



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

April 2021 - Volume 16 Number 4

Hamvention 2021 Activities



World Amateur Radio Day

Guinness Mean Time



PCARS K8BF

The Club that puts the FUN in Ham Radio!





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Special Notice

Tom, KB8UUZ
Newsletter Editor



The woes of modern technology have struck, just when you don't want something to go wrong - it does.

Due to computer problems here at the QTH of KB8UUZ, This month's newsletter is being done using an old fashioned typewriter. Most of you remember those. Some of you may never have seen one.... Just like a rotary phone (I heard one of you young ones saying "what is a rotary phone?").



As you know using a typewriter can be a bit tricky since I don't have any white out (another thing you young ones have no idea what I'm talking about) to edit. So you may just see a few words crossed out with XXXXX. This was common way back when.

Some other things from the "old days" that you may remember that seem better now than they were back then: Gas wars - I remember in 1968 paying 10 cents a gallon when some gas stations were going at each other. How about Black & White TV? And photographs - you took your roll of film (no digital files) to the local drug store and a week or so later you picked up the photos and negatives. My daughter once asked me (when she was about 5) how come all of the old photos of me, mom and her grand parents were in black & white? I told her that that's the way the world was until the mid 60's when everything started getting color....

Enough of this rambling - I'll be glad when we get back to something more 'normal' than it is right now.

So, sit back in your easy chair and enjoy this month's issue of The RADIOGRAM. And don't forget - it is April 1st ...



KB8UUZ - LATE 50's

From the President

Nick, AC8QG
PCARS President



Welcome to spring, everyone! This month marks something of an anniversary. One year ago, we had our first virtual meeting due to in-person meetings being shut down due to COVID-19. I'm proud of how we adapted and continue to adapt to the crazy challenges of this pandemic. Thank you all for your ongoing participation and support!

Speaking of spring, our website has gone through a bit of a spring cleaning. Thank you to Steve K8SRR, John KD8MQ, and Jim AC8NT for shouldering the load. There's still a bit of work to do, but the big migration is already complete. Great job to everyone involved!

At our last meeting, Chuck W8PT was elected as the replacement for the 1-year trustee position vacated by Terry KB8AMZ. Thank you to Terry for all of his support for PCARS over the years. And thank you to Chuck for stepping up and helping out.

I'm looking forward to the day when we open the club site to in-person activities again. As of this writing, Portage County is still a "red" county, so we're not there yet, but it looks like the numbers are trending in the right direction. In the meantime, I look forward to seeing all of you on Zoom or hearing you over the airwaves. As always, if anyone has a recommendation or a suggestion for a program, speaker, project, or activity, please let Mike or me know. We're always looking for input and feedback.

Stay safe and healthy!

Congratulations to Chuck, W8PT



At the March meeting, Chuck, W8PT was elected to fill the remaining term of One Year Trustee vacated by Terry, KB8AMZ due to ongoing health issues.

Terry felt that with his issues, he could not perform the duties of Trustee as he would like to, so he submitted his resignation.

Chuck, W8PT and Jim, AC8NT both were nominated and the results of the election showed Chuck as being the one elected.

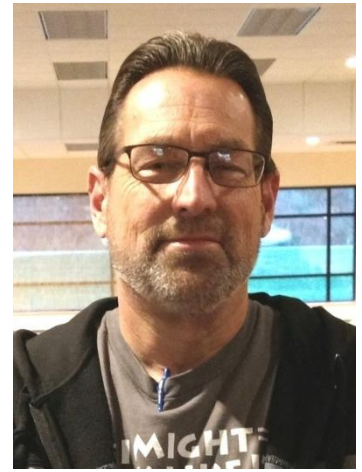


Chuck will be the One Year Trustee until December 31, 2021. **Congratulations to Chuck !!**



From the Vice President

Mike N8WCP
PCARS Vice President



Spring has arrived and soon flowers and antennas will be popping up! I hear hams on the radio and see posts on social media groups discussing their spring antenna projects. That was evident on the recent Antenna SIG Zoom call hosted by Tony, WA8AR. If you have questions about antennas, consider participating in the next Antenna SIG or post your question on the PCARS Groups site at <https://groups.io/g/pcars>.

If you were unable to attend our March meeting we welcomed new members Gary Crawford, KE8REE, Mark Crawford, KE8REF, and returning member Nick Rothermel, N8WLE. Glad to have you onboard!

Our guest speaker at the March meeting was Jeff Kopack, K8JTK. Jeff is the Ohio Section Technical Coordinator and presented his DVMIS bridge which links multiple digital and analog modes for interoperability. You can view the presentation on his website at: <https://www.jeffreykopcak.com/2020/11/13/k8jtk-hub-dvmis-presentations/>

At our April meeting Jeff Covelli, WA8SAJ will present his emergency backup power solution. Spring often brings nasty weather along with power outages so this is a good time to learn about a system you might want to add to your shack.

Have you visited our website lately? John, KD8MQ along with Steve, K8SRR recently moved the website to a new hosting platform. This was a major project and I appreciate their efforts to accomplish this with minimal downtime. John has some tweaking to do but the site looks great and response time has improved. Thanks John!

CQ CQ CQ 20 Meter Field Day Ops... If you're interested in working the 20M phone station during field day, please send me an email at vicepresident@portcars.org. If you can't work the station but can assist with setup or tear down, your help will be greatly appreciated.

Stay radioactive!



A large banner with a black background. On the left is the Portage County Amateur Radio Service logo. In the center, "PCARS K8BF" is written in large, bold, gold letters. Below that, the slogan "The Club that puts the FUN in Ham Radio!" is written in a smaller, gold, italicized font. On the right is the ARRL Special Service Club logo, which is a circular emblem with a diamond shape in the center containing the letters "ARRL".

Schedule of Events



On the calendar for upcoming meetings and activities are:



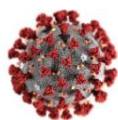
Although we are resuming in-person activities, many regular events are canceled or will be conducted virtually. Even events that are scheduled to be in-person may be canceled or moved to virtual. Please read this newsletter, join our weekly on-air club net, and watch for QST emails so you can stay up to date.

- April 5th - PCARS Board Meeting via Zoom - 7 pm
- April 12th - PCARS Meeting - 7pm

NOTE: All In-Person Activities & Meetings

Subject To Cancellation

Check Web Site for Updates



- First Tuesday - **Digital** - Moderator: Rick, K8CAV
- 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 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.

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 - Paul, KE8EGF.**

Paul has a list of current members and will check off your name when you get your **FREE PCARS** coffee cup.



Portage County Amateur Radio Service



2018 Hamvention® Club of the Year

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

Contact Paul for all of the details



From the Great Lakes Division Director



Dale, WA8EFK
ARRL Great Lakes Division Director



Greetings, welcome to "Dale's Tales"

SPECIAL ANNOUNCEMENT: The plans are approved for a GREAT LAKES DIVISION ARRL CONVENTION this year. DX Engineering will be hosting the event at their facility in Tallmadge, OH on August 7th in conjunction with their DX Engineering Hamfest. Plans for special meetings and forums will be announced as soon as those events are confirmed. Save the date!

CONTEST COMMITTEE: I am pleased to report to you that the Great Lakes Division's vacancy on the Contest Advisory Committee was recently filled by President Rick Roderick K5UR who appointed John Comella, N8AA of Fairfield, OH to serve as our representative in handling contest-related matters.

APPOINTMENTS: Vice Director Scott Yonally, N8SY and I received Board appointments on ARRL Standing Committees for the coming year. The Board re-elected me to the Executive Committee and I was appointed to serve on the HF Band Planning Committee. I will also be assisting with the newly created Investment Management Committee. Scott highlights his appointments in "Scott's Stuff" below. At times it does not seem like much but some of these committees meet weekly. Combining that with the many radio club Zoom meetings that each of us currently attend, the weeks do get rather busy. We all hope to be back very soon with regular in-person sessions.

From the Great Lakes Division Vice Director



Scott, N8SY
ARRL Great Lakes Division Vice Director



As many of you have read in the Board Meeting Minutes, I was assigned as the Board Liaison to the Public Relations Committee. We have been busy with several new projects that you will be hearing more about in the coming months. I was also asked to be a part of a special working group that the CEO, David Minster has put together, it is the Field Organization Working Group. Our primary objective is to document "best practices" for the Field Organization, helping create new tools and ideas for Section Managers and their staff. We have already had several meetings and we have got some great ideas in the works. More on that as time goes on.

Ok, let's switch gears... I had a dilly of a computer problem recently and if it were not for the fact that I have backups of all my files, I would be starting over, literally from scratch trying to recreate everything that is stored on my computer. This mess all started when I got a message from Microsoft that my Windows 10 had an update ready to install and it wanted me to reboot the computer to start the process. I discovered a while back

ago that you never let Windows just update your computer automatically. You can lose everything without even knowing what happened that way. I got everything ready and I went ahead and rebooted the computer and that is when all the fun started. It stalled and rebooted a half dozen times and then finally the dreaded "BLUE" screen appeared. I tried several times to get the computer to reboot thinking it would clear itself, but to no avail.

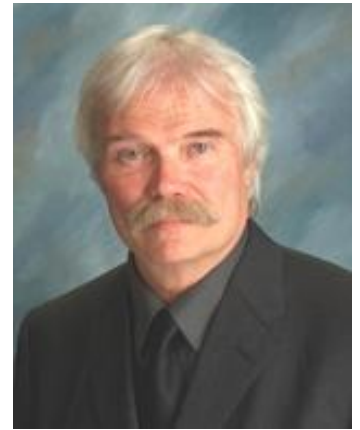
Luckily most newer computers have a recovery system built into the hard drive just for these types of situations. Unfortunately to get this feature to work you usually need to wipe a large part of the "C" drive clean. The "C" drive is also where your personal files are usually stored. This means that all your personal files are gone, permanently, unless you have backed them up somewhere else. Since I have all my files stored on a portable drive as well as in the clouds, I did not lose a thing. Oh, I did have to go back and re-install all my programs which is a pain, but that is just a minor pain compared to what life would be like without all my files.

Please, if you have a computer and what you have stored on it is important to you, make sure that you do backups on a regular basis.

Portable hard drives are very dependable and cheap now days. You can buy a 4-terabyte portable drive for less than \$90. That is more storage space than most folks can use in a lifetime. Think of just how many pictures, music, or special emails that you may never get back if you did not have a backup of them.

That is going to do it from here. Let's keep our fingers crossed that we all get together at the DX Engineering / Great Lakes Convention in August!





Michael Kalter, W8CI

Hamvention Weekend Activities

That magical weekend in May approaching. With no Hamvention this year, due to continuing Coronavirus restrictions, we have been developing several activities to keep Hams busy and engaged in the hobby. We have a two day prize total of \$15,000.

On Thursday May 20, 2021 the **Virtual Contest University** will be held starting at 9 AM EDT 1300Z. The course outline will be available soon. This will be a free event! Even if you are not a contesteer you will learn so much about Amateur Radio and hear the techniques and critiques of many of the world's foremost Hams. Hamvention is a proud sponsor along with Icom and DX Engineering. Plan on attending this amazing free event! Several Icom radios will be given away during the all-day event. You must be registered on Zoom and present online at the time of the drawing to win the radios. Please check <http://contestuniversity.com> for updates.



On Friday May 21 Starting at 11 AM EDT 1500Z we will have the 2021 Virtual Hamvention Forums. The Hamvention Virtual Forums celebrates the 2021 Hamvention Award winners. Each awardee will give a 45 minute presentation followed by Q&A. The Hamvention Forums will be presented via Zoom Webinar. Registration for the Zoom Webinar will start 30 days before the event – look for the registration information on the Hamvention Website. Several Icom radios will be given away during the 2021 Hamvention Forums. The winners will be selected at random. The winner must have registered on Zoom for Hamvention Forums and be present during the drawing to win. Drawing times are random throughout the Virtual Forums event. Thanks to Hamvention, Icom and DX Engineering for their support of the 2021 Hamvention Virtual Forums.

Our presentees are:

Technical Achievement: WX6SWW – Tamitha Mulligan Skov is well known as the “Space Weather Woman”. Folks that have seen her space weather forecasting show will freely admit that she is full of energy and excited about her work. She is a real space pioneer.

Special Achievement: W3WL – Wesley Lamboley was nominated by his peers for his lifetime, high energy support for the science and art of amateur radio. Not only has Wesley supported youth coaching, membership recruiting and technical problem assistance, he always does it with a smile and great humor.

Amateur of the Year: WP3R – Angel M. Vazquez is known for being one of the principal support engineers for what was one of the greatest antennas in the world – the National Science Foundation's Arecibo parabolic dish antenna. Angel's award stems from his unswerving and diligent support of amateur radio throughout the entire territory of Puerto Rico and extends worldwide.

Club of the Year: K4HTA -- The Vienna Wireless society was chosen this year for its 58 years of service to the amateur radio community. K4HTA with its 280 members focus on youth education, public service and promoting the overall growth of radio through the DC area and around the world.

On Saturday May 22, Participate in the Hamvention QSO Party 8 AM to 8 PM EDST (1200 May 22 to 0000 May 23 UTC) W8BI, the club call of the Dayton Amateur Radio Association, will be a bonus station scored at 10 points per band and mode. Bands: 10M, 15M, 20M, 40M, 80M. Typical call will be: CQ CQ HVQP (HamVention QSO Party) W8XX (Your call) Typical exchange will be signal report and first year you attended Hamvention; eg on CW: KB8XXX 599 1998 W4XX. If you have never attended Hamvention, please send 2021 in place of the year. Send your score (number of QSOs including bonus points) to 3830scores.com within 5 days of the event. You will be able to print a certificate after the contest.

Dayton[®] Hamvention 2021 Award Winners



Dayton Hamvention[®] has announced its 2021 award winners. Hamvention Awards Committee Co-Chairs Michael Kalter, W8CI, and Frank Beafore, WS8B, said that despite the COVID-19 pandemic, the Hamvention committee elected to go forward in announcing its selection of outstanding radio amateurs and predicted that Hamvention will return in 2022.

Amateur of the Year

Angel M. Vazquez, Jr., WP3R, the head of telescope operations and Puerto Rico Coordination Zone Spectrum Manager for Puerto Rico's famous Arecibo Observatory, was cited as Amateur of the Year for "his unswerving and diligent support of amateur radio throughout the entire territory of Puerto Rico and worldwide."

Although he was born in Puerto Rico, Vazquez grew up in Brooklyn, New York, and returned to Puerto Rico after college in 1977, taking a job at the Arecibo Observatory. Vazquez earned his amateur radio license in 1993, and headed the 2010 moonbounce effort from the observatory, as well as multiple special events using the KP4AO club call sign.

Vazquez helped to provide communication support in the wake of Hurricane Maria. He was named Amateur of the Year in Puerto Rico in 2018 and received the Yasme Excellence Award in 2019. He's also a Volunteer Examiner and inaugurated the first virtual/online bilingual testing program as part of the Greater Los Angeles Amateur Radio Group (GLAARG) VEC.



Technical Achievement

Tamitha Skov, WX6SWW, is well-known as the [Space Weather Woman](#). Calling her "a real space pioneer," the Awards Committee said those who have seen her space weather forecasting shows will agree that she is energetic and excited about her work.

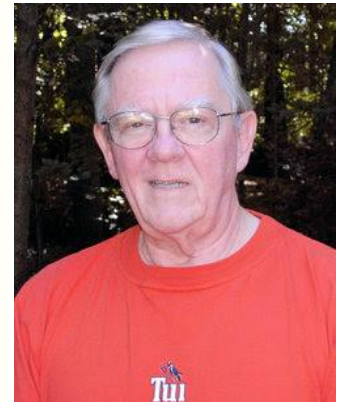
A credentialed space weather forecaster, Skov's forecasting work is widely known on social media and has been featured in publications and on TV. Her weekly space weather video podcasts are frequently featured on www.qrz.com. Skov said she specifically got her ham license in 2018 to better understand and serve the needs of the amateur radio community.

Professionally, Skov is a research scientist for The Aerospace Corporation. She also teaches the art of space weather forecasting to meteorologists at Millersville University and is working with ARRL and [HamSCI](#) to create educational materials.



Special Achievement

Wesley Lamboley, W3WL, was nominated by his peers for his lifelong, high-energy support for the science and art of amateur radio. "Not only has he supported youth coaching, membership recruiting, and technical problem assistance, he always does it with a smile and great humor," the Awards Committee said. Lamboley spent 40 years in the aerospace industry as a technical writer, electrical and systems engineer, and manager. Introduced to amateur radio in 1955 when a friend invited him to Field Day, Lamboley credits ham radio for much of his success.



"Many mentors helped me and I try to pay it forward as best I can, especially for young people," he said. He's also participated in several DXpeditions, and five SouthWest Ohio DX Association "DXpedition of the Year" plaques adorn his ham shack.

Club of the Year



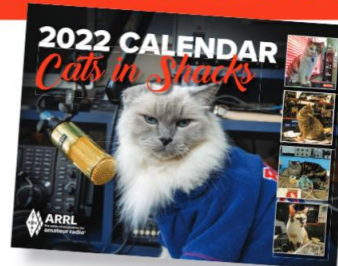
The Hamvention Awards Committee named the ARRL-affiliated Vienna Wireless Society (VWS), K4HTA, in Virginia as the Club of the Year. The committee noted that the club's 280 members focus on youth education and public service, and promote the growth of ham radio. The club is now the largest and most active in the Washington, DC, area.

The club offers licensing classes, workshops, and four educational programs a month at its meetings, and these are archived for broader use. Their annual Winterfest is host to the ARRL Virginia Section Convention. The Vienna Wireless Society operates two repeaters in the DC area, and actively supports public service communications. Read [an expanded version](#).



ARRL'S 2022 HAM CATS CALENDAR

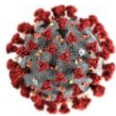
- 12 months of the ham's best friend
- Always know when it's Caturday
- Large date blocks for making notes – because you have stuff to do, even though your cat doesn't
- Warm winter wishes from cats on amps



PCARS VE Test Information & News

Tom, KB8UUZ
PCARS VE Team Liaison

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



NOTE: All Dates Subject To Cancellation
Check Web Site for Updates



- You **MUST** register in advance - **NO WALK-INS** will be accepted. Send an email to KB8UUZ@gmail.com to register.
- You will be required to have, in advance, a Form 605 - properly filled in and signed. Once you register a form 605 will be sent to you via email. You can print it out and fill it in.
- **You must have your FRN prior to taking an exam** - no SSNs will be used on the Form 605 anymore (6/29/21).
- 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.
- You will wear a mask covering your mouth and nose at all times.
- No food or snacks allowed.
- Only people that are testing will be allowed in the building.
- \$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 will need 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.



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.

Dates subject to change - Check the PCARS web site for the latest information

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

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

FRNs Required at Exam Sessions - Effective 6/29/2021

The FCC has indicated VECs/VE teams will discontinue the practice of accepting social security numbers at exam sessions. Examinees should register in the FCC CORES registration system and receive an FRN **before exam day**.

The FCC also advised VE teams to make it clear to candidates that some information about them will be made publicly available on the FCC's website, including their name, mailing address, and felony conviction status.

“Dorothy Stifflemire, the Associate Division Chief of the WTB Technologies Systems and Innovation Division told VECs that new license applicants should create an FCC user account and register their social security number in the FCC Commission Registration System (CORES) before attending exam sessions. Registrants will be assigned a Federal Registration Number (FRN) which will be used in all license transactions with the FCC.”



Under Section 97.21 of the new rules, a person holding a valid amateur station license "must apply to the FCC for a modification of the license grant as necessary to show the correct mailing and email address, licensee name, club name, license trustee name, or license custodian name." For a club or military recreation station license, the application must be presented in document form to a club station call sign administrator who must submit the information to the FCC in an electronic batch file.

Under new Section 97.23, each license will have to show the grantee's correct name, mailing address, and email address. "The email address must be an address where the grantee can receive electronic correspondence," the amended rule will state. "Revocation of the station license or suspension of the operator license may result when correspondence from the FCC is returned as undeliverable because the grantee failed to provide the correct email address."

Auto-registration in CORES for examinees using a social security number will be going away. In addition, since no mail is being sent because of the COVID-19 pandemic, applicants will not receive their auto-created password and FCC FRN and will not be able to access their personal license record in the FCC License Manager database or their FRN record in CORES. Going forward, she said, VECs should make sure all applicants are registered and have an FRN before exam day.

“Additionally, FCC Mobility Division (MD) Deputy Chief Tom Derenge recommended that VECs make it clear to applicants that their address will be public information when the new license is issued. He suggested advising that an alternative address, such as a PO Box or work address, would be acceptable. Derenge pointed out that once an address is in the FCC database, it’s nearly impossible to be permanently removed.”

Examinees can be directed to this information on our the ARRL website or directly to the FCC website.

FRN registration information (see item #4): <http://www.arrl.org/what-to-bring-to-an-exam-session>

FCC Privacy information: <http://www.arrl.org/fcc-licensee-privacy>

FCC CORES User Account and Registration: <https://apps.fcc.gov/cores/userLogin.do>

The banner features the PCARS K8BF logo on the left, which includes a map of Portage County and a squirrel. The text "PCARS K8BF" is in large, bold, gold letters, with "The Club that puts the FUN in Ham Radio!" below it. On the right is the ARRL Special Service Club logo, a circular emblem with a diamond in the center containing the letters "ARRL".

FCC Not Yet Collecting \$35 Application Fee



From the ARRL

The majority of the FCC's revised Part 97 rules (adopted in December 2020) establishing new application fees become effective on April 19, but the new amateur radio application fees will *not* become effective on April 19. The FCC announced on March 19 that the amateur radio application fees, including those associated with Form 605 filings, would not become effective until the "requisite notice has been provided to Congress, the FCC's information technology systems and internal procedures have been updated, and the Commission publishes notice(s) in the *Federal Register* announcing the effective date of such rules."



The \$35 fee, when it becomes effective, would apply to new, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications, as well as applications for a special temporary authority (STA) or a rule waiver. All fees will be per application. Administrative updates, such as a change of mailing, email address, or name, are exempt.

It is expected that such fees will not become effective before summer 2021. The FCC has stated that amateurs will have advance warning of the actual effective date, because it will publish such date in the *Federal Register*.

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 takes effect, new and upgrade applicants will pay the \$15 exam session fee to the VE team as usual, and pay the \$35 application fee directly to the FCC via the [Fee Filer System](#) or [License Manager System](#).** Somma said this information was provided in a [VE Newsletter](#) distributed this past week. "Further news and instructions will follow when we have them," she said.



PCARS
www.portcars.org



ResisThor



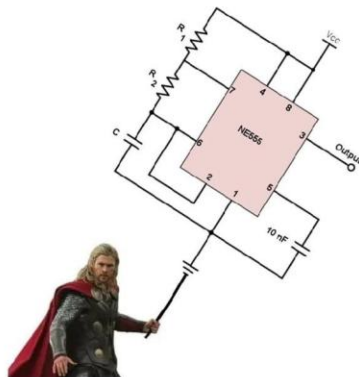
CapaciThor



InduThor



TransisThor



OscillaThor



GeneraThor

NCVEC Technician Question Pool Updates



From the ARRL



NCVEC Question Pool Committee Seeks Input for Updated Technician Question Pool

The National Conference of Volunteer Examiner Coordinators ([NCVEC](#)) Question Pool Committee ([QPC](#)) is requesting input from the amateur radio community on new or modified questions for the 2022 - 2026 FCC Element 2 (Technician pool), which goes into effect on July 1, 2022. This may include suggestions for new questions, changes to current examination topic areas, or changes to existing questions in the current Technician question pool.

The QPC said it's seeking input that focuses on:

- Topics and subjects that enhance public interest and understanding and use of amateur radio, or focus on STEM hands-on learning and education.
- Questions on new technology, digital modes, station setup and operation, antennas, and emergency and non-emergency operation.

To submit suggested questions for QPC review, the committee asks that questions have no more than two 70-character lines, including spaces. Distractors should be no more two 70-character lines long, and shorter if possible. Each multiple choice question must be accompanied by four possible distractors and only one correct answer. The answer choices may be in any order, but the correct answer must be indicated by the letters A, B, C, or D at the beginning of the question. Those submitting suggestions should provide the resource information that supports the correct answer or the FCC Part 97 rule.

The QPC will accept question comments, revisions, and submissions from the amateur radio community [via email](#) through June 30, 2021. This email address is a bulk forwarding mailbox, so no acknowledgement will be sent by return email. The NCVEC QPC will take all comments into consideration as it updates the Technician question pool for 2022 - 2026.

In Brief...



World Amateur Radio Day (WARD) 2021 is Sunday, April 18. On that day in 1925, the International Amateur Radio Union ([IARU](#)) was formed in Paris. Today, the IARU is a worldwide federation of national amateur radio organizations. The IARU has chosen "Amateur Radio: Home but Never Alone" as its WARD 2021 theme, acknowledging the many ways throughout the COVID-19 pandemic that amateur radio has remained a welcome respite for its variety of activities and opportunities -- even helping overcome online fatigue and social isolation. ARRL has [information](#) to help all radio amateurs start planning for World Amateur Radio Day.

Years ago, a mysterious signal dubbed "the ditter" showed up on 20 meters. The transmissions turned out to be unintentional. Now, the [IARU Region 1 Monitoring System](#) February [newsletter](#) reports that mysterious groups of dashes -- sometimes five, sometimes 16, sometimes continuous -- are being transmitted over long periods daily at or around 7075 kHz, a segment of 40 meters typically occupied by FT8 operators. So far, no one's been able to pinpoint the source of the transmissions. The "dasher" aside, over-the-horizon radars (OTHRs) continue to be the biggest source of interference in the HF amateur bands. A "numbers station" continues to be heard Wednesdays on 7062 kHz and 14280 kHz. The voice is female, speaking Russian. The signal is believed to belong to the Ukraine Security Service. The broadcasting stations Voice of Broad Masses (VOBM1 and VOBM2) from Eritrea continue to cause interference daily at 7140 and 7180 kHz. Another station at 7200 kHz -- believed to be National Unity Radio -- also broadcasts daily from 1100 to 1300 UTC. -- *Thanks to IARU Region 1 Monitoring System*



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: **Paul, KE8EGF** or e-mail him at: phyland@neo.rr.com

Happy Birthday PCARS Members

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

KE8LWP	Agnes Wagner
KE8LWL	Mark Knox
W8YIH	Sly Kaleja
KC8FQV	Mark Studer
	Bill Kaczmarek
N8QE	Bob Hajdak

W8JJW	John Wagner
KW8KW	Bill O'Neil
WB2DFC	Dave Rarrick
K1ZZ	David Sumner
KE8EGG	Alice Harris



Portage County Amateur Radio Service



K8BF



2018 Hamvention® Club of the Year

Swap-N-Shop

FOR SALE - Bridge Com Systems BCH-270 2M/70CM HT, BGM-270-Cable, & BGM-BCH-270 Spare Battery and Belt Clip new, never used. \$100.00. **MFJ-9340K 40M Cub QRP Kit** new, never used. \$100.00. **TIDRADIO UV-5R** Dual Band 2M/70CM HT new, never used. \$50.00. **DX Engineering DXE-SWP8** Memory Keypad for Kenwood, and ICOM new, never used. \$50.00. **Reconditioned Heath Kit SB-200 Amplifier** \$500.00 with new tubes.

Contact: Bob, N8QE at rhajdak@aol.com [05/02/21]

FOR SALE - Yaesu FT-dx1200 Transceiver-TX 160 to 6M, RX 30 kHz to 56 MHz, Spectrum Scope, Roofing Filters 3/6/15 kHz, 4.3" color TFT display, Autotuner, Bought in 2017, used as backup rig. Low air time, Like New. Has original boxes, power cord, manual, mic, etc - \$800.00 **FT-7800R Dual Band Mobile**, TX 50W on 2M, 40W on 70CM, Receive from 108 to 520 MHz (cell blocked), 1055 Memory channels, Used as base radio, never mobile. Includes RT Systems programming software and cable. All original boxes, power cord, mic, etc. Like new, \$250 **Comet DS-150S Discone Base Wideband scanner/receive/TX antenna**. Receive 25-1300 MHz, TX 6M/2M/440/900/1200 MHz. Gain- Unity/2/4dB, UHF connector. All Stainless, excellent condition \$60.00

Contact: John, W8JJW by phone at: 330-842-3619 [04/02/21]

FOR SALE: Ham Radio Repair Closed after 50 years - I have tons of good parts for Drake, Collins, Swan, Hallicrafters, Heathkit, etc. Call for info is best too much to list. **Collins S-line, 75S-3C receiver, 32S-3A transmitter, 312B-4 console, 516F-2 power supply** (restored) - \$3500, with extras! **Collins KWM-2A transceiver, 312B-5 VFO console, 516F-2 powers supply** (restored) - \$2500 with extras! **Collins reproduction 5-way antenna / radio switch** 1200 watt rated - \$300 **Drake 2-Model AC-4 power supplies**- \$200 / each all re-built with new Heathkit Shop AC-4R boards, three-wire AC cords, "VOX" relay RCA jack. **Swan 117XC power supply / speaker**- \$200, re-built with new board. **AMECO PT-3 transceiver pre-amplifier** 1.8 to 54 MHz, RF switching installed - \$100.

Contact: Jeff Covelli, WA8SAJ by phone at: 440-951-6406 [06/02/21]



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: [06/02/21] indicates the ad will run until June 2, 2021.



PCARS K8BF

The Club that puts the FUN in Ham Radio!



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!!



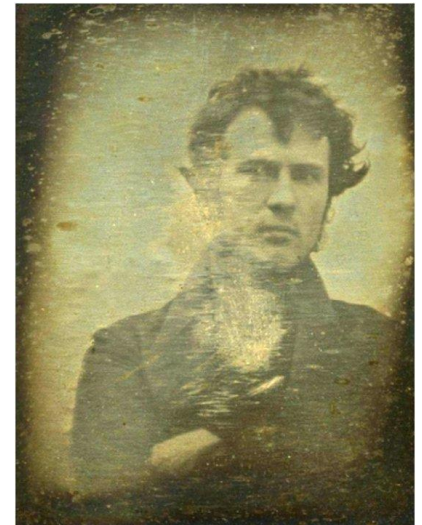
The First 'Selfie'

Robert Cornelius

The First Self Photographer (1839)

This photo of Robert Cornelius bears significant powers as it was the first of what is so prevalent in our society today. Even though it was neither the first photo was taken (Window at Le Gras, 1826 received that award) nor the first to have human representation (the award given to Louis-Jacques Mande Daguerre's Paris Boulevard), it was the first selfie to be taken in history.

Cornelius was an amateur chemist who thought it would be interesting to take a photo of himself while in the back of his Philadelphia-based family store. Records detail Cornelius took the picture by removing the cap from the camera, running into a position where he could be captured, and then returning the cover. At the back of the photo, he wrote the words "The first light Picture ever taken, 1839."



Field Day 2021 - Flex Station



Rick, K8CAV
Field Day Flex Station Captain



Some key points to remember about Flex are:

- We're making it as safe as possible for amateurs to operate by limiting people at the Flex station to strictly operators and loggers, **NO** visitors or social gathering at or in the Flex Station; wipe-downs inside of the Flex trailer between shifts; hand sanitizer and wipes inside of the Flex trailer; masking required outside of the Flex trailer; each operator and logger to provide their own headphones and/or headsets; **no food or drink inside of the Flex trailer.**
- Flex is band and mode agile, within limits (see the Flex article in the March issue of *The Radiogram* for details). Coordination with CW on 20 m and 40 m is required, Flex is primary on all other HF bands.
- There will only be one computer, my laptop for logging, digital operations (fldigi and FT8/FT4), and CW. Fldigi and FT8/FT4 will log directly to N3FJP, CW will use the Winkeyer with N3FJP and macros for operating and logging. Field Day macros will be set up for fldigi. Phone will log to N3FJP using the laptop.

Depending on the Coronavirus situation we may be able to hold a training meeting for logging, digital, and CW operations. If an in-person meeting is not possible or advisable, I will try to set something up using a Zoom meeting.

Given the uncertainties of the Coronavirus and the difficulties in obtaining vaccinations, I absolutely understand if some decide not to work at the Flex Station this year. If you feel you can volunteer, please look at the schedule, below and let me know what time slot you would be available to help out. Send me an email to k8cav.coms@gmail.com to let me know. Thanks!

DAY	TIME	MODE	OPERATOR
SAT 27 JUN	14:00 - 16:00	10M, 15M PH or DIG; 40M DIG *	Jim AC8NT
	16:00 - 18:00	10M, 15M PH or DIG; 20M DIG *	
	18:00 - 20:00	10M, 15M PH or DIG; 20M DIG *	
	20:00 - 22:00	80M PH, CW, or DIG	
	22:00 - 00:00	80M PH, CW, or DIG	Gene W8NET
SUN 28 JUN	00:00 - 02:00	80M PH, CW, or DIG	
	02:00 - 04:00	80M PH, CW, or DIG	
	04:00 - 06:00	80M PH, CW, or DIG	
	06:00 - 08:00	80M PH, CW, or DIG	Andrew KE8BWA
	08:00 - 10:00	10M, 15M PH or DIG; 20M DIG *	Gene W8NET
	10:00 - 12:00	10M, 15M PH or DIG; 40M DIG *	
	12:00 - 14:00	10M, 15M PH or DIG; 40M DIG *	

FLEX and CW to cooperate on 20M and 40M to insure that both are not on the same band at the same time
* If 10M and/or 15M is open make QSO's using PH, CW, or DIG, otherwise use the 20M or 40M band DIG as indicated for that time slot.

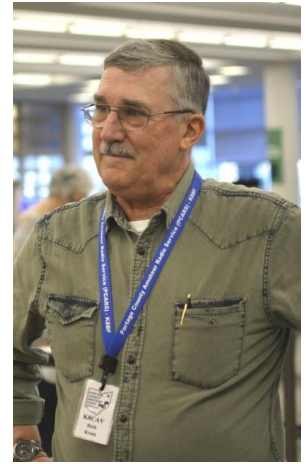
Portage County Park District Headwaters Race

Rick, K8CAV

Portage County Coms Unit Commander

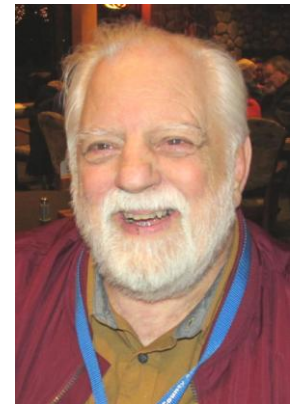
Hey PCARS members! I'm still looking for volunteers to help out with communications support for the Portage County Park District's Headwaters Adventure Race on Saturday morning July 10th in various stations in Mantua Village, Mantua Township, and Hiram Township.

Specifics about our support can be found in the March issue of The Radiogram. If you can help out, please send an email to k8cav.coms@gmail.com. Thanks!



BYTE Magazine Highlights Ham Radio

Larry Cole, N8FTP



This may be of some interest Who remembers BYTE magazine?

Here is a link that leads to an early "BYTE" magazine volume which is primarily devoted to Ham Radio.

LINK: <https://archive.org/details/byte-magazine-1976-10/mode/2up>



Hamfest Calendar

HAMFESTING: This continues to challenge all of us as many clubs are making their best efforts to return their hamfests to the calendar. Several early-in-the-year swaps have now been postponed, but some clubs are adjusting their timetables and setting their hamfests up with different configurations and planning them for dates later in the season.

For the latest detail on regional hamfests, check the ARRL web page at: <http://www.arrl.org/hamfests-and-conventions-calendar>.
PLEASE NOTE THAT SEVERAL CANCELLATIONS ARE ON THE SCHEDULE.

Please note that all are subject to change, so please stay current by checking the sponsoring club's web page before making your travel arrangements.

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05/21/2021 - 05/23/2021 - CANCELED - Dayton Hamvention, Xenia, OH - Sponsor: Dayton Amateur Radio Association Website: <http://hamvention.org>

07/10/2021 - MANSFIELD Mid-Summer Trunkfest - Location: Richland County Fairgrounds - 750 N. Home Road - MANSFIELD, OH 44901 - Website: <http://WWW.IARC.CLUB> - Sponsor: Intercity Amateur Radio Club - Public Contact: Danny Bailey , W8DLB - 70 Euclid Street Shiloh, OH 44878 - Phone: 419-541-8557 - Email: W8DLB113@GMAIL.COM

08/07/2021 - DX Engineering Hamfest - Location: **DX** Engineering/Summit Racing - 1200 Southeast Ave - Tallmadge, OH 44278 - Website: <http://dxengineering.com> - Sponsor: **DX** Engineering - Type: **ARRL Great Lakes Convention** - Talk-In: 146.985 -600 - Public Contact: Teri Grizer , K8MNJ - Phone: 330-630-7520 - Email: tgrizer@dxengineering.com

09/26/2021 - Cleveland Hamfest -Location: Cuyahoga County Fairgrounds - 164 Eastland Road - Berea, OH 44017 - Website: <http://www.hac.org> - Public Contact: Mathew Nickoson, KC8NZJ - PO BOX 201173 Shaker Heights, OH 44120 - Phone: 8002533378 (800-CLE-FEST) - Email: kc8nzj@hac.org

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No get-together in 2021: Ham Radio Exhibition Once Again Suspended

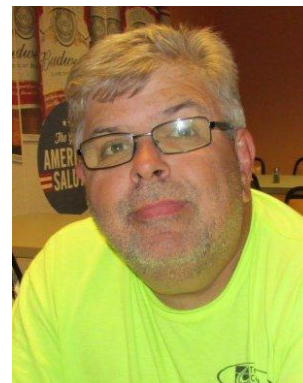
Friedrichshafen, Germany – This year, as well, the Coronavirus pandemic is maintaining a firm grip on world events. Due to current developments regarding the spread of COVID-19, Messe Friedrichshafen has been forced to make a very difficult decision. The Ham Radio international amateur radio exhibition will not take place in the planned time frame of June 25-27, 2021, but instead will be held from June 24 to 26, 2022.

“It was not an easy decision for us; however, an exhibition like Ham Radio depends on a high level of international participation. Due to the current uncertainties in the travel sector, it is simply not feasible to hold it this year,” explained Klaus Wellmann, CEO of Messe Friedrichshafen, sadly. Project Manager Petra Rathgeber also expressed her great disappointment: “It is deeply regrettable that the event cannot take place as planned. We were so looking forward to our get-together with the industry.” Christian NetShelter, chairman of the German Amateur Radio Club e.V. (DARC), added: “We support the decision of Messe Friedrichshafen to cancel this year’s Ham Radio exhibition at this early date. Naturally, we are very disappointed that our meeting with friends in Friedrichshafen will not take place, after all. However, the online version of Ham Radio that is now planned to take place from June 25 to 27, 2021, is a consolation that we very much look forward to, as it will offer our members of ham-radio friends some interesting surprises.” For further details, visit www.messe-friedrichshafen.de and www.hamradio-friedrichshafen.de/.



New Web Hosting for PCARS & OSPOTA

John, KD8MQ



New Website Home Page

Several years back, after a request by Jim, KC8PD, I started helping out with the website. My first experience with the Wordpress CMS (Content Management System) came from working with portcars.org, and ospota.org. I've had loads of fun using lines of code to solve problems on websites.

Over the last few years, portcars.org began acting weird; things would just stop working. Remember the timer on the home page that would count down the days to the next club event? It stopped working in 2020. Also last year, it practically took an act of congress to get the menu button to show up for the new membership page. At other times, the site would just disappear for minutes at a time.

We knew that it was time to move the site to its own dedicated hosting account. So, at the next board meeting, I proposed that some changes were needed. Tim, K3LR suggested that we contact Scott, KA9FOX about hosting space. Scott's QTH.com was the best option hands-down, and the rest is history.

Last weekend, Scott, and Steve, K8SRR moved the sites to our own PCARS hosting account at QTH.com. Scott and Steve handled the nuts & bolts, and by Sunday night, it was time for me to begin working on design, and checking pages. We thought we were done, but Murphy had another surprise in store for us.

For several years, we've been using a Wordpress theme called Arclite (Think of a theme as a design template/color palette for a website). There are literally thousands of themes available. Arclite was a great theme in its day, but back around 2013, the designer stopped maintaining it, and it seemed like with each wordpress update, new design & functionality issues would crop up.

Last weekend, Steve found an error message that said "this theme does not support menus". So, it was time to switch themes. Arclites theme was done! We are now running on the Wordpress "Twenty Ten" theme. It's an older design, but easily modified, and well-supported. It took some time to tweak the new theme so that the site still looked similar to what you are all used to, but I think it was worth it.

The new sites; ospota.org, and portcars.org are running faster than ever. There are still a few things I want to do in the coming weeks, but we should be up and running at this time, with no broken links. If you happen to find anything that looks broken, please notify me at kd8mq1@gmail.com, or webmaster@portcars.org

Thanks to all the officers, but especially, Nick, Jim, & Mike, who were great about tossing out suggestions when I was getting quotes on web hosting. Their support made an involved process so much easier!

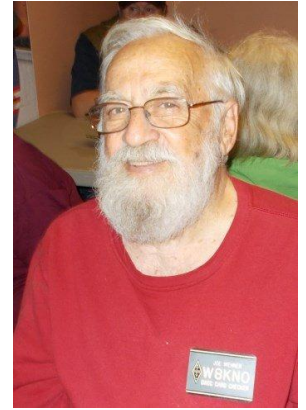
Special thanks to Steve, K8SRR. He is so knowledgeable on the Under-the-hood part of the internet. It was a pleasure to watch him work.

Hopefully we'll be good for the next 15 years!



Paper Chase - Last Train

Joe, W8KNO



The Klamath Basin Amateur Radio Association of Klamath Falls, Oregon will commemorate the 31st Anniversary of the "Last Train on the Oregon, California and Eastern Railway". The railway was a 64-mile rail line between Klamath Falls and Bly in Oregon. After 70 years of bringing logs from nearby forests to local sawmills. The last OC&E log train ran on Sunday, 29 April 1990. In 1993, when it became more economical to use trucks to haul the little bit of timber left along the line's right of way Weyerhaeuser liquidated the railroad.



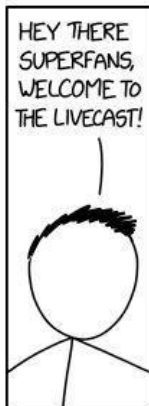
The Klamath Basin Amateur Radio Association will operate a special event station on 14.074 from noon until 6:00 pm our local time on the 24th of April using call sign W7VW.

A Certificate & QSL are available from Jim English, 2602 Wiard Street, Klamath Falls, OR 97603.



The crew of the last loaded log train to operate on the Oregon, California & Eastern poses after arriving at their yard in Klamath Falls, Oregon. The following day, the logs would be taken across town to Weyerhaeuser's sawmill and unloaded in the log sort yard there.

In September 1991, the OC&E would move all of its equipment into Klamath Falls, in anticipation of the line's abandonment and dismantling. After the railroad was abandoned, Southern Pacific operated several salvage trains of recovered track materials for the scrapper. By the end of 1993, the entire railroad was dust in the wind.





Thanks to [The Daily DX](#)

Plans Proceeding for Fall 2021 Willis Island DXpedition

The team from the Hellenic Amateur Radio Association of Australia ([HARAOA](#)) that's planning a November 3 - 13 DXpedition to Willis Island (VK9HR) has expanded by one, and the DXpedition planning is on schedule. A vessel to take the team to Willis Island has been chartered to leave Australia on November 3, returning on November 13. Willis ranks #38 on Club Log's [DXCC Most Wanted List](#). The group announced earlier that it had put off plans to include a stint from Mellish Reef, last activated in 2017. The ham radio team will be just in time to celebrate the centennial of the island's meteorological facility.

"With time away from jobs a consideration for the operators, Mellish is being put off to 2022," said team leader John Chalkiarakis, VK3YP.



While the call sign VK9HR is expected to be renewed in August, Chalkiarakis is trying to get VK9W. "VK9IR will be an additional call sign to be allocated," he said. VK9IR and VK9HR were used for HARAOA's 2011 DXpedition to Lord Howe Island.

Team members for this fall's DXpedition will hail from Australia and New Zealand. They're in the process of obtaining a permit from Parks Australia, which is "required to 'camp' at these Australian Coral Sea marine parks." Chalkiarakis said the most important document is the landing permit, also from Parks Australia. No permit is required to visit these coral sea islands for non-commercial purposes, but a permit application is needed to set up a campsite and to stay overnight on the

island.

The now eight-operator team plans to use verticals on 160, 80, 40, and 30 meters, while VDAs (vertical dipole arrays) will be used on 20, 17, 15, 12, and 10 meters. Operation on 6 meters is under consideration. Activity is expected on SSB, CW, and FT8 on 160 through 10 meters. The equipment complement is expected to be Kenwood TS-590S and Icom IC-7300 transceivers with amplifiers on all.

A DXpedition website and logo are in the works. Home to a meteorological station, Willis Island is in the Coral Sea, off the northeast coast of Australia.

Chalkiarakis also said that he and some friends have been trying to obtain a landing permit for Macquarie Island (VK0M), which is #12 on Club Log's DXCC Most Wanted List, but he conceded that it's nearly impossible to get permission from the Tasmania Parks and Wildlife Service because Macquarie is a protected nature reserve.



Monster Dipole - Monster Signal

Monster Dipole Can Deliver Monster Signal

A [video](#) shows how Gary Watson, ZL3SV, in Nelson, New Zealand, installed an enormous all-band dipole with each leg extending 320 meters (about 1,050 feet). The antenna is multiple wavelengths on HF, and on 20 meters it has a gain of more than 16 dB, Watson says. It hears quite well, too.

A huge 12:1 balun resembling a utility pole power step-down transformer converts the impedance from 50 W unbalanced to 600 W balanced. The wire he uses for each leg is aluminum-wrapped, power-line cable (10-millimeter cable with wrap), and he uses power-line fittings, because they're designed to handle the wire. The line has a 60-ton breaking strength.

Watson said he made the 600 W ladder line himself and he uses the antenna on all bands, typically running only 200 W. The coaxial feed line goes to his house down a slope from the antenna via a conduit. His home is entirely off the grid, powered by solar power. The noise level is very low at his location, with power lines some distance away, although his solar power system's inverter is nearby.

Watson says he can copy stations with the "monster" antenna that remain undetectable with a half-wave dipole.



Guinness Mean Time

An article in the *Financial Times* detailed an agreement that had been struck between the **Old Royal Observatory** in Greenwich, England and the **Guinness brewery**, wherein Guinness would be declared the official beer sponsor of the Observatory's millennium celebration.



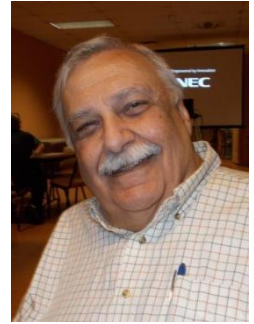
Greenwich Mean Time would be renamed **Guinness Mean Time**, and instead of counting seconds in "pips," as was traditional, the *Financial Times* lamented that the deal marked a new low in corporate marketing and set a "brash tone for the millennium."



But what the *Financial Times* didn't realize was that it had fallen for a joke. The Guinness press release, from which it had taken the information, had been marked for April 1 release. The *Financial Times* subsequently published a curt retraction, clarifying that Guinness Mean Time had been "apparently intended as part of an April 1 spoof."



Contest Update



Chuck, W8PT
Contest & DX SIG Coordinator

For those of you who like state QSO parties, this is your month. There are so many and since by now you should know how they work, I'm not going to go into any detail on them. But here's the list.

Louisiana QSOP –	1400UTC, April 3 to 0200UTC, April 4
Mississippi QSOP -	1400UTC, April 3 to 0200UTC, April 4
Nebraska QSOP -	1300UTC, April 10 to 0100UTC, April 11 and 1300UTC-2200UTC April 11
New Mexico QSOP -	1400UTC, April 10 to 0200UTC, April 11
Georgia QSOP -	1800UTC, April 10 to 0359UTC, April 11 and 1400UTC-2359UTC April 11
North Dakota QSOP -	1800UTC, April 10 to 1800UTC, April 11
Michigan QSOP -	1600UTC April 17 to 0400TUC, April 18
Florida QSOP -	1600UTC April 24 to 0159UTC, April 25 and 1200UTC-2159UTC April 25

You will notice that Nebraska, Georgia and Florida give us a break to get a night's sleep. Thank you very much! I will remind you to make sure you have the latest version of your contest software and that you have visited each of their sites to read and make note of the rules for each contest. Even though there are multiple contests on the same weekends, if you play it right, you can have a good showing in each of these given that note every contest will have a lot of that state's HAMs on the air.

Ontario QSO Party

Here is a good example why you should go to the contest site and read the rules. The Ontario QSOP, as listed on the WA7BNM Contest Calendar, Lists this contest taking place 1800UTC, April 17 to 1800UTC April 18. **HOWEVER**, going to the contest site, you will find out that the contest runs from 1800UTC, April 17 to 0500UTC April 18 and 1200UTC-1800UTC April 18. So this is a **split contest** to allow for some rest. Frequencies are all bands from 160-2 meters with the exception for WARC bands. There are 10 categories for fixed stations so you should have no problem in picking one.

Have some fun this coming month and play in one or more of the contests. As mentioned before, if you happen to participate in one that we haven't listed, let me know how you did and if it was a fun contest.

See you next month. 73

A banner for PCARS K8BF. On the left is a logo for Portage County Amateur Radio Service (PCARS) featuring a map of Portage County and a squirrel. In the center, the text reads "PCARS K8BF" in large, bold, gold letters, with "The Club that puts the FUN in Ham Radio!" below it. On the right is a circular emblem for the ARRL Special Service Club, featuring a diamond shape with "ARRL" and "SPECIAL SERVICE CLUB" text.

Charlie the Tuner's HF High-Lites

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



Greetings DXers:

The WX is turning fast and for the better. Yes, we still have some cold weather to get through, but Spring has sprung as they say. Time to get working on your outdoor projects. Get a head start so that you can devote more time to DX when Summer arrives.

It's a short list this month so lets' see what we have.

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, W9EWZ, K0BBC, 4X1VF, DL1SBF, DL7UXG & The DX News Letter, DXNews.com, DX-World.Net, F5LRL, F6AJA & Les Nouvelles DX, I1JQJ/IK1ADH & 425 DX News, International DX Press, M0URX, OH2BH, Sixitalia Weekly, VA3RJ & ICPO and VK8NSB 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.

April...

4X73, ISRAEL (Special Event/Contest). Operators Ruben/4Z5FI and Jan/4X1VF will be active as 4X73T during the Holy Land Contest between 2100 UTC, Friday, April 16th, and 2100 UTC, Saturday, April 17th. The special contest callsign is being used to celebrate 73rd anniversary of Israel's Independence. This will be the first time 4XFF-019 will be activated from the Dead Sea area and will take place from a very rare Holy Land Square L19BL. A special QSL will be sent out for every contact. QSL via the Bureau.

DP70, GERMANY (Special Event). In 2021, the Radio Telegraphy High Speed Club (HSC) is celebrating its 70th anniversary. To mark this event, HSC was granted the special DOK number HSC70 to be used by its club stations DA0HSC and DK0HSC throughout the year. Furthermore, the special callsign DP70HSC was assigned to HSC to be activated exclusively on CW. It will also use the special DOK number HSC70. Its HSC number is 1951, which is the year when the HSC was founded. This station may be operated in 2021 by any German HSC member upon special application. QSL via the Bureau or LoTW.

JW, SVALBARD. Peter, LA7QIA, active as JW7QIA from the SARK (Svalbard Amateur Radio Club) station on Spitsbergen Island (EU-026, WW Loc. JQ68) until about April 8th. Activity will be limited to his spare time usually with a focused on 6 meters and possibly on 70 MHz, using CW, SSB and the Digital modes. QSL via his home callsign.

LZ200, BULGARIA (Special Event). Look for special event callsign LZ200GSR to be active from Sofia between April 1-30th. Activity is to celebrate the 200th anniversary of the birth of Georgi Sava Rakovski (1821-1867), a famous publicist, writer, historian, ethnographer and creator of the revolutionary movement for the liberation of Bulgaria. QSL via LZ1XM or by the Bureau.

P45, ARUBA (Special Event/Contest). Jean-Pierre, P43A : 5 years after the first time this special callsign was issued, DTZ (Dienst Telecommunicatie Zaken) once again allowed me to use the P45 prefix between the March 15th and April 15th. Aruba is celebrating 35 years of Status Aparte & 45 years of Himno y Bandera this year and after 30 years I am still a P4 HAM, hihi! We will operate the CQWW WPX SSB Contest with it, so work us if you are around!

VK0, ANTARCTICA. Paul, VK2PAD, is currently stationed at Casey Station as VK0PD. Length of stay is not known. Activity will be on 40/20 meters. The equipment that he has is an IC-7300 and IC-705, 300w linear amplifier, 3 x 10m

telescoping fiberglass poles and loads of wire to build antennas. QSL via eQSL.

May...

FM/TO3, MARTINIQUE. Marius, ON4RU/OQ3R, will be active as FM/OQ3R from Laurent's (FM5BH) QTH on Martinique (NA-107) between May 23 & June 5. Activity is holiday style on 160-10 m using CW only. Also be active as TO3F during the CQWW WPX CW Contest (May 29-30th) as Single-Op entry. QSL both callsigns via ON4RU direct.

IOTA News...

EU-068. Members of the Radio Club Du Bassin Minier (F6KJS) are organizing DXpedition to the Isle of Sein (IOTA rank 51.4%, WW Locator IN78NA79) between May 27th and June 7th. Their special callsign will be TM6KJS. There will be 10 operators (9 on the island and 1 assistant in Burgundy). Operators mentioned are Didier/F6BCW, Pascal/F1MNQ, Pierre/F1TCV, Jean-Pierre/F0EWW, Lilian/F5SIK, Michel/F5LRL, Keith/VE7KW, Jean-Michel/F1COB, Jean-Michel/F4EHA and Christian/F4CXO. Activity will be on 80m-23cm using 6 stations. QSL info will be determined.

NA-059. Keith, KL2JE, is now active from Unalaska Island until April 10th. Activity is during his spare time on 20 meters FT8. QSL via address on QRZ.com.

That's it for now. A short list this month. There are more things happening but the information has not got to me before I had to turn this into Parky. So get on the air and **LISTEN**. You will find DX to work. 73 for now.



PCARS
www.portcars.org



Thanks goes out to *Thomas, N1SPY* for this April advertisement and the on the next page, too.



The New Tesla DX - Radio Operator Edition

Completely Self Driving So You Can Concentrate On What You Love - From Origin To Destination

J&R LAW FIRM -BAOFENG SERVICES-

All we do is seek
compensation for
Baofeng users



If you used radio equipment from Baofeng and suffered any of the conditions below, you need to call us!

- HEARING LOSS
- SLEEP LOSS
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- CHRONIC FATIGUE
- BLURRY VISION
- DRY MOUTH
- HEARTBURN
- GAS AND BLOATING



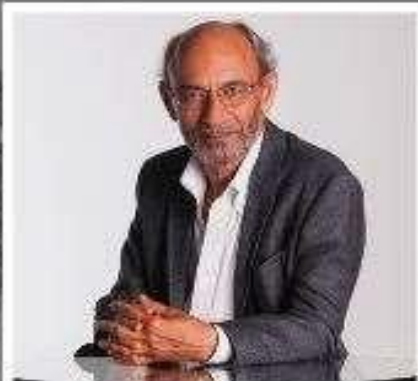
OUR OFFICE
123 AVENUE STREET
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Image: www.PosterMyWall.com

Attorneys



Dr. Ken Adams
Attorney
Highly experienced team lead



Dr. John Smith
Attorney
Specializing in class action law



Dr. Tomas Tree
Attorney
Results is all that matter

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**

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.

April	
1	WB2DFC
8	KE8BWA
15	WB8LCD
22	K8CAV
29	KA8TOA

May	
6	N8QE
13	WB2DFC
20	WB8LCD
27	KA8TOA

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

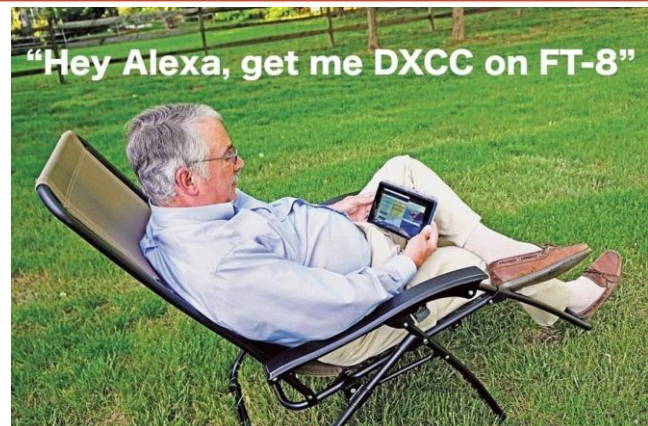
Hi everyone

I would like to thank all the net control operators for their help in running the weekly PCARS nets. Without your help and dedication it would be a lot harder job. I need some more help, and one way for you to help would be talk to the other club members about running the net every other month. It is fun, easy and a worthy cause for PCARS. Please talk it up and find a couple more volunteers.

It is great training and sometime you might have to use it for emergencies. It requires no additional cost and you make more contacts with a lot more members who might be able to help you out with information regarding radios, antennas and supporting our great club.

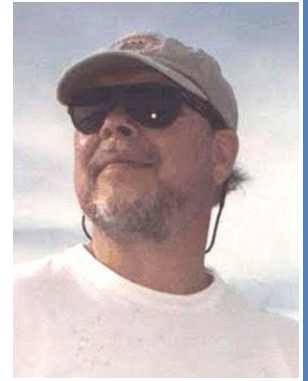
Please don't be afraid to try it out. It is really a simple thing to do and in the long run you gain experience and knowledge. So, I hope we can get a few more volunteers to help out. I know summer is coming and we all want to get outside and take care of things.

If you have not been a Net Control Operator for PCARS and would like to give it a try, *please* contact me at: gregory999@roadrunner.com everyone who is a club member is welcome to have a turn - and have fun being the PCARS Thursday Night Net Control !



A Tale of Two SDRs

Bob, KD8CGH



Last year I got involved with the uSDX development project. It crams impressive SDR capabilities into an Arduino. For more info on that see the QRP News in the September, 2019 issue. This year I have been using the Hermes Lite 2 QRP, SDR transceiver development whose hardware heart is a powerful modem chip. Both QRP transceivers are open source hardware and software, direct up/down conversion SDR with constant active development. For both you must order your own PCBs and parts or participate in a group buy. In spite of their similarities, the two are very different transceivers with greatly different strengths and weaknesses.

The uSDX is a new open source, home brew multi band, multi mode QRP transceiver that grew out of the QRP Labs QCX. Through some serious wizardry it retains an efficient class E RF amplifier for SSB and digital modes. The basic work uSDX appears to have been accomplished by Guido Ten Dolle PE1NNZ. It uses pulse width modulation of the PA supply voltage to transmit modes other than CW while retaining class E efficiency and uses a direct conversion SDR receiver. You can read more about the uSDX in my “Introduction to the uSDX” article.

Since I built my Barb WB2CGA v1.02 transceiver with plug in band boards, Barb’s design has progressed to manually switched 3 band transceivers using the highly efficient serial resonance output filters pioneered by Manual DL2MAN. These are small, through hole designs that are about the size of the QRP Labs mono band QCX.

Another uSDX development stream comes from Manual, DL2MAN. These tiny SMD transceivers now come in relay switched 5 and 8 band versions. Manual continues hardware development looking for ever greater efficiency and is considering adding an antenna tuner board.

You can order your own boards and parts as I did or you can get boards and some partly populated boards for both developments from group buys at Offline Systems <https://shop.offline.systems/> in the US and DL2MAN board sets also have sources in EU and India. Both transceivers use firmware developed by Guido Ten Dolle PE1NN, <https://github.com/threeme3/QCX-SSB>, who continues development.

The uSDX packs an amazing number of features into its small package: CW keyer, CW decoder, AGC, good variable width audio filters, VOX, QSK, noise reduction and attenuation. I think that the CW performance is excellent, as you would expect given its QCX heritage. Although I have not used it for digital modes, many others have reported success. In contrast to the stellar CW performance, the SSB transmit audio quality is not as good. Some users find it unacceptable. Recent “n” firmware revisions have improved both reception images and CW and SSB transmit quality issues.

Since both developments use similar circuitry and the same firmware performance is similar. These small, inexpensive, self contained, highly efficient transceivers are well suited to portable and SOTA CW use.

The Hermes-Lite 2 is a direct down/up conversion software defined amateur radio HF transceiver based on a powerful broadband modem chip and the openHPSDR Hermes SDR project. It is entirely open source and open hardware, including the tools used for design and fabrication files. Other spin offs from the openHPSDR development include the Apache labs ANAN line of transceivers. You can find info and support in the google group <https://groups.google.com/g/hermes-lite>.

The HL2 is a 160-10 meter, multi-mode 5 watt transceiver. Physically it’s a small (152mm x 106mm x 40mm) black box with an Ethernet socket and a few blinking lights. It’s not a standalone transceiver, requiring a host computer running SDR software to function. Since it is open source you can build it on your own or you can get an HL2 by participating in a group buy from Makerfabs. The HL2 is \$226, the low pass filter board is \$53 and the case is \$17. All components are mounted. You have to drill a hole in the case for the heat sink and assemble the system.

The HL2 communicates with a host computer over ethernet, which provides high speed communication and allows the HL2 to be remotely operated. Audio in and out is produced by the sound card and software running on the host computer attached to the HL2. The software also controls the HL2 and provides display usually including a spectrum and perhaps a waterfall. You can use virtual audio cables to add digital software like WSJT-X and fldigi and virtual serial ports for rig control like N1MM+ and Dxlabs Commander.

It uses a Cyclone 4 FPGA along with an AD9866 with a 12 bit ADC that runs at 76.8 MHz and DAC that runs at 153.6 MHz and supports up to a 384 kHz swath of bandwidth in receive. Its main board is usually paired with a relay switched low pass filter board to produce clean transmissions.

Like the Flex transceivers, the HL2 supports multiple receiver “slices”. The current gateway supports up to four receiver slices. The wide receive bandwidth and multiple slices drives the need for a fast Ethernet connection. The HL2 operates in full duplex mode so that you can monitor your transmission through a built in sampling circuit. This opens the way to use software like PureSignal, also used in Flex and Apache transceivers, to actively predistort your signal to correct for PA distortions and generate excellent quality SSB and digital transmissions.

Multiple software applications support the HL2 including Quisk, SparkSDR, SDR Console, PowerSDR, Thetis, LinHPSDR and PiHPSDR. There are Windows, Linux and Raspberry Pi apps. They generally all support spectrum and waterfall displays, a wide range of filters, AGC, ALC and audio input monitoring. PowerSDR and Thetis both have HL2 specific versions. SDR Console is a beautiful, easy to use application by Simon Brown, the original developer of Ham Radio Deluxe, that supports the HL2 well.

The HL2 has provisions for IO add ons for controlling a fan, AH-4 tuners from Icom and LDG, external power amplifiers and general IO for experimenting General Purpose IO. A popular addition to the system is the Hard Rock 50 amplifier. Another addition is a set of band pass filters for the receiver.

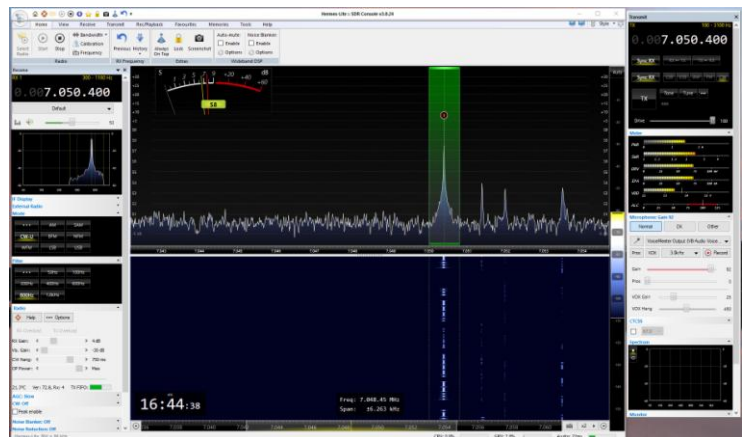
In contrast to the excellent support for SSB transmission, the CW support of the HL2 is minimal. There is a jack on the HL2 for a key, but no built in keyer and side tone. Generating a side tone turns out to be more difficult than it might first appear because of latency. The time it takes for the key press to be processed by the HL2, travel through the Ethernet cable, be processed by the host computer software and activate the sound card is long enough to throw off all but the slowest CW sending. SDR Console does a better job of reducing latency, but still has no keyer or CW keyboard. A recommended solution is to use an external keyer with built in side tone. In addition, the HL2 uses a TR relay and so is not QSK like the uSDX.

A new ongoing development to address the HL2 CW issue is a Teensy based keyer that includes WinKey emulation and adds low latency sidetone to received audio while retaining the capability of remote operation over ethernet. A midi based control panel is implemented to compliment WinKey program control.

I have an HL2 from the most recent build (build 9) directly cabled to my Windows 10 laptop in my shack. I bought the set including the main board, filter board and case. Assembly required drilling a single hole to mount a heat sink block that transfers heat from the PA to the aluminum case.

While mechanical assembly is easy, the software side not so much. Your heavy lifting comes in configuring the software, particularly for multi program use like with WSJT-X. I have used Quisk, SDR Console, SparkSDR, openHPSDR and Thetis with my HL2. I have connected software to WSJT-X, N1MM+, CW Skimmer and DXlabs Commander using virtual serial ports and virtual audio cables.

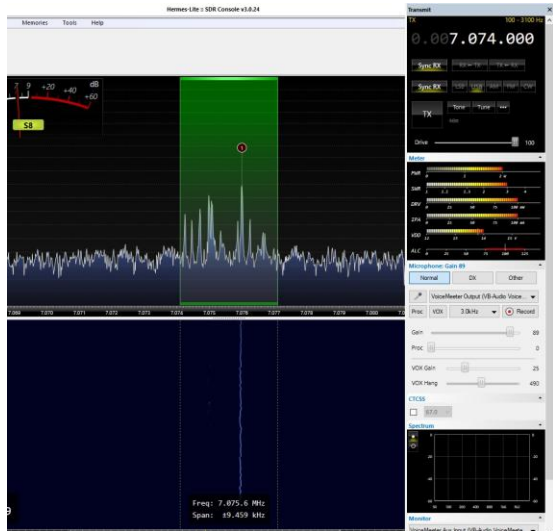
All of the programs have spectrum and waterfall display options with click on a signal to tune to it as well as click to select band, mode and audio filter width. The digital audio filters are quite good and the CW “peaking” filter works well to pick out a signal. Other features include a noise blanker, a selection of noise reduction methods and a notch filter. Since this is an SDR transceiver there are extensive receive and transmit equalizers and transmit compression.



I think that SDR Console is the prettiest and easy to use. It also has relatively low latency side tone, but still no keyboard CW or keyer. Connecting SDRC to DX Commander also connects the entire DXLab suite including WinWarbler for digital modes and DXkeeper logger. For the tone deaf people like me the SDRC receive audio display window is a great aid in precisely tuning CW signals.

I was impressed by the quality of the audio when doing A/B comparisons with my venerable old Elecraft K3. The audio peaking filter on the HL2 receive side is comparable the K3's excellent APF CW filter. On the CW transmit side the low latency of the SDR Console side tone made straight key CW usable. I also use a K3NG type stand alone keyer with side tone and WinKey emulation for paddle and CW macros. The keyer connects to the HL2 straight key jack and keys ithe HL2 directly.

The HL2 worked well with WSJT-X and I made a number of contacts with S/N around -20 db. For SSB I plugged my trusty old Yamaha headset in to the laptop and used VOX to key transmissions. Since my laptop has a TRRS jack I had to use a splitter to separate mic and headphone connections. Although there is a monitor function, I found that for SSB, like for CW, the latency lag made it unusable.



In addition to functioning as an HF transceiver the HL2 can act as a useful piece of test equipment. Since this is a wide band SDR receiver it also works well as a spectrum analyzer. PC software supports frequency and level calibration. I calibrated mine using a Leo Bodnar mini GPSDO and an attenuator. As a frequency counter it has the ability to read frequency to one hertz. Since it has duplex transmission and reception it can also run special gateway to act as a network analyzer.

Both the uSDX and the HL2 both put out about 5 watts RF. On the power consumption side they are again completely different. My power supply showed these current draws in amps at 13.8 volts on 40 meters, with the HL2 emitting an indicated 5 watts and the uSDX emitting an indicated 6 watts:

In summary these are two complementary transceivers. The uSDX is small, inexpensive, efficient, self contained, QSK and excels at CW. The Arduino used appears to limit potential growth and firmware development is mostly a one man effort. The HL2 requires a host computer with an Ethernet connection. It receives great swaths of the spectrum and features a wide panoramic waterfall display, multiple good receivers and great SSB performance. Its CW reception is fine, but it lacks a keyer and side tone and adding those is a kludge at best and it is not QSK. It is much more expensive than the uSDX, particularly when you include the host computer cost, but much less expensive than the high end SDR radios from Apache and Flex. The main board has gone through nine build revisions with constant improvements. The firmware and PC software are under constant development by multiple developers as are hardware add ons. The uSDX is a great choice for portable CW ops and I'm hoping that the HL2 will grow to become a great desktop transceiver.



**WHEN I GROW UP
I'D LIKE TO BE A
RETIRED LOTTERY
WINNER.**

**The best part about
getting older is...
Nothing.
Getting older sucks.**

DX & Contest Special Interest Group

Chuck, W8PT
DX & Contest SIG Coordinator



The DX/Contest Special Interest Group meeting was held at 7 PM on Tuesday, March 23rd. Those who attended discussed the following:

1. CQ WW WPX Contest - SSB Mode
2. State QSO parties taking place in April
3. HF Contesting Guideline Document
4. Band conditions

We reviewed the CQ WW WPX contest that took place on the weekend of March 27. We noted that this is one of the contests where the rules make it difficult for individual members of a club to work the contest from their own QTHs and then try to pool their logs for a club entry, as we have been doing lately. The rules simply don't allow that to work in a straight forward way. So the general consensus was that those who wanted to work the contest could do so in the Single Op category and put PCARS down as their club affiliation, knowing that it would not count toward a club score.

There will be **8** state QSO parties taking place in April: Louisiana, Mississippi, Nebraska, New Mexico, Georgia, North Dakota, Michigan, and Florida. A few of them are split timed so that participants can get a night's sleep before starting again the next day. We concentrated on the one that takes place April 24-25. This is one of the contests that allows you to get a night's rest. We had a show of hands as to whether or not there would be members playing in this contest. At least 5 showed that they planned to enter. As we have been doing, we will work from our own QTHs, using our own calls and making sure that when we turn in our Cabrillo formatted logs, we have listed Portage County Amateur Radio Service (full name) as our club affiliation. I encourage as many as can participate to do so, even if it's for just a few hours.

For those of you who receive **ON ALL BANDS** (<https://www.onallbands.com/>) regularly, March 22 issue was entitled: **Ham Radio Contesting Etiquette for Contesters and Non-Contesters Alike** (<https://www.onallbands.com/ham-radio-contesting-etiquette-for-contesters-and-non-contesters-alike/>)

In this issue there was a link to an ARRL document entitled, **HF Contesting Guidelines** (http://www.arrl.org/files/file/Contest%20-%20General/HFContestingGuidelines_201411.pdf). If you, like me, save these emails, I encourage you to use that link to go to the document and give it a good read. It is a very well put together discussion on how to operate in a contest. You will find several brief discussions regarding various aspects of contesting that in some cases will even help the non-contester to understand how to operate in general. Do yourself a favor and check it out.

Digital Special Interest Group

Rick, K8CAV
Digital SIG Coordinator



The PCARS Digital Special Interest Group will be meeting virtually on Tuesday April 6th on the K8IV 146.895 repeater. This is an open forum meeting which means will talk about what ever digital topics you want.

We can also do digital coms on the repeater or if you'd like, we can switch to HF and communicate digitally there. 40 meters seems to be a decent band in the evening for ground wave coms locally.

As always if you are having any problems or issues with setup or anything else, we'll do our best to help work them out.

Shack Shots - Jeff, KB8ZWT



Jeff, KB8ZWT

My interest in Amateur Radio started in the late 70's after the movie Smokey and the Bandit came out in May of 1977. Yes, a CB radio was my first radio. My Handle was "One Wheel". One Wheel sounds like a strange handle, but when you rode around town on one wheel (a Unicycle) I think the handle fit me.



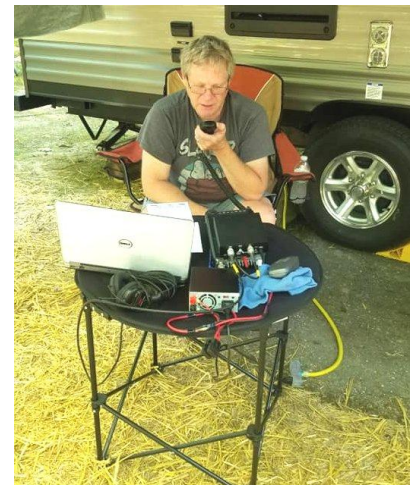
When I was in Junior High one of my friends invited me over to his house one day and I saw my first Ham Radio shack. My friend, his brother and mom all had their ham radio license. I watched in amazement as he made a CW contact and then a Phone contact. The hook was set.

It wasn't until the early 1990's when I started working at the Summit County Metro Parks as a Park Ranger when I started looking into getting my Amateur Radio license. I first bought a scanner and started listening to local repeaters. In 1993, I started working at the Village of Silver Lake Police Department. One night, I was working and drove through the parking lot of the Church in Silver Lake and noticed the parking lot was full of cars with all kinds of strange looking antennas on them. I walked into the Scout House where the Cuyahoga Falls Amateur Radio Club was having a club meeting. The next day, I went to Radio Shack and bought the "Now You're Talking" book. A short time later, I got my Amateur Radio License.



A short time after retiring from the police department I started working at DX Engineering. In 2018, I upgraded to General and started building my HF shack. I'm mostly interested in DX and some contesting.

I'm currently using an Icom IC-7200, Icom IC-7300, Yaesu FT-891 and an Icom ID-880H VHF/UHF Dstar radio. I have a Butternut HF9V and Chameleon EMCOMM-II 6-160 meter antenna for HF and a Diamond X50A base antenna for VHF/UHF.



When I go camping, I take the Yaesu FT-891 and a Chameleon MPAS portable HF antenna with the MIL-EXT and spike mount.

I have enjoyed Amateur radio over the last several years and look forward to many more years.



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 72 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.



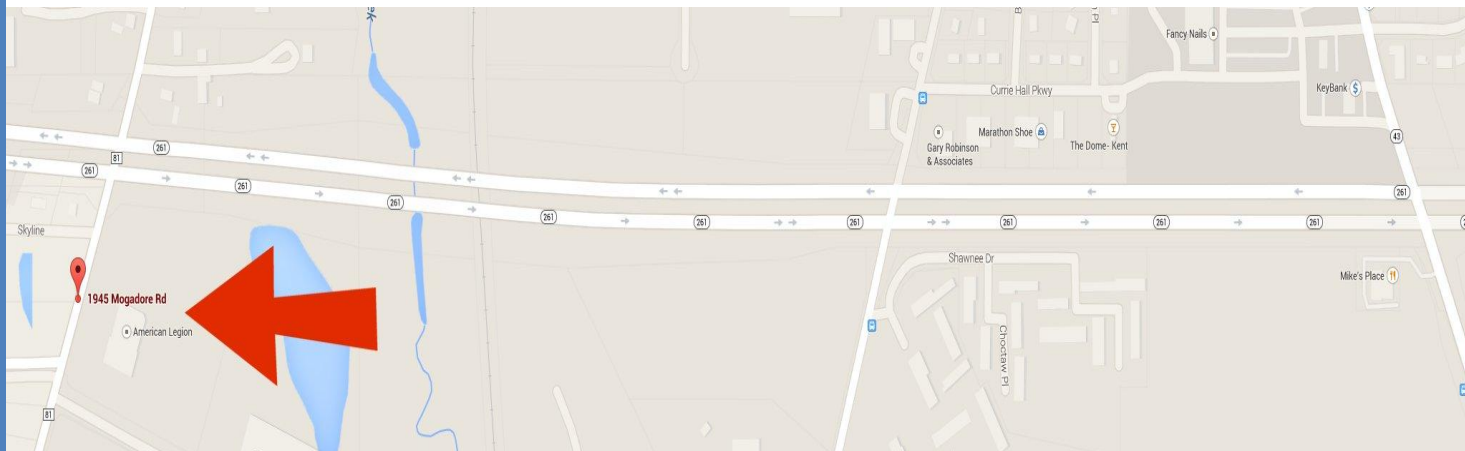
PCARS Meetings

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.



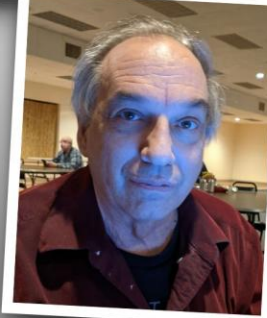
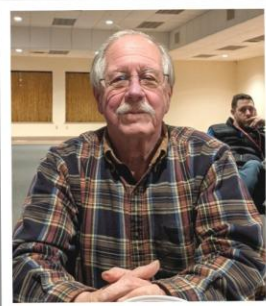
*The picture on the left shows
The American Legion Post 496
as viewed from Mogadore Road.
(looking East)*



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.

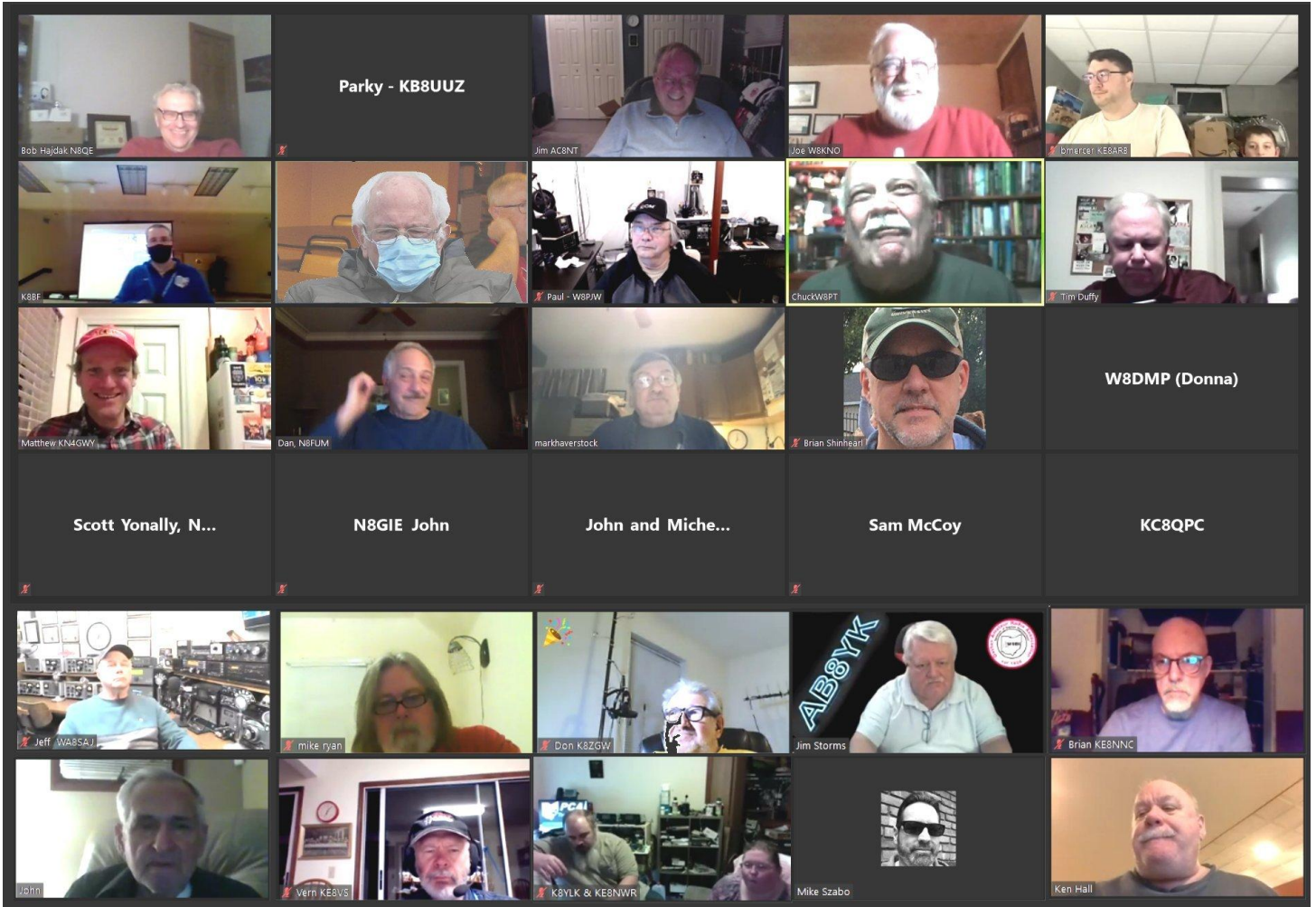
Photos from the March Meeting



PCARS
8 Mar 2021



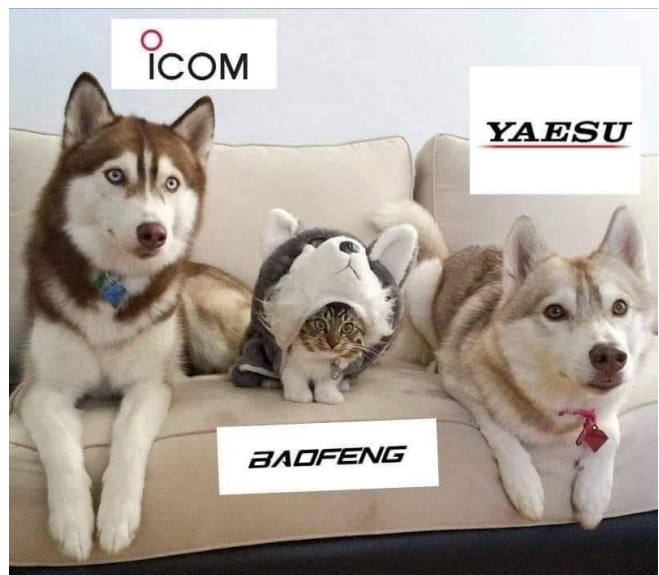
Photos from the March Meeting - via Zoom



PCARS
www.portcars.org



Baby Boomers will get this 🤔😄
Too Funny!!



Take the
"OLDER THAN DIRT"
Quiz
Do You Remember?

1. BlackJack Chewing Gum
2. Wax coke-shaped bottle with colored sugar water
3. Butch Wax
4. Candy Cigarettes
5. Soda Pop machines with Glass bottles
6. Howdy Doody
7. Restaurants with tableside JukeBoxes
8. Home milk delivery in glass bottles
9. Party Telephone Lines
10. NewsReels before the movies
11. 45 RPM records
12. P.F.Flyers
13. Carrying a Metal Lunchbox
14. Drive in Movie Theatres
15. Telephone numbers with word prefix (Olive-6971)
16. The Andy Griffith Show
17. Soda Fountains
18. Roller Skate Keys
19. S+H Green Stamps
20. Blue Flashbulbs

If you remember 0 to 5 - You're a WhipperSnapper

If you remember 6 to 15 - You're Gettin' There

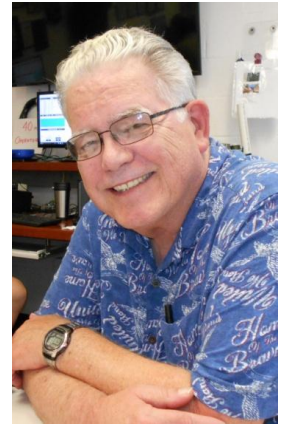
If you remember 16 to 20 - You're

"OLDER THAN DIRT"

Thanks & 73

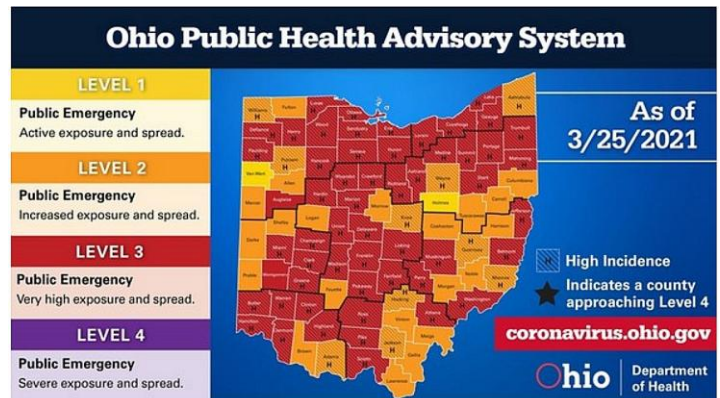


Parky, KB8UUZ
PCARS Newsletter Editor



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 PCARS is known as the **BIG FUN** amateur radio club. So chip-in and send your article in to keep this newsletter great for 2021 and beyond. You will see some humor based cartoons and articles about the COVID-19 - Yes, I agree this pandemic is *VERY* serious to all - but in tough times, you just have to have a bit of humor to get you through - I hope you agree. **Hang in there, please.**

Please - Be careful out there, wear a mask and practice social distancing. **Ohio is still mostly in the red. And Portage County is still red (as of March 27th).** We will get through this if we all work together. I'm still looking forward to seeing **ALL** of you in person - sometime later in 2021.



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

KB8UUZ, AC8QG, N8WCP, KE8EGF, WA8EFK, N8SY, W8CI, NF8R, W8BBQ, K8CAV, N8FTP, KD8MQ, W8KNO, ZL3SV, W8PT, NISPY, KA8TOA, KD8CGH, KB8ZWT, The ARRL, The Daily DX and the World-Wide Web.

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

Here's What You Can Do After You're Fully Vaccinated Against COVID-19

<https://www.prevention.com/health/a35852257/what-can-you-do-after-fully-vaccinated-covid-19/>

2021



1918



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

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

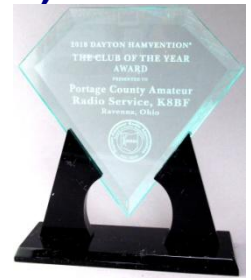


PCARS meets the second Monday of each month at the **Kent American Legion Post 496**,
1945 Mogadore Rd. - just South of Rt. 261 - Enter the rear of the building for the meeting room.


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



~ 2021 Officers ~	2021 PCARS Appointments & Committees	
President - Nick Wagner - AC8QG Vice President - Mike Szabo - N8WCP Treasurer - Paul Hyland - KE8EGF 3 Year Trustee - Amy Leggiero - N8AMY 2 Year Trustee - John Myers - KD8MQ 1 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 & Web Guru	K8SRR Steve Randlett
	Field Day Chairman, 2021	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	AC8NT Jim Wilson
	Net Control Manager	KA8TOA Greg Ash
	Net Night - Club Manager	WB8LCD Tom Sly
	Newsletter Editor	KB8UUZ Tom Parkinson
OSPOTA Chairman	KB8UUZ Tom Parkinson	
~ Meetings & Net ~	Public Information Officer	
2 nd Monday of each month. 7pm Thursday night Club Net at 8 pm on 146.895	Secretary	
	Social Media	N8AMY Amy Leggiero
	Tech, Gen & Extra Class Manager	AC8NT Jim Wilson
	Volunteer Examiner Liaison	KB8UUZ Tom Parkinson
	Webmasters	KD8MQ John Myers K8SRR Steve Randlett



**PCARS
Active
Volunteer
Examiner
Team
Members**

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



THE RADIOGRAM

PCARS Incorporated
Nov. 1, 2005

First Meeting
Nov. 14, 2005



ARRL Affiliation
April 20, 2006



Special Service Club
March 22, 2010

The RADIOGRAM copyright ©2021, is the official newsletter of the Portage County Amateur Radio Service, Inc. (PCARS) - Hamvention® 2018 Club Of The Year. The RADIOGRAM is an Award Winning newsletter: **ARRL Ohio Section Newsletter - Third Place 2015 - Second Place 2014, 2016, 2020 - First Place 2012, 2013, 2017, 2018, 2019. ARRL Great Lakes Division Newsletter - Second Place 2013 - First Place in the 2017 & 2020.** Articles are the opinion of the authors and not necessarily those of PCARS. Or, better yet, let me express it this way: "These are my opinions and only my opinions, unless you share them as well, which would make them our opinions, but I am not of the opinion that I can express your opinion as my opinion without your prior expression of said opinion, and then my re-utterance of that opinion would, in my opinion, be foolish unless I were expressing agreement to your opinion, and then it wouldn't be my opinion but your opinion to which I only agree." **GO AHEAD - STEAL THIS NEWSLETTER!** You have our permission to post, e-mail, copy, print, or reproduce this newsletter as many times as you like, but please do not modify what you use. If you use material in this newsletter, all we ask is that you give credit to PCARS along with the author of the article. Caution - some of the articles in this newsletter maybe covered by copyright - please do not copy and use the ones that have by-line information unless you obtain permission from the original author. If you're not sure, drop an e-mail to KB8UUZ@gmail.com. The RADIOGRAM always obtains written permission for reproducing copyright material. The RADIOGRAM comes out the first day of each month (usually), please have inputs submitted by 8 pm ET on the last Friday of each month. ARES® (Amateur Radio Emergency Service®) is a program of, and both logos are registered trademarks (used with permission) of the American Radio Relay League, Inc. ARRL, the National Association for Amateur Radio™. **Why the Black Squirrel in our logo?** For those of you not familiar with it: The Black Squirrel is commonly seen around Portage County, Ohio. Seems that some of these little guys and gals got loose from Kent State University back in 1961. They have migrated and thrived throughout our county. Kent State University even has an annual Black Squirrel Festival. **So when you spot a black squirrel – think PCARS!**

The RADIOGRAM is published every month and only sent to subscribers. If you would prefer not to receive this newsletter, we understand. We'll try not to take it personally. It's not you saying you don't like us, but maybe you just don't have the time to look at all this hard work we've done just for you. Hey, that's cool. But if your heart is truly set on making sure you no longer receive this newsletter, even though we promise to one day reveal the meaning of life in it and you're going to be really upset when you miss out on that, we can take you off the e-mail list. Send your newsletter inputs (in .TXT format) along with in-focus pictures (not small 50 kb photos) to the newsletter editor: KB8UUZ@gmail.com

By attending PCARS in-person activities, you are acknowledging that an inherent risk of exposure to COVID-19 exists in any public place where people are present. By attending PCARS in-person activities, you voluntarily assume all risks related to exposure to COVID-19 and covenant not to sue and agree not to hold the Portage County Amateur Radio Service (PCARS) or any of their directors, officers, contractors, vendors or volunteers liable for any illness or injury. While PCARS implements preventative measures to reduce the spread of COVID-19 in accordance with Federal, State and Local guidelines, we cannot guarantee that attendees will not become infected with COVID-19 as a result of attendance.



NLC



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