD8WCK

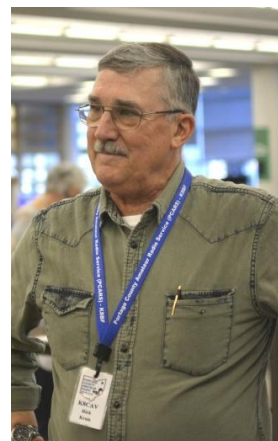
April	
7	N8WCP
14	N8QE
21	K8YLK
28	K8CAV

May	
5	KD8WCK
12	KE8BWA
19	KA8TOA
26	N8QE

The PCARS net is **BIG Fun** - tell your friends to check in via RF or EchoLink!

Flex Net

Rick, K8CAV
Flex Net Coordinator



PCARS will be holding the next Flex Net on Wednesday March 9th at 8:00 PM.

The net will meet on 50.150 MHz USB, phone. This is a fun net to participate in, and is also a good place to try and fill out those Q's for the PCARS A to Z contest.

Last month we had a great time revisiting our RTTY skills on 10 meters! Many thanks to Brandon, KE8ARB Bob, N8QE Mike, N8WCP and Rick, KD8WCK.



Erie Ham Makes Bogus Threats



Erie Radio Amateur in Court

The Erie Times-News reports on the case of amateur radio operator **Richard L. Wagner N3BWG**, aged 62, of Erie PA, who has been accused of making bogus weather emergency reports on ham radio over several months in 2021

The newspaper says:

Authorities also accused Wagner of threatening to assault other radio operators who told him to stop, and of threatening to place a bomb in an Erie apartment building where he lives.

Wagner was charged in October with airing the false weather reports and making the bomb threat.

While Wagner was awaiting his preliminary hearing in that case, authorities allege he broadcast — between Dec. 19 and Sunday — threats to place bombs in buildings including the Erie police station and the Erie County Courthouse, according to information in a new criminal complaint filed on Monday [Feb 14].



PCARS Custom Coffee Cups - Limited Edition - Almost Gone

PCARS has obtained a limited number of special, custom made coffee cups that are available only to members.

Portage County Amateur Radio Service



2018 Hamvention® Club of the Year

Supply is limited. If you are a current (PAID) member of PCARS you get one coffee cup for **FREE !!** The only catch is you have to claim it from the

Treasurer - Greg, KA8TOA. Greg has a list of current members and will check off your name when you get your **FREE** PCARS coffee cup.



There are a **very limited number of extra coffee cups** and they are for sale at \$5.00 each.

Contact Greg for all of the details: Treasurer@portcars.org





Paul, N1SFE
From the ARRL

Lewis and Clark Trail On The Air



Clark County Amateur Radio Club, out of Vancouver, WA will be hosting a new event to start June 2022.

CCARC is an active club of over 400 members. It has also received the recognition of being an ARRL Special Services Club. The club has made a big impact on the amateur radio community in the Pacific Northwest.

Lewis and Clark Trail OTA is being organized by a committee of CCARC members. The event will be from June 4-19, 2022. Lewis and Clark traveled through 16 states, and we're working on getting a club from each state to activate. There will be certificates sent out for those that contact all 16, and another certificate for those that contact less than 16.

We see this as a chance to promote the Lewis and Clark Expedition and honor them for their achievement by bringing them in to the amateur radio world of 2022. Mark your calendars for this special event and see how many contacts you can make. **LCTOTA.org** Lewis and Clark Trail On The Air on Facebook

Field Day is Coming-Start Planning Now

It is February and Field Day is just four months away. Has your club starting to planning? Many clubs are still operating in pandemic mode and will not have a gathering site but many will be in the field. Now is the time to get the club together, however you are meeting, and plan for what I think is the best weekend of the ham year. Field Day can be a great opportunity to operate and have fun. It can also be a great chance to work with local authorities and demonstrate the capabilities. Earn extra Points - Set up an information table and a Get On The Air station - and get the new hams out for what is often their first real chance to work HF in a friendly contest-type environment. There are some updated rules and you can find them at <http://www.arrl.org/field-day-rules>. This site is updated often so check back for the latest. The most important thing is to have fun and enjoy Field Day. Invite the public, local dignitaries, and media. Field Day is a great photo op for police, firefighters, and EMS. Remember, outreach to the community is one of those things that we all need to be doing.



FCC: Amateur Service Licensees May Not Use Their Radios to Commit Criminal Acts

The FCC Enforcement Bureau has re-issued its earlier [Enforcement Advisory](#) that licensees in the Amateur Radio Service and licensees and operators in the Personal Radio Services are prohibited from using radios in those services to commit or facilitate criminal acts.

"The Bureau recognizes that these services can be used for a wide range of permitted and socially beneficial purposes, including emergency communications and speech that is protected under the First Amendment of the US Constitution," the FCC said. "Amateur and



Personal Radio Services, however, may not be used to commit or facilitate crimes."

As it did in advisories in 2021, the Enforcement Bureau is reminding amateur licensees that they may not transmit, "communications intended to facilitate a criminal act" or "messages encoded for the purpose of obscuring their meaning."

"Likewise, individuals operating radios in the Personal Radio Services, a category that includes Citizens Band radios, Family Radio Service walkie-talkies, and General Mobile Radio Service, are prohibited from using those radios "in connection with any activity which is against Federal, State, or local law. "Individuals using radios in the Amateur or Personal Radio Services in this manner may be subject to severe penalties, including significant fines, seizure of the offending equipment, and, in some cases, criminal prosecution.

"To report a crime, contact your local law enforcement office or the FBI, the FCC said."

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Tickets are on Sale for Next QSO Today Virtual Ham Expo, March 12 - 13

ARRL Life Member Courtney Duncan, N5BF, will be the keynote speaker for the [QSO Today Virtual Ham Expo](#) on Saturday, March 12, in the QSO Today Virtual Ham Expo auditorium. The semi-annual virtual ham radio gathering will be live on March 12 - 13. Duncan will discuss the importance of amateur radio and technical hobbies in advancing global technology. Just retired from NASA's Jet Propulsion Laboratory (JPL), Duncan supported numerous missions involving digital and radio frequency hardware and software, most recently as telecommunications lead for the Ingenuity Mars Helicopter.



This edition of the QSO Today Virtual Ham Expo will showcase a wide range of topics with appeal to newcomers and veterans alike. It's a chance to update your amateur radio knowledge and get exposed to cutting edge ham radio technology as well as practical operating and building techniques. Like a live ham radio convention or hamfest, the Expo has presentations, exhibits, and state-of-the-art "lounges" for face-to-face interaction among participants.

Some 60 ham radio luminaries [will address a multitude of topics](#), from DXpeditions to Solar Cycle 25. Some highlights include:

- Mike Crownover, AB5EB; Erwann Merrien, LB1QI, and Bill Straw, KO7SS [will discuss their plans](#) to operate from Bouvet Island in November 2022.
- ARRL Central Division Director and ARRL Electromagnetic Compatibility Committee Chair Carl Luetzelschwab, K9LA, will present an [Update on Solar Cycle 25](#).
- [Chasing DX During A Contest](#) is the subject of a presentation by Bill Salyers, AJ8B. He'll offer best practices, tools, and techniques to increase your chances of logging DX during operating events.

Because it's a virtual event, you don't have to pick and choose which presentations you can attend. You can watch any one of them within 30 days of the Expo as well as explore exhibitor offerings from the comfort of your computer or other device.

[ARRL The National Association for Amateur Radio](#)® is a QSO Today Virtual Ham Expo Partner. "Early bird" tickets are \$10 through March 6 and then \$13.50 to the end of the on-demand period. Tickets include entry for the live, 2-day event and the 30-day on-demand period.

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Crozet Island DXpedition Preparations are Moving Forward

The upcoming solo DXpedition to Crozet Island, spearheaded by Thierry Mazel, F6CUK, will likely arrive on the island around Christmas. While traveling aboard the *Marion Dufresne*, Mazel will make stopovers at other remote islands that are also rare DXCC entities, including Tromelin Island. The Crozet and Tromelin islands are administered as part of the French Southern and Antarctic Lands (abbreviated in French as TAAF).

"After the permission granted by the TAAF and the DXpedition announcement, [the] time has come to gather the equipment and move forward with the preparations," Mazel said. "The *Marion Dufresne* will leave Réunion Island on December 8, with a stopover at Tromelin to resupply the people there, then head for Crozet."

Mazel expects to spend a solid 3 months operating from the Alfred-Faure base on Crozet. The *Marion Dufresne* will return on March 26, 2023, after stopovers at the Kerguelen Islands and Amsterdam, arriving at Réunion Island on April 16, 2023. He said dates may vary depending upon weather conditions. His first task upon arrival will be to erect antennas and set up his station, for which he'll need to enlist help from others. He'll also have to contend with the weather, as Crozet is subject to strong winds.

No call sign has been issued at this point, although Mazel has requested one that will commemorate the 60th anniversary of the first amateur operation from Crozet in 1961 and 1962. To head off problems with pirates, the call sign won't be released until after Mazel has arrived on Crozet, and just hours before he begins operation. "I have asked the TAAF [for] permission to send part of the equipment with the previous ship supply mission leaving in November," Mazel said. "It sometimes happens that, because of the weather during landing, not everything can be brought to the island. Imagine being on the island without a station!"

Mazel said much remains to be done, including finalizing antenna designs, securing winter clothing, and organizing scheduled contacts with school children via the QO-100 geostationary satellite. "Crozet will be an ATNO [All-Time New One] for many, and you can't afford missing it, as nobody knows when the next ham operation will take place from this #3 most-needed," Mazel said in urging contributions to the DXpedition effort.

The last ham radio activity from Crozet was in 2009 by Florentin Bard, F4DYW, who operated as FT5WQ. The 2022 - 2023 solo DXpedition is anticipated to cost upward of \$60,000. For additional information, visit the [Crozet Island DXpedition](#) website. Read [an expanded version](#).



3Y0J Bouvet DXpedition Confirms Departure Date

The 3Y0J Bouvet Island DXpedition has confirmed January 6, 2023, as its date of departure on board the vessel SV Marama. The DXpedition will make the second-most-wanted DXCC entity available for the first time in several years.

"It is complex to plan the logistics of such a huge project like the 3Y0J Bouvet DXpedition, which involves many parties," the DXpedition announced this week. "The new date is mainly related to the Marama vessel logistics, but [also will] enable us to return to Cape Town in late February 2023." The 3Y0J team also confirmed that the DXpedition will run for 44 days overall, with a contingency week for added flexibility.



"We have contracted 22 days at Bouvet Island, and it means we will spend more than 3 weeks at Bouvet," the announcement said. "As we have the flexibility to still decide the port of departure -- Ushuaia, Argentina, or Port Stanley, Falkland Islands -- this will be done at a later stage."

The DXpedition will feature 12 stations, with eight CW or SSB stations and four FT8 stations. Operators aim to log at least 200,000 contacts. "We will be using the Elecraft K3S, a well-proven in the field DXpedition radio as the CW/SSB radio, and SunSDR2 DX as the FT8 radio," the DXpedition said. "We want to emphasize that the FT8 radios will not be run in unattended robot mode," the DXpedition said. "Each FT8 QSO will be initiated by a human

operator sitting at Cape Fie on Bouvet."

"During peak times, we will run up to 12 radios simultaneously. We plan for minimum downtime on the radios, and to achieve this, we will set up the four FT8 stations to run 24/7, so that these can either be run by one operator separately or be run by any other operator in a simplified SO2R setup. This will be done so that each operator can log into the FT8 machine from his operator position and run CW/SSB and FT8 simultaneously. Running several radios by a single operator this way has shown to be very efficient." Stations will be equipped with various 1.5 kW amplifiers (2 kW PEP for 160 meters).

The receive antenna will be a ground-independent RX loop system developed by LZ1AQ. It will be located some 300 meters from the camp for use on 160 - 30 meters. With the capability to feed up to six receivers. It also permits switching from loop to dipole mode.

Five diesel generators will power 3Y0J, with one spare.

Keep up with the DXpedition's plans and preparations via the 3Y0J website and the 3Y0J Facebook page. Individuals may support the DXpedition via the 3Y0J website.

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ARRL International DX Contest- New Categories and Rules Changes for 2022!

The CW edition of the ARRL International DX Contest begins at 0000 UTC Saturday, February 19, and concludes at 2359 UTC Sunday, February 20. For 2022, there are new categories added to the event, with the Single-Operator, Single-Band, categories now having three power level subcategories (QRP, Low Power, and High Power) in both Non-Assisted and Unlimited (Assisted) categories.



Also new for ARRL DX 2022, for the Affiliated Club Competition, Multioperator DXpedition scores (operations outside the United States and Canada) can be distributed to clubs that each operator declares. The club must be active in the ARRL's Club Eligibility listing, and the operator's call sign must be included in the club's eligibility list. Each eligible operator's portion of the total station score will be attributed to the club of their choosing. See the [Affiliated Club Competition](#) rules for more details.

Additionally, the Multioperator station accommodations for 2021 have been extended into the 2022 running of the event. This allows multi-operator station participants to operate from their home stations in conjunction with the multi-op station. The home stations must be within a radius of 100 kilometers (62 miles) of the multi-op station, and must be within the same DXCC entity, US State, or Canadian province.

For complete rules and more information, visit www.arrl.org/arrl-dx.

New Rules in effect for all ARRL HF Contests in June

Starting with the ARRL International Digital Contest, in all categories that allow assistance (Unlimited), the use of online and other non-amateur radio platforms including but not limited to social media, live video streaming, and internet chat rooms will be allowed. In all Unlimited and Multioperator categories, the prohibition of self-spotting, and asking another station to spot you, will also be removed.

New Features added to WA7BMN Contest Calendar

Bruce Horn, WA7BNM, has added a new feature to his [Contest Calendar](#) website. The site now includes a 5-Week Calendar. It's a list of contests similar to the 12-Month Calendar but designed to show only those contests in the current week (Monday-Sunday), plus the following four weeks. Contests that are held every week are listed in a separate section to make it easier to view the weekend contests.

The Five-Week Calendar is accessible via a direct link at www.contestcalendar.com/fivewkcal.html.

St. Patrick's Day Award

Saint Patrick's Day Award

The organizers of the **Saint Patrick's Day Award** are excited to announce the launch of a new web page where visitors can learn everything they need to know about the Saint Patrick's day award.

On the new page, you will also find the simple registration form to be completed by all participants in this year's festivities which will be running from the 16th-18th March 2022.

Previous years have seen over 100 amateurs register to participate and we are hopeful that this will continue to grow.

The award is an opportunity for amateurs around the world to celebrate Saint Patrick's day and turn the airwaves green.

The new page can be accessed at www.stpatricksaward.com We look forward to celebrating with you all.
<https://www.facebook.com/St-Patricks-Award-1100697056639846/>



Daylight Saving Time Starts March 13th

SPRING FORWARD FALL BACK

Yep, Sunday March 13th **Daylight Saving Time** starts. At 0200 local, turn your clocks *ahead* 1 hour.

Remember UTC (Zulu, GMT) time does NOT change.

Examples:

March 12th - we are still on **EST** (Eastern Standard Time).

At 0800 EST (8 am for you non-military people) it is 1300 UTC

(1 pm) - That is a five hour difference between Ravenna, OH and Greenwich, England.

March 13th - we are now on **DST** (Daylight Saving Time).

At 0800 EDT (Eastern Daylight Time) it is 1200 UTC (noon) - That is a four hour difference between Ravenna, OH and Greenwich, England.

MCHUMOR.COM by T. McCracken



Digital Special Interest Group

Rick, K8CAV
Digital SIG Coordinator



The next Digital Special Interest Group meeting will take place on Tuesday March 1st at 7:00 PM. **This will be a virtual-only meeting by Zoom**, please see the link below.

This month we'll be talking about a mode called JS8Call. FT8 and FT4 have become some of the most widely used digital modes, mainly due to the fact that their weak-signal abilities rival CW. It's especially popular with contesters and DXers because of only requiring exchange information, which FT8/4 accommodates within the 13 character message limit. Anything other information exchange is problematic due the 13 character limit, and due to the message structure in those modes. This makes its use for communications in other formats such as rag-chewing, or in special events where more lengthy information is needed or desired, difficult to impossible.

This meeting will be a **Zoom-only** meeting, the link is:

<https://us02web.zoom.us/j/88355094567?pwd=ZzRvd1hmQWNaYlZEcGF0dVhuNlNiQT09>

Meeting ID: 883 5509 4567

Passcode: PCARS2022

JS8Call is a digital mode whose modulation/demodulation scheme and signal processing are modeled on FT8/4. It differs from FT8/4 in that it's pretty much a free-form message environment with no limitations on the length of text being sent, and no forced use of a particular format for the message content – think a RTTY QSO but with far better weak signal ability, albeit with far longer transmission time. Unlike the semi automated nature of FT8/4, JS8Call QSO's require the same amount of operator attention and participation that conventional digital QSO's, such as RTTY, require.

If you're interested in hearing about, and discussing this new mode, please plan on joining us for the March Zoom meeting. As always, we'll also make time to answer questions or address any issue you may have about digital communications.

Portable Ops Special Interest Group

John, WG8X
Portable Ops SIG Coordinator



Hi everyone, the Portable operations SIG will have a hybrid meeting this month.

We talk about all manner of subjects to do with portable operation. We'll be discussing all manner of portable gear, and operating. Stop by, you never know what we'll be discussing. As always, we'll be entertaining your show & Tell, and questions.

We'll be meeting on March 8th, at 7PM in person or via Zoom. Here's the link:

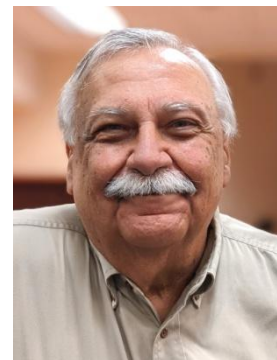
Join Zoom Meeting
<https://us02web.zoom.us/j/89732195744?pwd=cldtZmxMcmlFqQndhQWtJN0s2NUNnUT09>

Meeting ID: 897 3219 5744
Passcode: PCARS2022

We'll also be in person at PCARS World Headquarters club site, 705 Oakwood St, Ravenna.

DX and Contest Special Interest Group

Chuck, W8PT
DX & Contest SIG Coordinator



Hello PCARS Members:

On Tuesday, Feb. 22, we held our monthly DX/Contest Special Interest Group meeting. We had a good turnout and a wide ranging discussion. We talked about some upcoming contests in March, DX Clusters and their use, and computer logging programs and their need.

One of the things we noted is the need for more programs like electronic logging software for MAC users. Having not only a PC but also an IMAC, I know that there is still not much out there for Amateur Radio ops who would rather use a MAC than a PC. I, for one, like my MAC but use a PC exclusively for any of my HAM activities.

I also found out that I am not the only one that is using a paper log backup to my logging software. The only way you can lose a paper log is if you physically destroy it. I have had two PCs fail me and had to jump through hoops to retrieve my logs from a crashed hard drive. Fortunately there are people out there much smarter than I when it comes to retrieving "lost" data. (Editor's note: Do routine data backups - external USB drives are cheap and if you do a weekly backup, you'll be glad you did it when the main PC drive fails.)

The March Contest calendar has three state QSO parties (Oklahoma, Idaho and Wisconsin) as well as the ARRL International DX Contest - SSB and the CQ WW WPX Contest - SSB. The state QSO Parties are all on the weekend of March 12-14. The ARRL contest starts the month on March 5-6 and the CQ WW WPX Contest ends the month on March 26-27.

I urge you to take advantage of the Wisconsin QSO Party since K8BF has played in that one as a team effort. Since we can't do that yet, get on with your own call and make some Qs. I'm going to see if I can use our club call to enter that contest and continue our tradition of K8BF being involved.

Charlie the Tuner's HF High-Lites

Chuck, W8PT
a.k.a. "Charlie the Tuner"



Greetings DXers

Charlie the Tuner's DX High-Lites – March 2022

March means that we are closer to Spring. I know that the WX has been somewhat brutal and has caused distress to some who have to be out in it. I can say the triple axel – forward somersault that I did in my drive was not what the judges were looking for. All kidding aside, I took three spills in my drive trying to retrieve the mail and my knees are killing me. COME ON SPRING!!

For those of you who love this kind of WX, more power to you. I'm glad that I don't have to drive in it much. So what does this have to do with HAM radio? Well, it's a good time to stay indoors and work some DX.

The propagation has been very interesting lately. Although the bands have been noisy, at least at my QTH, they have been generous. Sometimes that comments made regarding the listing of all the DX in my column are: Chuck, this list is all well and good, but what are we hearing in our neck of the woods? Here's a short list of countries heard and worked: Seychelles, Wales, South Africa, Saudi Arabia, Greece, Uganda, Japan, Azores just to name a few. All worked on SSB.

"Well Chuck, I don't have 1kW and a Yagi at 100 ft." My response is to say that many of these listed (and more) were working the entire east coast and working stations running only 100 w and dipoles and verticals. Again, the propagation has been quite interesting. But you need to be on the air. It's my favorite mantra. **GET ON THE AIR!!**

Let's see what coming up. The upcoming list includes Wallis Is., South Korea, Kuwait, and Mongolia just to whet your appetites.

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, the AB5K's AR Cluster Networks, NJ1Q & W1AW, NG3K & ADXO, W3UR & The Daily DX, W4VQ, K8YSE, W8GEX & 60m DX News, K9MM, DL1SBF, DL7UXG & The DX News Letter, DX Adventure Team, DXNews.com, DX-World.Net, EA4NF, F6AJA & Les Nouvelles DX, I1JQJ/IK1ADH & 425 DX News, Sixitalia Weekly, SP1EG, VA3RJ & ICPO and VK5MAV for the following DX information.

And as always, this report "could" contain "Pirate/SLIM" operation or more likely a "BUSTED CALLSIGN". As always, you never know, so..... - **"Work First, Worry Later"**.

PLEASE NOTE: The fact that donation requests, from various DXpeditions, are at times included in this column does not mean that PCARS or this HAM approves or disapproves of donating to the DXpeditions listed. I am only providing information for you to make up your own minds as to whether or not to donate.

March...

3D2, FIJI. Wojtek, SP5MXZ, is reportedly now active as 3D2SP from Viti Levu Island (OC-016). Length of his stay is not known. Activity has been on various HF bands using CW, SSB and the Digital modes. QSL only via LoTW.

5X, UGANDA. Alan, G3XAAQ, will be active as 5X1XA from Kampala, Uganda, between March 7-14th. Activity will be on CW only on 80-10 meters (excluding 60m). The primary purpose of the trip is to be an entry in the RSGB Commonwealth (BERU) Contest (March 12-13th) with some holiday style operating outside of the contest. Direct only QSLs will be available via G3SWH, preferably via OQRS via his Web site (www.g3swh.org.uk) or via ordinary air mail. No bureau cards. LoTW and the online log search will be updated once Alan returns home.

8Q, MALDIVES. Nobby, G0VJG, will once again be active as 8Q7CQ between March 4-18th. This will be his third trip

there, but this time he will be active from the Island of Innahura (AS-013). Activity will be on 80-10 meters (this now includes 60m) using SSB and the Digital modes. He plans to participate in the ARRL International DX SSB Contest (March 5-6th). His equipment will be a FT-450D or FT857 with a JUMA 1000 watt amp into HF6V Butternut vertical for the HF bands and a link dipole. QSL via M0OXO's OQRS or direct.

9K, KUWAIT. Abdallah, 9K2GS, will be active as 9K2K during the CQWW WPX SSB Contest (March 26-27th) and CQWW WPX Contest (May 28-29th) as a Single- Op/High-Power entry. QSL via EC6DX or LoTW.

C5, THE GAMBIA. Don, G3XTT, will once again be active as C56DF from The Gambia between March 9-18th. He is there for the 85th Commonwealth Contest (BERU) [March 12-13th]. Look for operation before and maybe after the contest. Activity will be on various bands, probably all CW like last time using low power (IC-7300 and wires) from a rooftop apartment. He will, of course, upload logs to LoTW and ClubLog, but possibly only after his return to the UK. QSL direct to Don's home callsign or via ClubLog's OQRS.

DF90/DK90/DL90/DM90/DR90/DQ90/DP90 & HB90, GERMANY AND SWITZERLAND (Special Event). Gert, DM7MA, and a crew of operators will activate the following special event stations between March 1st and June 30th: DF90TJU, DK90TJU, DL90TJU, DM90TJU, DR90TJU, DQ90TJU, DP90TJU and HB90JU. Activity is to celebrate the 90th anniversary of the maiden flight of the Junkers JU52/3m (transport aircraft).

EA8, CANARY ISLANDS (Satellite Op). Philippe, EA4NF, will be active as EA8/EA4NF from Hierro Island (AF-004), the smallest island of the Canary Island and the furthest west, between March 4-6th. Activity will be on the FM and Linear LEO satellites, and he plans to activate the very rare grids IL07 and IL17. QSL via LoTW.

FG/TO3, GUADELOUPE. Operators Gildas/F6HMQ and Michel/F6GWV will once again be active as FG/F6HMQ and FG/F6GWV, respectively, from Guadeloupe between February 25th and March 27th. Activity will be holiday style on various HF bands using "light equipment". They will also be in the ARRL International DX SSB Contest (March 5-6th) and the CQWW WPX SSB Contest (March 26-27) using the callsign TO3Z. QSL TO3Z via F6HMQ. QSL FG/F6GWV and Gildas FG/F6HMQ via their home callsign, direct or by the Bureau.

FK, NEW CALEDONIA. Jean Louis, F5NHJ, announced on QRZ.com that he will be active as FK/F5NHJ from New Caledonia (OC-032) while he visits his son, who lives and works there. He should be active soon. QSL via F5NHJ direct or ClubLog. No other details were provided.

FM, MARTINIQUE. Francis, F6BWJ, is now active as FM/F6BWJ from Martinique (NA-107) until mid-March. Activity has been on 40/30/15 meters using CW only. QSL via F6BWJ.

FW, WALLIS AND FUTUNA ISLANDS (Update). Jean, F4CIX, continues to be active as FW1JG from Wallis Island. Reports indicate that he will be here for the next 2 or more years. Activity is mainly on 40/20/15/10 meters using SSB and FT8. Watch for him between 0630-0915z on 20 meters using FT8 and SSB. He uses a IC-7300 into a wire multi-dipole and with 100 watts. QSL via direct or LoTW.

GB3, ENGLAND (Special Event). Look for John, M0HEM, to activate the special event callsign GB3SPD from Essex to celebrate St. Patrick's Day on March 16th. A special E-mail certificate is available only. See QRZ.com for details. NO Bureau.

HL, SOUTH KOREA. Al, WH2Z, is now active as HL2ZIO from Pyeongtaek, South Korea. He is currently working there and the length of his stay is unknown. Activity will be on the Digital modes, SSB and sometimes CW. His rigs are a FT1000D and TS850S, with antennas Cushcraft D-3 (20/15/10m) Rotatable Dipole and a EFHW 40M (end-fed half-wave). QSL via WH2Z direct.

J6, ST. LUCIA. Operators Frans/J69DS, Dr. Bill/K9HZ (J68HZ), Mike/KA4RRU, Kyle/WA4PGM, and Daniel/W0CN will be active as J68HZ from the Villa Grand Piton in Soufriere, St. Lucia (NA-108, WLOTA L-1336) between March 1-7th. Activity will be on 160-10 meters during the ARRL Inter. DX SSB Contest (March 5-6th) as a Multi-? entry. QSL via K9HZ, direct, ClubLog or LoTW (preferred). NO BUREAU CARDS. ADDED NOTE: Currently, Dr. Bill/K9HZ (J68HZ) and Barry/K8SD are active from the J68HZ villa until February 8th.

JT, MONGOLIA. Mats, RM2D (SM6LRR), will be active as JT4RR from South Gobi Region, Mongolia, between March 20th and April 5th. He also mentions that sometime in March-April and in July-August, he is planning a few days

of activity as JT4RR/P from the South Gobi Desert.

KP2, U.S. VIRGIN ISLANDS. Operators David/EB7DX, Jimmy/KP2BH and Jaime/WP3A will be active as KP2B during the ARRL International DX SSB Contest (March 5-6th) as a Multi-Single entry. QSL via EB7DX.

NH7, HAWAII. Operators Jim/N6TJ, John/KH6SH, Chuck/K7JA, Kimo/KH7U and others active as NH7T from the KH6YY station in Haleiwa, HI, during the CQ WPX SSB DX Contest (Mar 26-27) as a M-M entry. QSL via KH6SH.

P4, ARUBA. Lee, K3DMG, is once again active as P4/K3DMG from Aruba (SA-036) until the end of March. Activity is holiday style on various HF bands using mainly CW, RTTY and the Digital modes. He has been heard mostly on 15/12/10 meters FT8 and 20 meters CW. QSL via LoTW and eQSL. NO paper QSLs.

PF01, THE NETHERLANDS (Special Event). Frans, PC2F, will be active as PF01MAX during each racing weekend between March 20th and November 20th, during the Formula 1 2022 season. A detailed schedules is available on QRZ.com. QSL via PC2F, direct, by the Bureau, eQSL or LoTW.

PJ2, CURACAO. Operators Chuck/AD4ES, Don/AF4Z, Stephen/AK4R, Vincent/K4JC, Walter/K5LD, Peter/K8PGJ, Daniel/N1ZZ, Greg/N4EN and the PJ2T contest station owner and host Geoff/W0CG (PJ2DX) will be active as PJ2T from the Caribbean Contesting Consortium's (CCC) Signal Point contest station on Curacao Island (SA-099, WLOTA 0942) during the ARRL DX SSB Contest (March 5-6th) as a Multi-Op entry. QSL PJ2T via W3HNC. Operators will be there March 1-7th, and will use their own callsign (PJ2/homecall) outside of the contest. Activity will be on 160-10 meters using CW, SSB and FT8/FT4. Listen for QSL info or via their home callsign.

PJ7, SINT MAARTEN. Ed, WA1ZAM/N2HX, has tentative plans to once again be active as PJ7PL from the Cupecoy, Sint Maarten Island (NA-105), usually a week before and a week after a contest. However, plans may change due to the Covid situation. His activity will include operations in the ARRL International DX SSB Contest (March 5-6th) as a Single-Op/Low-Power entry. Outside of the contest, activity is usually holiday style on 30-10 meters using SSB, RTTY, FT4 and FT8 -- depending on what he brings down. QSL via N2HX or WA1ZAM.

TA, TURKEY, Rolf, DL6RO is QRV as TA4/DL6RO near Antalya until March 15. Activity is on the HF bands. QSL to home call.

VK90, AUSTRALIA (Special Event). Look for special event station VK90ABC to be active throughout 2022 to celebrate the 90th anniversary of Australia's national broadcaster, the Australian Broadcasting Corporation (ABC). During 2022, amateurs from across Australia will be using this special event call- sign to make contacts with other amateur radio operators across Australia and around the world.. For more information visit (<http://www.vk90abc.net>). PLEASE NOTE their QSL policy. NO DIRECT QSL. NO BUREAU QSL. QSL only via LoTW and eQSL (Logs uploaded monthly).

VP5, TURKS AND CAICOS ISLANDS. Dave, K0KQ, will be active as VP5/K0KQ from Grand Turk Island (NA-003, WW Loc. FL41kl) between March 7-21st. Activity will be on various HF bands using FT8, with an IC-706 into an End-Fed vertical wire in a palm tree. QSL via LoTW; no paper QSLs.

VX2, CANADA. Members of the Contest Group du Quebec will be active as VX2X during the CQ WPX RTTY Contest (February 12-13th) as a Multi-Multi/ Distributed entry. QSL via LoTW only.

ZF, CAYMAN ISLANDS. Pete, K8PGJ, who was active as ZF2PG from the Sunny Isle of Grand Cayman (NA-016) this past weekend for the NAQP SSB Contest, will be active again between March 25-27th, for the CQ WPX SSB Contest (March 26-27th). Activity will be on 160-10 meters. QSL via LoTW.

ZZ165, BRAZIL (Special Event). Look for the special callsign ZZ165IBI to be used in commemoration of the 165th anniversary of "Estancia Turistica de Ibiuna City" and will be on the air between March 1-31st. Ibiuna is located about 60 km west of Sao Paulo city. A digital certificate will be available for all stations who log ZZ165IBI. Details will be on QRZ.com.QSL via PU2SWB. eQSL will be also available.

April...

6W, SENEGAL. Willy, ON4AVT plans to be QRV as 6W/ON4AVT from Warang until April 2. Activity is holiday style on 80 to 10 meters using CW, SSB, and various digital modes, and on Satellite QO-100. QSL direct to home call.

OE0, AUSTRIA (Special Event). Jo, OE6VIE, will activate the special event callsign OE0MORSE from Styria, Austria, between April 1-30th. Activity is to commemorate the 150th anniversary of the death of Samuel F.B. Morse. Operations will be CW only. QSL via ClubLog's OQRS, eQSL or LoTW. A free special commemorative award is available (see QRZ.com for details).

XT2, BURKINA FASO. Max, DK1MAX, will once again be active as XT2MAX from Ouagadougou, Burkina Faso, between April 7-20th. Activity is usually holiday style on all bands using mostly CW and FT8, with an IC-7300 into verticals and dipoles. QSL via EA5GL, LoTW, eQSL, (no Bureau or SWL reports) and ClubLog. NO PAPER QSLs. Look for more details to be forthcoming.

OE22, AUSTRIA (Special Event). Look for the special event callsign OE22M to be active sometime around April 23rd. Activity is to commemorate the anniversary of Guglielmo Marconi's birthday (April 25th, 1874) and to celebrate International Marconi Day (Saturday, April 23rd). QSL direct to: DokuFunk, OE22M, An den Steinfeldern 4A, Vienna A-1230, Austria. QSL by the Bureau via OE1YPP. For more details on International Marconi Day, see: <http://gx4crc.com/gb4imd>

IOTA News...

AN-006. Sergiy, UT9UX, will be active as EM1U from the **Ukrainian Antarctic Station Akademik Vernadsky on Galindez Island** (WASA UR01, WWFF URFF-0030) until sometime in April. Activity will be limited as time permits on various HF bands. Listen for QSL info.

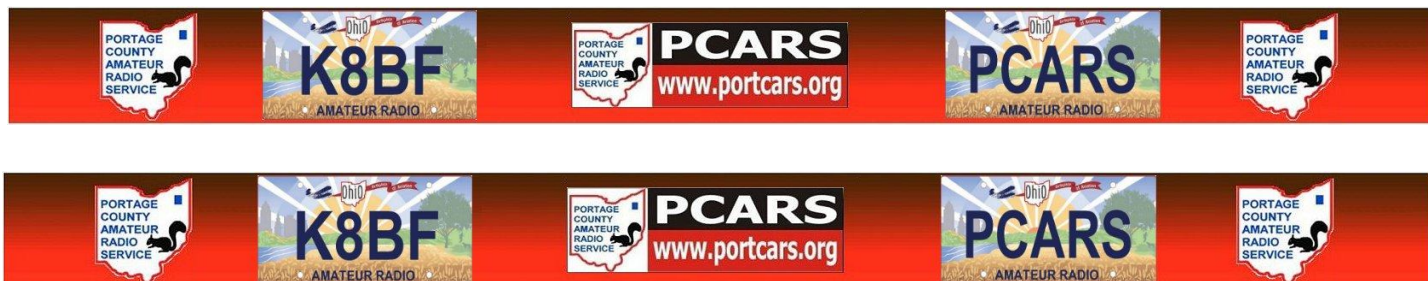
AS-024. Tashi, JR2TER, continues to be active as JR2TER/P from **Yonaguni Island** until sometime March 2022. Most of his activity has been on 10 meters FT8, but he has also been on 160/40/17/12m. QSL via eQSL, LoTW (DX only), by the Bureau and ClubLog.

EU-125. Operators Wies/SP1EG, Hans/DK8RE and Hans/DL8UUF will be active as 5P1EG from **Romo Island (OZFF-005)** between May 7-14th. Activity will be on various HF bands using CW, SSB and the Digital modes, with an IC-7300 + Expert PA into different GP antennas. QSL via SP1EG.

NA-079. Gene, N0MHJ, will be active as N0MHJ/4 from **Garden Key, Dry Tortugas Islands** (WW Loc. EL84, ARLHS USA-316, Loggerhead Key 216, POTA K-0023, ARRL NP 17), 70 miles west of Key West, FL, between April 22-25th. Activity will be mainly on 6m using CW and SSB. Gene states that most of his operations will be during the daytime only. He also plans to be on 20 meters and 40 meters (contacts with the "locals"). QSL via LoTW, but he will not upload the logs until he returns to his home in SW FL. For more details and updates, watch: <https://www.n0mhj.net>

NA-142. Bodo, DF8DX, will once again be active as KT3Q/4 from **Santa Rosa Island (FL003S)** until March 5th. Activity will be on various HF bands using CW and FT8. Watch 30/20 meters. He mentions that he will activate NA-141 and possibly other IOTA. QSL via DF8DX, direct, by the Bureau or LoTW.

That's what I have now. As I've done in the past, if something of great interest comes up during the month, I will send out a separate announcement. Please use your license privileges and get on the air. Let's work together to keep our allotted frequencies for our great hobby. **Until next month - 73 and Gud DX....**



China is Expanding its South China Sea Antenna Farms

A December 17 [commentary](#) from the Center for Strategic and International Studies ([CSIS](#)) has concluded that over the past year China has taken "major steps" to upgrade its capability to wage electronic warfare near the South China Sea." CSIS cites satellite images of massive antenna complexes to back its claim.



Some facilities have already been suspected of jamming the communication facilities of US military aircraft operating in the region.

"The Chinese military is taking major steps toward improving its electronic warfare, communications, and intelligence-gathering capabilities near the South China Sea," said the commentary by Matthew P. Funaiole, Joseph S. Bermudez Jr., and Brian Hart, all associated with CSIS. "Recent satellite imagery reveals that China has rapidly expanded facilities near Mumian, on Hainan Island, providing the People's Liberation Army (PLA) with greater ability to track and counter foreign military forces operating in the region and in outer space."

The commentary said, "Many assets in the vicinity appear dedicated to gathering communications intelligence, a subset of [signals intelligence] that includes the collection of communications between individuals and organizations."

Some of China's land claims in the South China Sea include rare DXCC entities. Scarborough Reef (Panatag Shoal) is one. Conflicting land claims exist for other islands, especially in the Spratlys. Further complicating the situation is a 2016 ruling from the Permanent Court of Arbitration in the Hague that discounted China's claims with respect to Scarborough Reef and the Spratlys. The Court ruled in favor of the Philippines in a dispute with China over Scarborough Reef.

In April 2015, a Chinese naval vessel "harassed a Philippine Air Force patrol flight in the Spratlys," according to one news account, by firing an illumination round. The incident postponed a Philippine Navy flight that was to evacuate an ailing participant of the DX0P Spratly Islands DXpedition. A private aircraft carrying a BBC reporter received radio warnings from the Chinese Navy to stay away from the South China Sea reefs and islands that China claims, strongly suggesting that China has expanded its sphere of influence to include the entire region.

This and the more recent artificial island-building in the South China Sea cloud the possibility of future DXpedition to rare DXCC entities in the South China Sea, whether or not China has laid specific claim. The Spratlys are claimed in whole or in part by China, the Philippines, Vietnam, and other countries, and the Philippines government had issued the DX0P call sign. An international amateur radio team postponed a December 2017 DXpedition to the Spratly Islands operating under Malaysian call sign 9M0W, although the DXpedition did take place the following year. The planned 2012 DX0DX DXpedition to the Spratlys was canceled altogether without explanation after being pushed back at least twice. The last operation from Scarborough Reef was in 2007.



PCARS IO Group

Members are reminded that PCARS has a IO Group site dedicated to PCARS. It's a great site to sign up for and get on the mailing list for important PCARS information.

Check out the PCARS IO Group at:
<https://groups.io/g/PCARS>

Two things every member should do.

1. Check the PCARS web site every day, maybe a couple of times a day, to see new info that's posted.
2. Join the PCARS IO Group. That's a great place to post message when you are looking for information or have a question about something. Try it - you just may like it!!



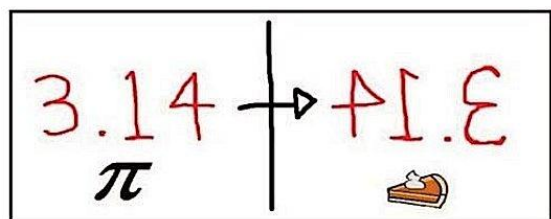
The screenshot shows the PCARS IO Group page on groups.io. The header includes the group name 'PCARS K8BF' and the tagline 'The Club that puts the FUN in Ham Radio!'. Below the header, there is a 'Group Description' section, a 'Group Information' section, and a 'Group Settings' section. The 'Group Information' section shows 59 members and a 'Join This Group' button. The 'Group Settings' section lists various permissions for subscribers and members.

Pi Day - March 14th

Pi Day is an annual celebration of the mathematical constant π (pi). Pi Day is observed on March 14 (3/14 in the month/day format) since 3, 1, and 4 are the first three significant digits of π . [2][3] In 2009, the United States House of Representatives supported the designation of Pi Day.

History: In 1988, the earliest known official or large-scale celebration of Pi Day was organized by Larry Shaw (photo at right) at the San Francisco Exploratorium, where Shaw worked as a physicist, with staff and public marching around one of its circular spaces, then consuming fruit pies. The Exploratorium continues to hold Pi Day celebrations.

On March 12, 2009, the U.S. House of Representatives passed a non-binding resolution (111 H. Res. 224), recognizing March 14, 2009 as

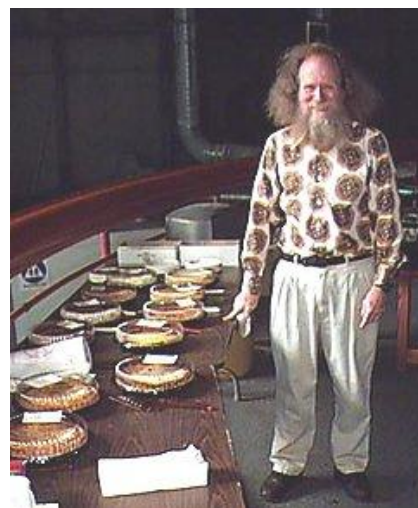


National Pi Day. For Pi Day 2010, Google presented a Google Doodle celebrating the holiday, with the word Google laid over images of circles and pi symbols and for the 30th anniversary in 2018, it was a

Dominique Ansel pie with the circumference divided by its diameter.

The entire month of March 2014 (3/14) was observed by some as "Pi Month". In the year 2015, March 14 was celebrated as "Super Pi Day". It had special significance, as the date is written as 3/14/15 in month/day/year format. At 9:26:53, the date and time together represented the first 10 digits of π .

W8PT says: "What could be better than FT8 with a Raspberry Pie ?!"



Make it FUN - Keep it FUN !

Tom, WB8LCD



Make it Fun – Keep it Fun!

Fun is in our DNA, as well as in our Club Callsign K8BF.

Almost 17 years ago, a couple of guys stood in a parking lot and had an ad hoc discussion about FUN in Amateur Radio. At that first parking lot meeting it was Tom, KB8UUZ - Al, KB8VJL - Jim, KC8PD (sk) and Tom, WB8LCD. But it wasn't long after that we were joined by others who were looking to have some **FUN** with our hobby. To make a long story short, that was the beginning of PCARS. And now, some 17 years later, we are still the club of **BIG FUN!** (K8BF)

I know these past couple years have been pretty tough on just about everyone. I would like to think we are turning the corner, but only time will tell. We have all given up more than a few of the activities that make our lives worth living. It was a “SHOCK” event that put us into this hibernation, but, waking up is hard to do. And I respect the fact that we will all do it at the pace that we, individually, feel comfortable with. But, particularly for us “older” guys, a two-year hibernation has maybe made us just a bit lazy.

“I’ve already been there and done that”. Yeah, maybe you have, but lots of folks haven’t. They need you there to be a part of their “experience” of ham radio. When you decide to “sit it out” you deprive them of the excitement of the experience that we had when we were young, and all the “old-timers” were there taking part with us and showing us how it was done.

So, lets get back to **BIG FUN**, but let’s be cautious as we move forward. One of the safest ways to have that fun is on the air. I want to ask you to monitor the K8IV repeater (146.895 MHz, 118.8 PL tone) and when you hear someone there – give them an answer! And it also wouldn’t hurt to toss your own callsign out there every now and then, so folks know you’re listening for them. The repeater is an underutilized asset provided to PCARS use, and for a lot of new hams, it’s one of their first experiences of fun on the air. But it can only happen if there is someone else out there to QSO with them.

Check into the PCARS net on Thursday evenings, too. It’s always more fun when more of you check in and tell us about what you’re doing with the hobby. And don’t be afraid to let everyone you know that we welcome their check-in from “*around the corner to around the world*” – which is entirely possible on echo-link. On Thursday March 10th I’m set up to be your net control operator. Put it on your calendar – I want to take your check in, and I want to hit at *least* 50 check-ins! I can’t do it without you.

Having a hard time hitting the repeater? That’s an easy problem to fix. I know where you can get some really good J-Pole dual band antennas. Even making a 2 meter ground plane is pretty simple. And either of those will be a HUGE improvement over your HT rubber dummy load. Invite one of the “new guys” to come over and help you get it up in the air. Show them how to put a PL-259 connector on coax. Then offer to help them get a similar set-up going at their QTH. **Keep it FUN!**



Field Day 2022



Tony, WA8AR
Field Day Chairman



Some New Rules Going into Effect this Year for ARRL Field Day

After taking a few detours over the past couple of years due to the COVID-19 pandemic, **ARRL Field Day** rules are being updated on a permanent basis starting this summer. ARRL conducted a Field Day community survey with invitations propagated far and wide, and direct emails sent to more than 15,000 individuals and ARRL-affiliated clubs. After sorting through, reviewing, and discussing the survey results, the ARRL Programs and Services Committee recommended a number of rule changes for ARRL Field Day, which will take place this year over the June 25 – 26 weekend.

Starting this year, the maximum PEP output for a transmitter used by anyone submitting a Field Day log will be 100 W. The power multiplier of 2 will remain in place, and the high-power category will be removed from the rules. Until this year, the maximum low-power limit had been 150 W for most ARRL-sponsored operating events. The power multiplier will remain at 5 for QRP participants running a maximum of 5 W or less. As previously announced, 100 W is now the low-power category limit for all ARRL and IARU HF Contests, effective January 1, 2022.

A couple of changes instituted initially as accommodations for the COVID-19 pandemic will remain. Class D (Home) stations will continue to be able to earn points for contacts with other Class D stations. The club aggregate scoring change initiated in 2020 as a temporary measure will become part of the permanent rules. In the aggregate scoring plan, the scores of individual stations are combined under the score of a single club.

Another change, involving Rule 7.3.2 Media Publicity, has been modified. Rules to date have offered 100 bonus points for attempting to obtain publicity and demonstrating same. With the ease of posting via Facebook, Twitter, Instagram, and various other media websites, Field Day participants will now be required to obtain publicity, not just try to do so. Any combination of bona fide media hits would qualify for the bonus points. For example, posting the details of your upcoming or ongoing Field Day activity, or your Field Day results, on a club or news media site, on Facebook, or via Twitter and Instagram would meet the bonus criteria. Photos and videos are encouraged as part of media posts.



Field Day 22 - Flex Station



Rick, K8CAV
Flex Station Captain



The operator schedule for the Flex Station is wide open, which is great news! The sooner we have all of the slots filled the sooner we can concentrate on training and tactics to increase our contact total during Field Day 2022. Here's the schedule so if you see an open spot you want - let me know.

DAY	TIME	MODE	OPERATOR	LOGGER
SAT 25 JUN	14:00 - 16:00	40M FT8 DIGITAL	Jim AC8NT / Rick K8CAV	
SAT 25 JUN	16:00 - 18:00	20M DIGITAL		
SAT 25 JUN	18:00 - 20:00	20M DIGITAL		
SAT 25 JUN	20:00 - 23:00	80M CW		
SAT 25 JUN	23:00 - 00:00	80M DIGITAL		
SUN 26 JUN	00:00 - 02:00	80M PHONE		
SUN 26 JUN	02:00 - 04:00	80M PHONE		
SUN 26 JUN	04:00 - 06:00	80M DIGITAL		
SUN 26 JUN	06:00 - 08:00	80M DIGITAL		
SUN 26 JUN	08:00 - 10:00	20M DIGITAL		
SUN 26 JUN	10:00 - 12:00	40M DIGITAL		
SUN 26 JUN	12:00 - 14:00	40M DIGITAL		

FLEX & CW to coordinate with 20M & 40M to insure that both are not on the same band at the same time.

Field Day 22 - 20 Meter Station



Mike, N8WCP
20 Meter Station Captain



If you would like to be on "Stand By" – let me know what times you would be at the Field Day site and willing to be on call. If you would be willing to operate or log, PLEASE! Let me know what time slots you would be willing to be an operator or logger.

There will be a training / operations session in APRIL and/or MAY where we will discuss the operation of the radio as well as our Field Day strategy for the operation of the 20 meter station, and any "back up" scenarios we will want to be prepared for.

DAY	TIME	OPERATOR	LOGGER
SAT 25 JUN	14:00 - 16:00	N8WCP	
SAT 25 JUN	16:00 - 18:00		
SAT 25 JUN	18:00 - 20:00		
SAT 25 JUN	20:00 - 22:00		
SAT 25 JUN	22:00 - 00:00		
SUN 26 JUN	00:00 - 02:00		
SUN 26 JUN	02:00 - 04:00		
SUN 26 JUN	04:00 - 06:00		
SUN 26 JUN	06:00 - 08:00		
SUN 26 JUN	08:00 - 10:00		
SUN 26 JUN	10:00 - 12:00		
SUN 26 JUN	12:00 - 14:00		

Field Day 22 - CW Station



George, K3GP
CW Station Captain



IN SEARCH OF: CW OPERATORS FOR FIELD DAY JUNE 25 AND 26

In spite of the snow and the ice we have been suffering through over the past month, Field Day is but three short months away.

Over the past several years, PCARS has managed to improve our standings and last year achieved second place in the 4A classification! We will need a significant effort to pass the first place team, including a strong CW effort (each CW contact contributes two points).

We are looking for operators to keep the CW station active for the entire twenty four hour period. Once again the CW operation will be in a trailer protected from the blazing sun and/or rain.

Please consider signing up for CW at field day at an upcoming club meeting or by email to: rttyfan@gmail.com.

Additional CW operators are more than welcome, we will adjust the operator schedule and durations accordingly. email me at rttyfan@gmail.com	DAY	TIME	OPERATOR
	SAT 25 JUN	14:00 - 17:00	K3GP
	SAT 25 JUN	17:00 - 20:00	
	SAT 25 JUN	20:00 - 23:00	
	SAT 25 JUN	23:00 - 02:00	
	SAT 25 JUN	02:00 - 05:00	
	SUN 26 JUN	05:00 - 08:00	
	SUN 26 JUN	08:00 - 11:00	
	SUN 26 JUN	11:00 - 14:00	

CW will coordinate with FLEX to insure that both are not on the same band at the same time.



Field Day 22 - 40 Meter Station



Ed, K8IV
40 Meter Station Captain



FIELD DAY JUNE 25 AND 26

Field Day is but three short months away. Over the past several years, PCARS has managed to improve our standings and last year achieved second place in the 4A classification! We will need a significant effort to pass the first place team, including a strong 40 meter effort.

I'm looking for operators to keep the 40 meter station active for the entire twenty four hour period. Once again the operation will be in an air conditioned trailer protected from the outside elements.

Please consider signing up for 40 meter station at an upcoming club meeting or by email to:
EP.K8IV@gmail.com.

Additional operators are more than welcome, I will adjust the operator schedule and durations accordingly. email me at EP.K8IV@gmail.com	DAY	TIME	OPERATOR
	SAT 25 JUN	14:00 - 17:00	
	SAT 25 JUN	17:00 - 20:00	
	SAT 25 JUN	20:00 - 23:00	
	SAT 25 JUN	23:00 - 02:00	
	SAT 25 JUN	02:00 - 05:00	
	SUN 26 JUN	05:00 - 08:00	
	SUN 26 JUN	08:00 - 11:00	
	SUN 26 JUN	11:00 - 14:00	



Dayton Hamvention® Update

Posted on the Hamvention® web site

Hams and vendors hoping to attend Hamvention® 2022 are asking questions about plans to deal with COVID. Hamvention® management is monitoring the situation closely. General Chairman Rick Allnutt, WS8G, has issued the following statement:

"We strongly anticipate that the Hamvention® 2022 is a go. We cannot guarantee what government may decide about unknown changes in the pandemic. It has become obvious that the State of Ohio is very unlikely to call a halt to large gatherings anytime soon. Despite a recent large spike in Omicron COVID cases and hospitalizations, there is no move to restrict large indoor or outdoor events such as sports events."

Allnutt added that he anticipates the official state guidance may be to recommend (but not require) wearing a mask and social distancing. Hamvention will support state guidance. We do not anticipate checking immunization status on site.

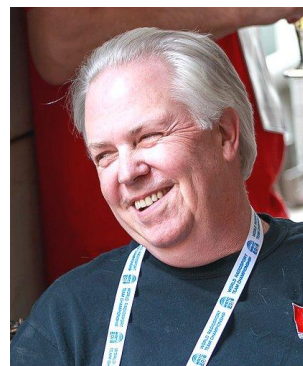
Some have asked whether COVID testing will be available at Hamvention®. At this time there are no plans to have testing on site. Watch hamvention.org for any updates dealing with the COVID situation. <https://hamvention.org/>



Contest University Dayton

Contest University

Tim, K3LR
Contest University



Contest University registration is now **OPEN** and ready for May 19, 2022, at the Hope Hotel in Dayton, Ohio.

For 15 years - Contest University has had over 15,000 hams participate worldwide. We are very excited to be back in person in Dayton, Ohio - the day before Hamvention®.

For more information and to sign up please go to: <https://www.contestuniversity.com/>

PCARS

ARRL Volunteer Examiners:
serving the Amateur Radio community

First Saturdays 10:00 am
at the club site in Ravenna

February, April, June, August,
October, December

The ARRL VEC logo is a circular emblem. The outer ring contains the text 'AMATEUR RADIO' at the top and 'VOLUNTEER EXAMINER' at the bottom. The center features a diamond-shaped symbol with a stylized antenna and the letters 'A', 'R', 'R', 'L' around it, and the text 'ARRL VEC' in large, bold letters.

TopBand & Contest Dinners at Dayton 2022

Tim, K3LR

Dayton Top Band Dinner Chairman
Dayton Contest Dinner Chairman - 28 years



32nd Annual Dayton TopBand Dinner

Continuing the great Dayton Top Band dinner tradition that George, K8GG and George, W8UVZ started, I am proud to announce the 32nd Annual Dayton TopBand dinner. Dinner reservations are now available for 2022! Friday evening May 20, 2022 at the Hope Hotel.

<https://www.hopehotel.com/>

Top Band Social hour is at 6:00 PM and Dinner starts at 7:00 PM. Come and have dinner with the guys you work on 160 meters and enjoy great TopBand discussions. Dinner reservations are available on line with credit cards and PayPal. Thanks to Teri, K8MNJ for coordinating and organizing the 2022 TopBand Dinner. The 2022 Dayton TopBand Dinner details are here: <http://topbanddinner.com> Scroll down to make your reservations. We will pass the mic so everyone can introduce themselves. We will also have the exciting TopBand DXCC count down.

Four nights of great Top Band, DX and Contesting hospitality are also at the Hope Hotel Contest Super Suite. <http://contestsupersuite.com> If you enjoy having fun on the 160 meter band, the 32nd Annual Top Band Dinner is for you! Hope to see you at the 2022 Dayton TopBand Dinner

The 28th Annual Dayton Contest Dinner

The North Coast Contesters are proud to announce the 28th Annual Dayton Contest Dinner at the Hope Hotel - Wright Patterson Air Force Base, Ohio <https://www.hopehotel.com/>

2022 Contest Dinner tickets are on sale now exclusively via our web site. HUGE thanks to Scott, KA9FOX and QTH.com for designing, building, donating and running the Contest Dinner web site. <http://contestdinner.com>

Master of Ceremonies for the 2022 Dayton Contest Dinner is Contest Hall of Fame member and CQ World Wide Contest Director, John Dorr, K1AR. Thanks to Teri, K8MNJ for coordinating and organizing the 2022 Contest Dinner.

The 2022 Contest Hall of Fame inductees will be announced during the 2022 Dayton Contest Dinner. Thanks to Icom America and DX Engineering - the MAIN prize is an Icom IC-7610. The Dayton Contest Dinner will be held on Saturday night, May 21, 2022 at 6:30 PM Cash bar opens at 5:30 PM at the Hope Hotel. Located at the Hope Hotel (Official Contester Hotel) <https://www.hopehotel.com/>

Seating is random. Tables are set in rounds of 10. You can purchase an entire table for your group (purchased group tables are set for round 10). Full Table purchases are reserved seating. Tickets are only available on <http://contestdinner.com> **There are no tickets for sale at the door.**

Paper Chase - B-17 Special Event Station

Joe, W8KNO



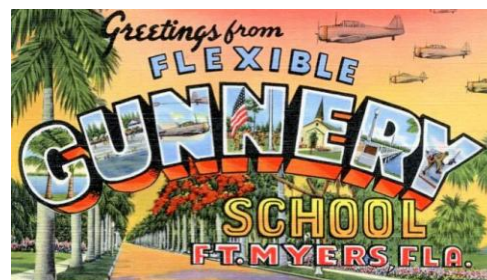
Each month I look for a special event that looks possible to contact and would be of interest to the membership. The events usually consist of Wars, Battles and Naval ships. This month is no different though there was one special event that seemed it might be special. It was an invitation from the Fort Meyers Amateur Radio Club to participate in their special event originating from Buckingham Field.



Buckingham Field was "Buckingham Army Airfield" and is an inactive United States Air Force base, approximately 10 miles east of Fort Myers, Florida. It was active during World War II as an Army Air Forces Training Command airfield. It was closed on September 30, 1945.

It was established as training base in 1942 under the AAF

Eastern Flying Training Command, and when active, was the largest airfield in the State of Florida. Its primary mission during World War II was to train the aerial gunners who would defend bombers. In 1942 and 1943, most American fighter planes didn't have the range needed to keep up with the bombers and in-air refueling had not been developed. This would leave the bombers and their crews unprotected on lengthy flights over enemy territory.



Sitting in turrets and standing behind openings in the fuselage of the bomber, it was the gunners job to shoot down attacking aircraft and was critical to the United States' success in both the European and Pacific theaters.

The Airfield operated from January 1943 till September 1945 and graduated almost 48,000 aerial gunners.



The Special Event will operate on March 22nd, 23rd and 24th from 9:00 am till 4:00 pm EST on 14.270, 21,360, 28,360 SSB and 146.685 FM.

To request a Certificate and/or QSL card, please send a self-addressed stamped envelope (letter-size or larger for a certificate), with a return address and your callsign to the club's mailbox at:

Fort Meyers Amateur Radio Club
P.O. Box 061183
Fort Myers, FL 33906-1183

Hear you in the pile-up!



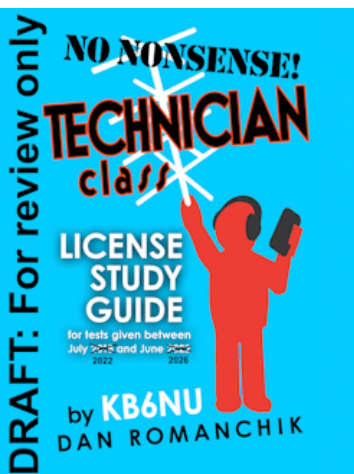
AC Log 7.0.3 & New Versions of All Contest Logging Software Released

Scott, N3FJP, announced that AC Log 7.0.3 has been released, along with updates to the popular N3FJP contest logging software. One of the major changes in the software is the introduction of a new color scheme, "Dark Theme," intended to help reduce eye strain during nighttime operating. Users now also have the ability to save color schemes, which are easily recalled in any of the N3FJP suite of programs.

Other new features include increased functionality for rig control on newer Yaesu radios (such as the FTDX10), the ability to disable the audible alert when you're spotted on the cluster, and an option to display 24-hour local time display in AC Log.

Visit n3fjp.com for additional details and download links.

Free Beta Version of New Tech Study Guide



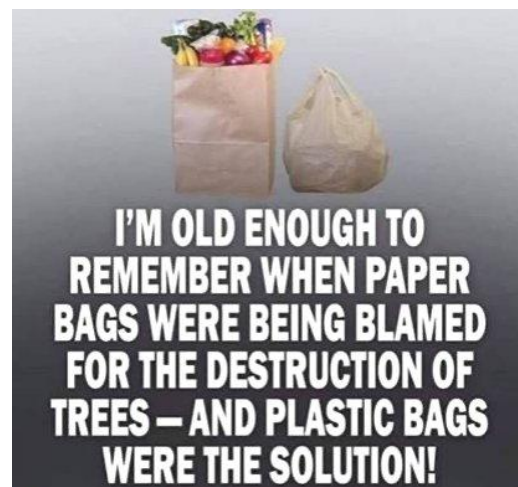
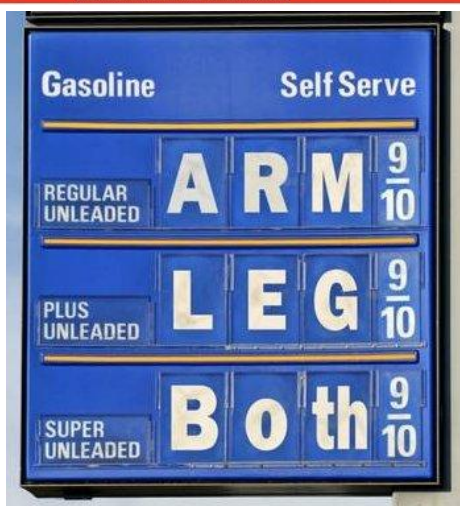
Dan, KB6NU



The [beta version of my 2022 No Nonsense Technician Class License Study Guide](#) is now available for download. I've made a few changes that I think might make the study guide even better:

1. Each question now includes all the false answers as well as the correct answer. The correct answer is bolded to make it easy to pick out.
2. I've improved some of the explanations.
3. I've added some terms to the glossary.

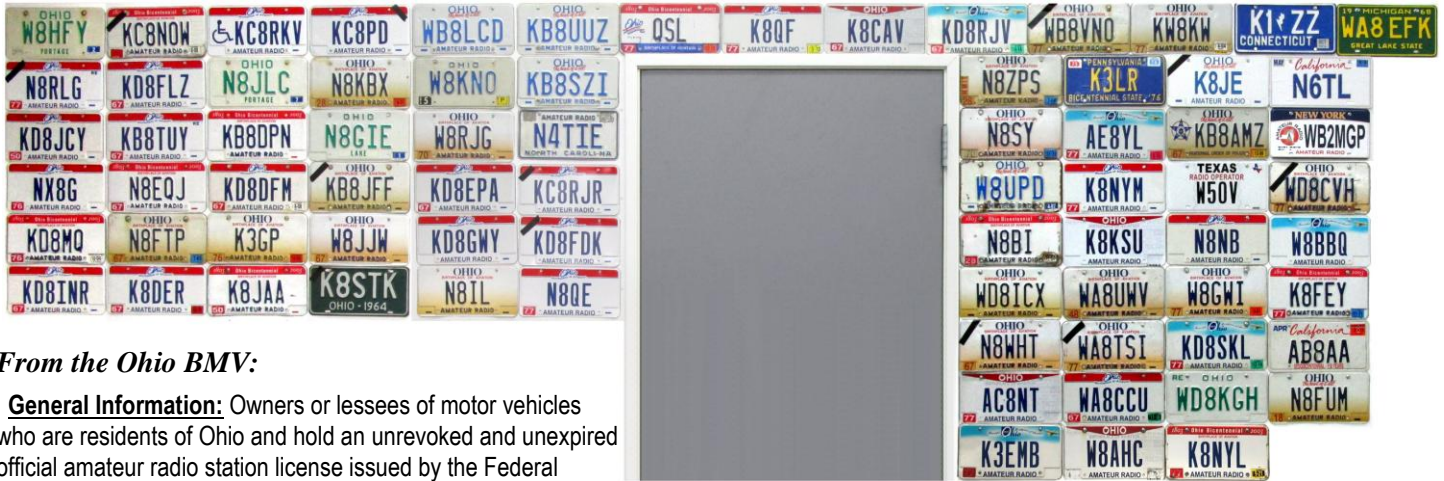
If you're interested at all, please download it and have a look. I'd love to get your comments. I'd especially like to know how you like the new question and answer format, and if there are any other terms that I should add to the glossary



PCARS Ham Radio License Plates Wanted !!! PLEASE !!

Dig out that amateur radio call sign license plate (with your present call sign), clean it up and bring it to be permanently affixed to the wall in the PCARS club station.

We have 75 PCARS member's ham plates now, **but we can use more.** Don't have ham radio call plates on your vehicle? Well for those of you in Ohio, you can get the plates sent to you by going to any License Bureau office and filling out the special plate registration form. Have a copy of your current FCC license when you apply. The official form to obtain your Ohio Amateur Radio license plates is on the PCARS IO Group site. Then you'll have an old plate to bring in to get hung up as a **permanent part of PCARS history.**



From the Ohio BMV:

General Information: Owners or lessees of motor vehicles who are residents of Ohio and hold an unrevoked and unexpired official amateur radio station license issued by the Federal Communications Commission may apply for these plates. The official call letters will be the license plate numbers.

Registrant Eligibility: Owner must submit a copy of the un-revoked and unexpired official amateur radio license issued by the Federal Communications Commission. (FCC).

Title Requirements: Ohio Certificate of Title issued in the same name as the FCC license, either singly or jointly, or the name on the FCC license is the same name on the lease agreement.

Vehicle Information: These plates may be issued to passenger vehicles, non-commercial trucks, recreational vehicles, house vehicles and non-commercial trailers.

Type of Plates: Plates will be manufactured with the FCC license.

Issuance Information: Amateur Radio plates cannot be issued with system assigned, reserved, or personalized plate formats.

Renewal of plates can be done at your local Deputy Registrar or by mail using their renewal notice. **Amateur Radio License Holders must provide a copy of their current unexpired and unrevoked official amateur radio license issued by the Federal Communications Commission (FCC) at the time of *any type renewal transaction*.**

All plates will be mailed directly to the address on your registration card unless customer requests otherwise. The deputy will issue your registration card, stickers and provide you with a permit which will allow you to operate your vehicle while your plates are being manufactured. Special license plate applications are available at all Deputy Registrar license agency locations. These plates cost an additional \$10.00 annually plus the normal registration fees. The fee is determined by Ohio Revised Code section 4503.14.

PCARS is on YouTube

That's right - PCARS is now on YouTube. So, what does that mean? Hey, we have a new place to put all kinds of videos that are about PCARS for the world to see.



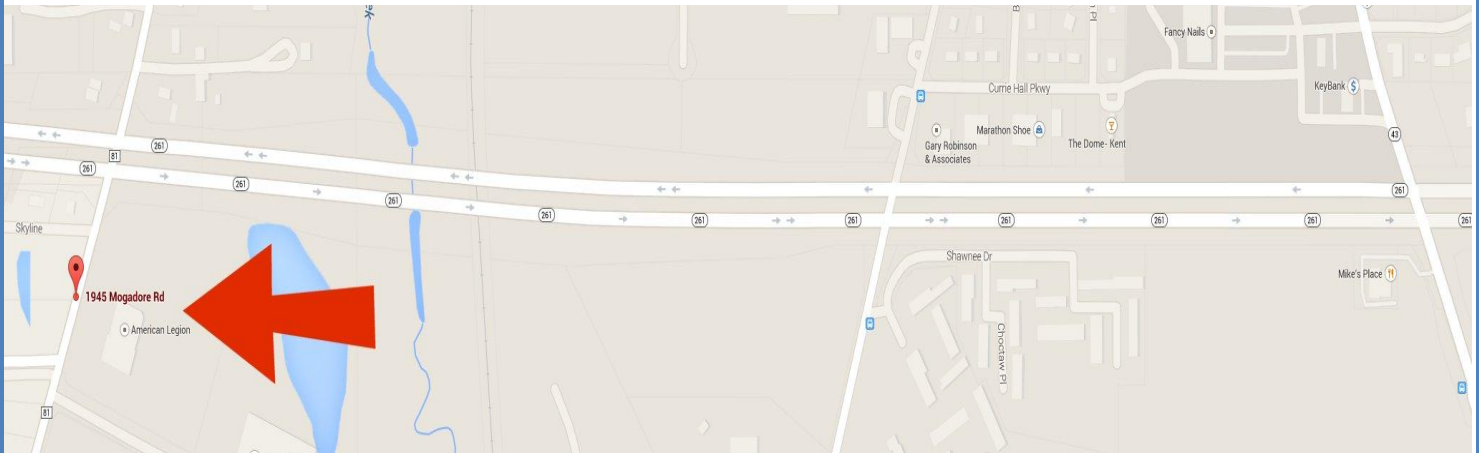
PCARS Meetings

The Portage County Amateur Radio Service (PCARS) in-person meetings are held the **2nd Monday** of each month and start at 7:00 pm.



CHECK WEBSITE FOR UPDATES ABOUT IN-PERSON MEETINGS

*The meetings are held at The American Legion, Post 496
1945 Mogadore Road - in Kent. (Just South of Route 261)*



The American Legion Post 496 is located on the southeast corner of State Route 261 and Mogadore Rd. The driveway is on the south side of the building and as you enter you will pass through a parking lot on the south side of the building. Please do not park in this lot but instead continue on to the parking lot on the east side of the building which is the near the rear entrance into the Post 'Canteen'. As you enter the post from this entrance you'll see a bar to the left and a dining area to the right. The meeting area we'll be in is on the right, to the rear of the dining area.



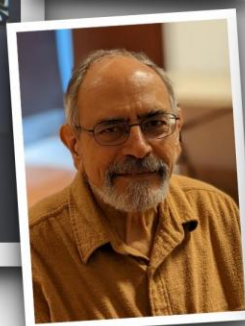
*The picture on the left shows
The American Legion Post 496
as viewed from Mogadore Road.
(looking East)*



The menu consists of your basic burger / dog / chicken sandwiches, wings, fries, onion rings, and salads. There is also an appetizer selection as well. Adult beverages are available and costs are in line with what you would expect at most bar-restaurant facilities.

If you are a member of the The American Legion, The American Legion Auxiliary, or the Sons of The American Legion, bring your ID card as you get a substantial discount on adult beverage pricing.

Photos from the February Meeting



PCARS Feb. 14, 2022



Open Stub 2m & 70cm Antenna Build

John, WG8X has been building these for a few years; mostly to donate to the Center of Hope fundraisers at PCARS, and a similar fundraiser in Alliance. John uses one at home, it works really well, and is practically indestructible. PCARS, in the past, has done this antenna project and used this antenna at Field Day and FYAO and can attest to its excellent performance. The design has been around for over a decade and it is a **proven performer**.

~~Cost for the parts will be \$30, which is a bargain, since all the cutting, drilling, tapping, etc. will be done in the kit.~~

----- SOLD OUT -----

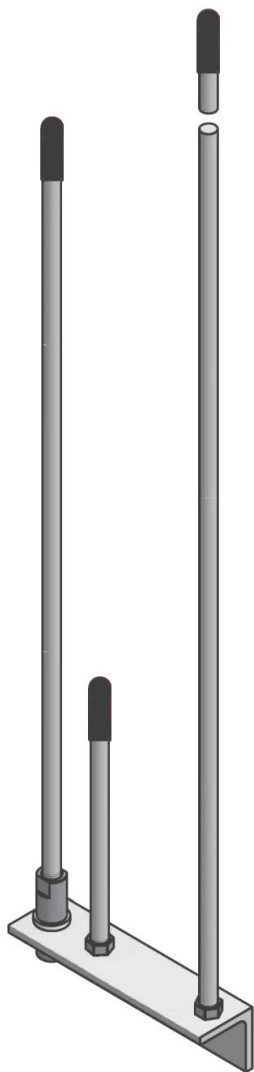
What you get for ~~\$30~~ is **all** the quality finished elements, hardware and a U-clamp for mounting to a pole.

This was a LIMITED availability to the FIRST 14 antennas sold.

Pre-registration & pre-payment was required.

Contact John, WG8X at: KD8MQ1@gmail.com for more information

March 12th is the date for the antenna build day at the PCARS club site.



NOARS Winter Hamfest

Annual Hamfest and Computer Show

Sunday, March 13, 2022

9AM - 1PM EDST

Lorain County Community College

John A. Spitzer Conference Center

Reaser Grand Room

1005 N. Abbe Rd.

Elyria, OH

===== TIME CHANGES to Daylight Savings at 2 AM Sunday =====
Setup at 7:00 AM EDST Doors open at 9:00 AM EDST

Air-conditioned indoor vendor sales

Free Parking - Handicap Accessible

ARRL APPROVED HAMFEST

Just \$7.00 General Admission - under 12 free

6 ft. indoor vendor tables - \$10.00

Vendor Discount: 20% discount for 6 or more tables

Non-refundable Prepayment due by February 1, 2022

PRIZES

Hourly Prizes starting at 10 AM

Need not be present for Main Prizes but must be present for all other prizes.

Mobile check-ins and directions on 146.70- (PL 110.9) NOARS repeater

For table reservation contact:

Carl Rimmer W8KRF at 216-256-9624 (before 9PM)

or

Email: winterhamfest@noars.net

To find out more, go to the NOARS web site: <http://www.NOARS.net/hamfests/winter-hamfest>



Silvercreek Amateur Radio Association
Hamvention 2022
Saturday, May 21, 2022 @ 5:00 AM



Don't miss this year's SARA Bus Trip to the world's largest topical conference and product exhibition. Save on gas, parking, and walking by riding with us! Leave the driving to us, and you can come and go to the flea market with your great purchases and leave them on the bus. This event takes place at the Greene County Fairgrounds in Xenia, Ohio.

The cost of the **Bus & Entrance ticket** to the Hamvention:
\$100* before April 15, 2022

The cost of the **Bus Only** to the Hamvention:
\$74* after April 15, 2022

(You will be responsible for getting your own entry ticket -
see <https://hamvention.org/purchase-tickets/#> for more information.)

*The above pricing does not include driver's tip for which a hat will be passed.

SARA reserves the right to cancel this trip should a minimum of 35 riders not be secured by April 15th. If that happens, a full refund will be made.
We will take riders right up to departure that morning (if there are seats available) on a first come, first served basis.

Please arrive by 5:00 AM

Departure time is 5:30 AM **SHARP**. Please be on time so you don't miss the bus!

There will be a stop for breakfast @ McDonald's & a dinner stop @ Cracker Barrel (both out of pocket expense).

The bus will leave the fair grounds for home at 4:00 PM

To Order Visit: www.w8wky.org/bustrip

Direct questions to:
Russell Orr (KD8VYT)
kd8vyt@arrl.net
330-524-9175

Transportation provider: Great Day! Tours

This bus is a smoke free bus, so there will be no smoking permitted.

Location of Departure - 3979 Medina Rd, OH-18, Akron, OH 44333

(Park in spaces as close to Rt. 18 as possible.)

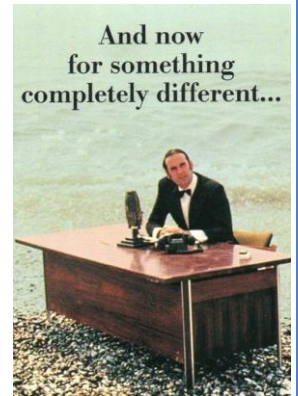
Parking (as always) is at your own risk,

Please pass the word out to all of your ham friends & computer geeks.

SARA Uses Repeater 147.390 PL 114.8

Web Site: www.w8wky.org/bustrip

Ssrange Facts about the United States



- More people live in New York City than in 40 of the 50 states.
- The word "Pennsylvania" is misspelled on the Liberty Bell.
- There is enough water in Lake Superior to cover all of North and South America in one foot of liquid.
- There's a town in Washington with treetop bridges made specifically to help squirrels cross the street.
- In 1872, Russia sold Alaska to the United States for about 2 cents per acre.
- It would take you more than 400 years to spend a night in all of Las Vegas's hotel rooms.
- Western Michigan is home to a giant lavender labyrinth so big you can see it on Google Earth.
- There's enough concrete in the Hoover Dam to build a two-lane highway from San Francisco to New York City.
- Arizona and Hawaii are now the only states that don't observe daylight savings time.
- Boston has the worst drivers out of the nation's 200 largest cities. Kansas City has the best drivers.
- Kansas produces enough wheat each year to feed everyone in the world for about two weeks.
- Oregon's Crater Lake is deep enough to cover six Statues of Liberty stacked on top of each other.
- The Empire State building has its own zip code.
- The Los Angeles Coroner's Office has its own quirky gift shop called Skeletons in the Closet.
- The Library of Congress contains approximately 838 miles of bookshelves—long enough to stretch from Houston to Chicago.
- In 1922, a man built a house and all his furniture entirely out of 100,000 newspapers. The structure still stands today in Rockport, Massachusetts.
- The entire Denver International Airport is twice the size of Manhattan.
- In 1893, an amendment was proposed to rename the country to the "United States of Earth."
- A highway in Lancaster, California plays the "William Tell Overture" as you drive over it, thanks to some well-placed grooves in the road.
- The total length of Idaho's rivers could stretch across the United States about 40 times.
- The town of Centralia, Pennsylvania has been on fire for 55 years.
- The number of bourbon barrels in Kentucky outnumbers the state's population by more than two million.
- You can watch more than 100 ponies swim to Chincoteague Island every year in Virginia.
- In 1943, the temperature in Spearfish, South Dakota jumped 49 degrees in two minutes (-4°F to 45°F), one of the most drastic changes on record.
- The world's tiniest park is in Portland, measuring a mere two feet wide.
- The biggest signature in human history belongs to Texas farmer Jimmie Luecke. The two-mile landmark can be seen from space.
- There are around 5,000 commercial airplanes flying over the United States at any given time.
- Only one-third of all \$100 bills are actually inside the United States.
- In Colma, California the dead outnumber the living by nearly 1,000 to 1.
- The smallest county in the U.S., Kalawao County on the Hawaiian island of Molokai, is also a leprosy colony where a few former patients still live.
- South Florida is the only place in the world where alligators and crocodiles coexist in the wild.

Sent in by Larry Cole, N8FTP

Thanks & 73



Parky, KB8UUZ
PCARS Newsletter Editor



I really appreciate the help in gathering material to keep this newsletter number one. Without your help we would not have received the newsletter awards in past years. All of our members (and others) look forward to getting this newsletter every month, so keep sending those inputs! I'm sure you know PCARS is known as the **BIG FUN** amateur radio club. So chip-in and send your article in to keep this newsletter great for 2022 and beyond.

Thanks go out to the contributors for this month's newsletter:

AC8QG, N8WCP, WA8EFK, N8SY, WB8LCD, KB8UUZ, WS8G, KE8ARB, WB2MGP, KJ3X, W8PT, KA8TOA, K8CAV, N1SFE, WG8X, WA8AR, K3GP, K8IV, K3LR, W8KNO, KB6NU, NO8D, NF8R, N8QE, N8FTP, Southgate ARC, The ARRL, DX Engineering and the World-Wide Web

With *your* continued help – we can keep making this a *great* newsletter.

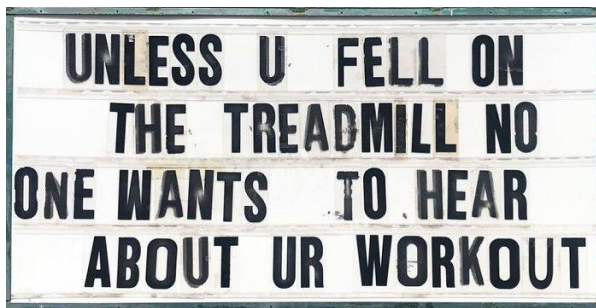


It Keeps Coming - Do All You Can to be SAFE



The coronavirus mutant widely known as “stealth omicron” is now causing more than a third of new omicron cases around the world, but scientists still don't know how it could affect the future of the pandemic. Overall cases are falling in some places where the variant is becoming more prevalent, offering some hope that the latest troubling version of the virus won't send cases skyrocketing again as experts try to learn more. HOW WILL BA.2 AFFECT THE PANDEMIC? No one knows for sure. It's difficult for researchers to predict how much BA.2 will change caseloads because it is spreading in communities with varying levels of protection from vaccines and prior infections. Some experts believe BA.2 is unlikely to spark new surges but may slow COVID declines in some places. WHO officials stress that the pandemic isn't over and urge countries to remain vigilant. Doctors said individuals should do the same and remember that vaccines and boosters offer excellent protection against the worst effects of COVID-19, no matter the variant. For people who aren't boosted, please get boosted. For people who aren't vaccinated, it's never too late, Your best defense against COVID is still the vaccine.

Please be careful.



The Portage County Amateur Radio Service, Inc. (PCARS) - Ohio

~ The Hamvention® 2018 "Club of the Year" ~



PCARS meets the second Monday of each month at the **Kent American Legion Post 496**.
1945 Mogadore Rd. - just South of Rt. 261 - Enter the rear of the building for the meeting room.

Meeting starts at 7:00 pm - All are welcome to attend ~ Stop in and say hello!

PCARS uses the **K8IV** repeater: **146.895 MHz PL 118.8** in Sugar Bush Knolls ~ EchoLink Node: **K8BF-L**

Check PCARS out on the web: www.PORTCARS.ORG -or- www.K8BF.ORG



~ 2022 Officers ~		2022 PCARS Appointments & Committees	
President - Nick Wagner - AC8QG Vice President - Mike Szabo - N8WCP Treasurer - Greg Ash - KA8TOA 1 Year Trustee - John Myers - WG8X 2 Year Trustee - Tom Parkinson - KB8UUZ 3 Year Trustee - Chuck Patellis - W8PT Past President - Tom Sly - WB8LCD		ARRL Awards - DXCC	W8KNO Joe Wehner
		Club Site Manager/Liaison	K8CAV Rick Kruis
		Contest Coordinator	W8PT Chuck Patellis
		EchoLink	
		Field Day Chairman, 2022	WA8AR Tony Romito
		FYAO Chairman	W8PT Chuck Patellis
		Historian	KB8SZI Peggy Parkinson
		K8BF Callsign Trustee	N8AMY Amy Leggiero
		K8BF QSL Manager	N8AMY Amy Leggiero
		Membership Chairman	
		Net Control Coordinator	KA8TOA Greg Ash
		Newsletter Editor	KB8UUZ Tom Parkinson
		OSPOTA Chairman	KB8UUZ Tom Parkinson
		PCARS Meeting Photographer	KE8LWO Bernadette Wagner
~ Meetings & Net ~		Public Information Officer	
2nd Monday of each month, 7pm Thursday night Club Net at 8 pm on 146.895		Secretary	KE8EGF Paul Hyland
		Social Media	
		Tech, Gen & Extra Class Manager	
		Volunteer Examiner Liaison	KB8UUZ Tom Parkinson
		Webmaster	WG8X John Myers



PCARS
Active
Volunteer
Examiner
Team
Members

KB8UUZ	Tom Parkinson
AC8QG	Nick Wagner
AC8NT	Jim Wilson
N8QE	Bob Hajdak
KA8TOA	Greg Ash
WA8CCU	Al Nagy
N8PXW	Jim Korenz
K8IV	Ed Polack
N8AMY	Amy Leggiero
N8FUM	Dan Torchia
N8XTH	Deron Boring
WB8LCD	Tom Sly
W8PT	Chuck Patellis
W8GWI	Dave Seckel



THE RADIOGRAM

PCARS Incorporated
Nov. 1, 2005

First Meeting
Nov. 14, 2005



ARRL Affiliation
April 20, 2006



Special Service Club
March 22, 2010

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