



The **RADIOGRAM**

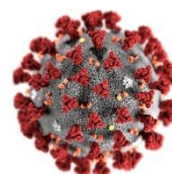
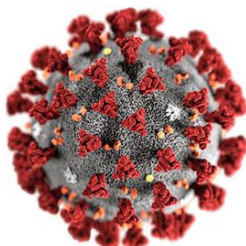
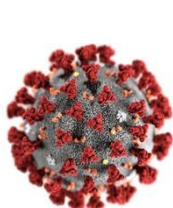
When All Else Fails ~ Amateur Radio Works

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

PCARS - the 2018 Hamvention® Club of The Year

April 2020 - Volume 15 Number 4

Limit In-Person Social Contact



**OUR HOBBY IS A GREAT WAY TO
COMMUNICATE**



**FROM AROUND
THE CORNER
TO AROUND
THE WORLD**

**GET ON THE
AIR !**

Gary Spence ▶ QCWA National Capital Chapter 70

Amateur Radio: Social Distancing for over 100 years. 🎤



PCARS K8BF

The Club that puts the FUN in Ham Radio!



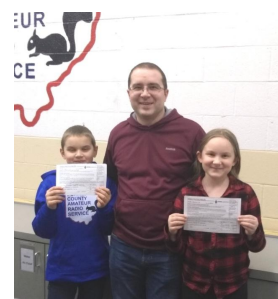


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Portage County Amateur Radio Service

K8BF

2018 Hamvention Club of the Year

ARRL FIELD DAY 2020

JUNE 27-28

From the President

Tom, WB8LCD

PCARS President



We know that our club members have a lot of questions and concerns with respect to the Coronavirus (COVID-19) and we are reaching out to share with you what we are doing. We want you to know that your health and safety is top priority and we are taking the coronavirus outbreak very seriously.

PCARS is cancelling: Board Member Meetings, Regular Member Meetings, Special Interest Group meetings, Club-site Build Days, Club Site activities such as contesting and VE testing sessions until further notice. Please check the PCARS web site (www.portcars.org) for any updates.

When we do re-open the doors, our first activity will be a complete and thorough cleaning of our club facility. We cannot stress enough that we are being proactive because your health and safety is our foremost priority. We will continue to monitor developments and evaluate the situation to support our club members as needs arise.

If you have any concerns or questions, please email me or one of the PCARS officers. You can find our e-mail addresses on the PCARS web site in the 'Members' area.

The Thursday evening nets on 2-meters will continue. Please check in via the repeater or from EchoLink. We encourage everyone to keep in touch via ham radio as much as possible. **Get on the Air!**

On Monday April 13, 2020 we WILL HAVE a PCARS meeting! And you won't have to leave your house to attend. This will be our first "Virtual Meeting" and will be held on the ZOOM platform. Very easy to use and participate. As we get a little closer I will send you all the information you'll need to get logged in. BOTH Jim Storms, AB8YK and Michael Kalter, W8CI will attend online as our featured speakers to talk about the **David Kalter Memorial Youth DX Adventure program**. You won't want to miss it.

A big "Thank YOU" to Amy, KD8SKL for taking over as our social media chairperson. If you haven't taken a look at the PCARS Facebook Page lately – check it out! Amy has already made some serious updates and changes to the page to make it current.

I'll be rolling out some PCARS "Stay at Home" operating activities. These will be events that last as long as the quarantine does and there will be PRIZES for the winners! Stay tuned.

One last "housekeeping" item. Not knowing what goes on around our club site in this extended quarantine period, I have made sure that the hasp has been secured on the door leading to the bathroom, and on the door between bays 2 and 3. I have also removed the key from the outside lockbox. I want to do everything possible to keep our club site safe from intruders. If, for some reason you need to gain access to the club site, contact me directly and I will make sure arrangements are made to get you in.

We are privileged to serve you and thank you for your ongoing support of PCARS. I will be in contact with you on a regular basis to keep you informed of what PCARS will be doing as we pass through this time of disruption. God Bless you all, and please, stay safe.

From the Vice President

Nick, AC8QG
PCARS Vice President

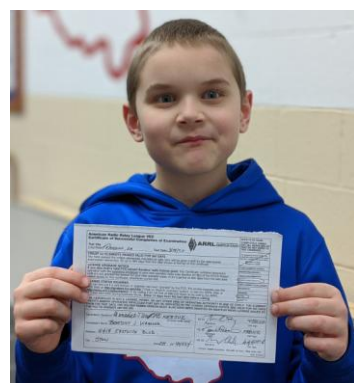
"Every day is a great day. I have my faith, my family, and live in the finest country in the world." — U.S. General James "Mook" Mukoyama.

First of all, I hope and pray that everyone reading this is healthy and safe. The novel coronavirus has already significantly affected me and my friends and family. A person I've known for several years lost his fight against this "silent enemy." A family member is preparing to deploy to NYC with his Army Reserve unit. Other family members are in quarantine due to confirmed exposure. I know that many people, probably some of you, are experiencing similar situations. Stay strong, and hang in there! We're all in this together!



Congratulations to all the people who passed their exam at our last VE session! Several people picked up their General Class upgrade. I have to admit, I'm especially proud of my kids who upgraded. **Agnes, KE8LWP upgraded to General, and Ben, KE8JUZ upgraded to Extra.**

I think I need to get a few more antennas up at home.



Unfortunately, all in-person events are canceled for now but rest assured, they will be back. I'm looking forward to seeing everyone face-to-face once everything returns to a more normal state. In the meantime, let me know if you have any ideas, or if you want to see a specific activity or training program. If you can teach a ham radio skill, lead a build day, give a presentation, or help in any other way, I want to hear from you, too. I'm always looking for volunteers!

Upcoming Meetings and Events

All of our in-person board meetings, regular monthly club meetings, special interest group meetings, build days, and all club Site activities are canceled until further notice.

On April 13, we will have Jim Storms, AB8YK and Dave Kalter, W8CI as guest speakers for our very first virtual meeting! They will talk about the David Kalter Memorial Youth DX Adventure program. Watch for an upcoming QST or check the web site for the information you'll need to participate.

We'll do our best to keep everybody up to date by QST emails. If you are a paid-up member and are not getting those emails, and you would like to receive them (typically a few per week), please send me an email at vicepresident@portcars.org and I'll work to resolve the situation. You can also get all the info you need by checking the PCARS web site (<http://www.portcars.org>), and by joining in our Thursday evening 2-meter nets through the repeater or on Echolink.



Schedule of Events

On the calendar for upcoming meetings and activities are:

- April 6th - Board Meeting - starts at 7 pm
- April 13th - PCARS Meeting - 7 pm - On-Line
Jim Storms AB8YK & Dave Kalter W8CI
Youth DX Adventure (YDXA)

Special Interest Groups (SIGs)

Every Month at the Club Site in Ravenna - 7:00 pm

NOTE: All In-Person Activities & Meetings

Subject To Cancellation

Check Web Site for Updates

- | | | |
|-----------------|---|---|
| First Tuesday | - | Digital - Moderator: Rick, K8CAV |
| Second Tuesday | - | QRP/CW - Moderator: Terry, KB8AMZ |
| Third Tuesday | - | Antenna - Moderator: Tony, WA8AR |
| Fourth Tuesday | - | DX & Contest - Moderator: Chuck, W8PT |
| Fifth Tuesday | - | Linux for Hams - Moderator: Terry, KB8AMZ |
| Fourth Thursday | - | Net Night at the Club Site - 6:30 pm - Moderator: Tom, WB8LCD |



PCARS Custom Coffee Cups - Limited Edition- Going Fast

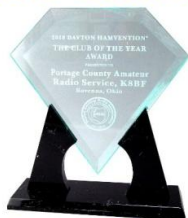
PCARS has obtained a number of special, custom made coffee cups that are available only to members.

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 in person 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



K8BF

2018 Hamvention® Club of the Year

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

See Paul for all of the details



Michael Kalter - W8CI - PCARS Life Member

Tom, KB8UUZ



In 2019, the PCARS Board of Directors had decided to grant Michael Kalter, W8CI a Life Membership in PCARS. It was going to be presented to Michael at a PCARS meeting he was scheduled to attend in 2019. Unfortunately there was a family emergency and Michael had to cancel his visit.

Michael is a very busy person traveling all over the world promoting Hamvention® and Amateur Radio. Finding an open date in his calendar is not easy. However, we were able to get him re-scheduled for his visit to PCARS at the April 2020 meeting. Well, needless to say, the Covid19 virus put a halt to that.



Michael did manage to visit DX Engineering on March 17th to announce that Hamvention® 2020 was cancelled (you can see that video at: https://www.youtube.com/watch?v=yeBZLiA_xZ4).

While he was at DX Engineering I was able to see Michael and present him with his PCARS Life Membership. He was very surprised and very thankful of the honor of being presented the proclamation and life membership in PCARS. He said he did not deserve it. I told him, that PCARS has always considered him one of the best Ambassadors of amateur radio through his years of involvement in the hobby at all levels.

This is what the proclamation read:

WHEREAS, Michael Kalter, W8CI, is the Official Spokesperson, a former Chairman for the Dayton Hamvention® and;

WHEREAS, Michael Kalter, W8CI, has always demonstrated the highest level of commitment to the mission of amateur radio; and

WHEREAS, Michael Kalter, W8CI, in his many years of service with the Dayton Amateur Radio Association has always championed the encouragement of youth in being actively involved with Amateur Radio and has been an integral part in the promotion and advancement of amateur radio throughout the world and:

WHEREAS, Michael Kalter, W8CI, shares with the Portage County Amateur Radio Service, the passion of, and the every-day promotion of amateur radio.

NOW, THEREFORE, I, Tom Sly, WB8LCD, President of the Portage County Amateur Radio Service, Inc., by virtue of the authority vested in me by the Constitution and by-laws of the Portage County Amateur Radio Service, Inc. with pleasure, as a token of our appreciation for all that you do, I hereby grant:

Michael Kalter, W8CI, a Life Membership with all member privileges in the Portage County Amateur Radio Service, Inc.

PCARS VE Test Sessions

Tom, KB8UUZ
PCARS VE Team Liaison

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

NOTE: All Dates Subject To Cancellation

Check Web Site for Updates

Jun 6th, Aug 1st, Oct 3rd, Dec 5th, June 27th at the Field Day site - 4 pm

Amateur Extra Class question pool changes - July 1, 2020



What to Bring to the Testing Session

- \$15 is still the current test fee. We prefer the exact amount in cash or a check made out to: **ARRL-VEC**
- A government photo ID (**driver's license or state ID card preferred**).
- Your Social Security Number or FCC Federal Registration Number. We are required to submit either your Social Security Number (SSN) or your FCC Federal Registration Number (FRN) with your application. If you are upgrading, your FRN is on your current Amateur Radio license.
- A pen (black ink) and pencil (we can loan you either or both)
- **If you already have an Amateur Radio license: One copy of your current (*unexpired*) Amateur Radio Operator License issued to you.**
- 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 reinstate your license.

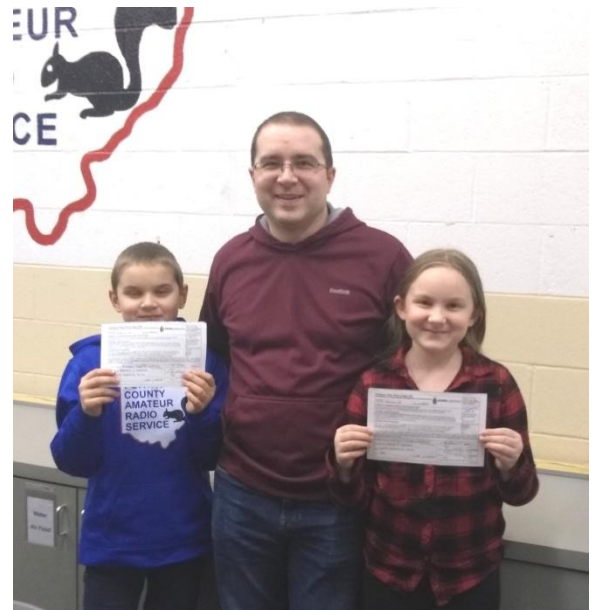
Any Questions? Contact: KB8UUZ@gmail.com



At the last VE Test Session held on March 18th - the last evening of the General Upgrade Class at the club site, there were a few from the class and a few other walk-ins to take tests as well. Thanks goes out to the VE's that helped grade tests: WB8LCD, KA8TOA and myself, KB8UUZ. A couple of other VE's showed up, but they had family taking tests, so they were just there to supply encouragement.

The two hams taking upgrades that made everyone smile after the grading were 9 year old Agnes, KE8LWP and 11 year old Ben, KE8JUZ. **Agnes upgraded to General Class and Ben upgraded to Amateur Extra !!!** Nick, AC8QG was there and the smile never left his face!

Ben elected to get a 2x2 call - We're waiting for the FCC to issue him his new call



phonetic alphabet

A
alpha

B
bravo

C
chunky

D
drape

E
egg

F
fingler

G
guy fieri

H
horp

I
i forget

J
jorp

K
Kristen
Stewart is not
a great actress

L
like she is
okay, but, just,
not great

M
mup

N
nup

O
oboe

P
pwom

Q
quimple

R
Rob
Schneider

S
soup &
tequila!

T
tequila &
soup!

U
umm?

V
kevin

W
wu-tang

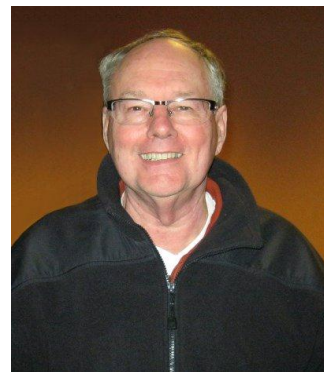
X
ex-wife

Y
why

Z
zee last letter
in the alphabet

Reduce confusion with this
standardized NATO alphabet
chart.

Jim, AC8NT



Keeping Active

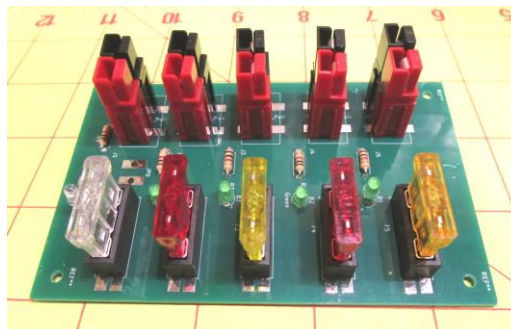
These are difficult times as everyone knows. We find ourselves more isolated than ever when it comes to face to face contact. We are not taking part in as many activities that keep our minds occupied and learning. But we do have options. Here are some of the things I have used to keep my “little grey cells” working.

Help another ham with a problem:

My brother Ted, KB5CNB in Denver lives in an apartment. He has a small balcony to use as an antenna location. For some time we have discussed a mag loop as an alternative. He purchased an MFJ loop from our friends at DX Engineering and I picked it up for him. As some of us know, MFJ stuff can have problems out of the box. Problems range from loose screws finding their way into circuit boards to major mechanical issues. I agreed to test the antenna, return it if necessary and ship him a working unit. I was worried when the box didn't rattle when I loaded it into the car. This is bad mojo. When I got it home I gave it a good inspection and found a solder connection completely missing. Once fixed, I finished the checkout and found it worked fine. I shipped to Ted and he has it up and running with his Yaesu FT-991. He can now have some fun working the world with his new setup. Good for both of us.

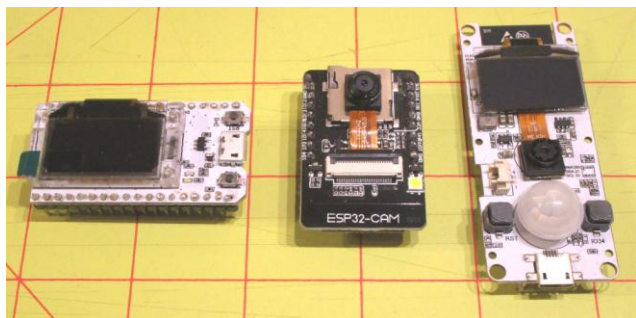
Complete some projects that have been on the bench way too long:

I finished the circuit board for the PCARS PowerPole build. There are now 20+ kits ready for the build when times get better. Learned to use KiCAD and work with some new board suppliers to get this project finished. I am also finishing up a design and board for the paint can dummy load and power meter that was in the November 2018 QST. The goal is to have kits available for this project in April. Another great build in the making. All of us have projects and kits yet to be finished. Now we have the time, get them done.



Learn something new:

I am learning two new CAD packages that will be very useful going forward. One is FreeCAD and it is a lot of fun. I have used it to build 3D models for projects and improve some of my mechanical design skills. I am fortunate to have access to a ton of software I have never had the time to explore. Now I have the time and I am exploring. Take a little time to learn something new. If you can't operate CW, now is the time to learn code.



You might also consider learning more about microcontrollers. For some this may seem impossible, but it isn't. I have been helping young and old learn enough to complete great projects. Lots of tutorials are on-line to help you learn how to program and hook up microcontrollers. Pick a simple project and build it. “Hacker.IO” and “Instructables” are two great resources for projects and learning opportunities. A few of the controllers I am playing with are shown in the included picture.

Use the on-line resources of your public library. Many have access to all kinds of course materials. Maybe you want to learn another language. Just an idea.

Get on the air!!!

I have been working 20 meters and having a lot of great contacts. Lots of us are hold-up at home, so there are some neat opportunities for contacts. There are some great HF nets you should check out.

I am on D-STAR and DMR a lot. It has allowed me to talk with hams all over the world often in nets. Imagine being in a country where things are a lot worse, like Italy. Hams in these locations really appreciate a simple conversation. They are all part of our community and talking with them will help all of us get through this tough time. You may also build friends for life.

Unfortunately I have a Skype class on Thursday nights right on top of our two meter net. That has been tough for me. I really enjoy our nets. However, my two meter rig is powered up most of the time during the day just listening. Maybe if more of us were "listening" we could communicate more. Shout out on our repeater during the day and see who you can talk with.

Final Note:

If we keep busy, living with this situation will be better. We are a fortunate group. We are capable of easily reaching out to our fellow hams in all kinds of situations including our war with this virus. Please stay safe and sane. Better times are coming.



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



On-Line Code Instruction - Free!

Long Island CW Club Offering Free Online Code Instruction for Homebound Youngsters



The [Long Island CW Club](#) in New York is offering free online Morse code instruction for the "many youngsters at loose ends as a result of school closings due to COVID-19 concerns." The club's co-founder, Howard Bernstein, WB2UZE, pointed out that learning Morse code is "a fun and educational activity for children of all ages that can fill part of the gap left by the current unfortunate situation that has closed so many schools across the country."

Ongoing classes will take place Monday through Friday, specifically for school-agers anywhere across the country or overseas, via Zoom online video conferencing.

A computer equipped with a microphone and camera is required. Classes for elementary schoolers run 30 minutes starting at 1600 UTC, followed by 45-minute classes for middle- and high school-aged students, starting at 1645 UTC. Parental permission is required through advance registration.

Contact class instructor Rob Zarges, K2MZ, by [e-mail](#) or call 508-831-8248.

-- *Thanks to Mel Granick, KS2G, ARRL New York City-Long Island Section Public Information Coordinator*

RSGB - Not Accepting Multi-Op Entries

The Radio Society of Great Britain (RSGB) HF and VHF Contest committees will no longer accept multioperator contest entries.



The ban, in accordance with UK social distancing policies, is in effect until the end of June and applies to all RSGB-sponsored contests. Single-operator entries from *shared stations* also will not be accepted, unless the station is being shared by family members at the same address.

The HF Contest Committee has canceled the RSGB HF NFD (Field Day) for 2020, but is okaying portable operation by single operators, "because of the potential mental health benefits associated with engaging in hobbies, as well as the lack of person-to-person contact in normal single-operator contesting."

RSGB is encouraging all to follow UK government guidelines regarding social distancing and unnecessary travel and will decide in early June if the VHF NFD, the IOTA Contest, and SSB NFD events can go ahead as planned.

IARU Adjusting to COVID-19

International Amateur Radio Union Adjusting to COVID-19

The International Amateur Radio Union (IARU) has reported on how it's addressing the COVID-19 pandemic, given the various restrictions in place to slow the spread of the virus. IARU said the International Telecommunication Union (ITU) Headquarters in Geneva remains off limits to visitors until April 17 at the earliest.

ITU has cancelled some meetings, postponed others, and converted others into online gatherings. IARU representatives are adjusting plans accordingly and following a similar pattern.

While Dayton Hamvention® has canceled its 2020 show, Europe's largest amateur radio gathering, HAM RADIO in Friedrichshafen, Germany, is still on schedule for June 26-28.

IARU Region 2 Emergency Communications and Satellite Communications workshops set for May 30 - 31 in Trinidad and Tobago will now be held online. IARU reports that interest and registrations have surged since the announcement. These workshops will be held in English, but preparations are under way for workshops in Spanish to be held later.

IARU Region 3 has canceled its first Youngsters on the Air (YOTA) Camp that had been planned for early October in Rayong, Thailand.

World Amateur Radio Day on April 18 this year celebrates the 95th anniversary of the IARU's founding. IARU has allowed that amateur radio "is the best way to practice social distancing."

IARU Region 1 (Europe, the Middle East, and Africa) has asked member-societies to "reconsider their position" on Field Day events over the next few months.

"Field Days bring radio amateurs together and, therefore, represent an environment where social distancing is difficult to achieve," IARU Region 1 President Don Beattie, G3BJ, said. "We must recognize that many radio amateurs are in the older, higher-risk age groups." IARU will not sponsor the Region 1 HF CW Field Day in June but said national societies have to make their own decisions as to whether their Field Day events will go forward.

Beattie said single-operator contests "remain a great way for those forced to stay at home to enjoy the magic of amateur radio."



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



Welcome to the Cuyahoga Falls Amateur Radio Club

Hamfest 2020 **CANCELED**

I'm sorry to have to inform you that we have made the decision to cancel our 66th annual Cuyahoga Falls Amateur Radio Club Hamfest. This is done as a effort to protect our audience and in compliance with the Ohio Department of Health directives.

We are evaluating other options for later this year.

We thank you for your past patronage and interest and urge you to check this page periodically for updates about our Hamfest plans.

Editor's Note: Most Hamfests have been cancelled due to the Social Gathering bans.

Dayton Hamvention® Announces Cancellation of 2020 Show

For the first time in its 68-year history, Dayton Hamvention® will not take place this year, due to concerns about the coronavirus outbreak. The glum news was not entirely unexpected, given widespread cancellations of public gatherings and a national state of emergency.

“The Hamvention Executive Committee has been monitoring the COVID19 pandemic. We have worked very closely with our local and state health departments. It is with a very heavy heart the Hamvention Executive Committee has decided to cancel Hamvention for this year,” Hamvention General Chair Jack Gerbs, WB8SCT, said in announcing the cancellation on March 15. “This decision is extremely difficult for us, but with around 2 months until the Great Gathering we felt this action necessary. More specific details regarding the closure will soon be posted. Thank you for your understanding in this time of international crisis.”



The Dayton Hamvention® cancellation comes less than a week after the International DX Convention in Visalia, California, called off this year's show. The Dayton Amateur Radio Association (DARA) sponsors Hamvention®.

Since 2017, Hamvention® has been held each May at the Greene County Fairgrounds and Expo Center in Xenia, Ohio. The international gathering attracted more than 32,000 visitors in 2019.

Hamvention®'s announcement has caused the cancellation of other associated events. These include Contest University, the Contest Dinner, and the Top Band Dinner.

Refund Information

Due to unfortunate cancellation of Hamvention® 2020, we know that tickets, inside booth spaces and flea market spaces have been purchased. These purchases have been made by online credit cards, mail order checks and purchased from our outside vendors. All refunds will be through the same method of purchase. All credit card sales will be refunded to the original card used to make the charge. All check and cash sales will be refunded by check. We anticipate all refunds completed as soon as possible but not later than August 1.

We are offering the following options: Obtain a refund. Obtain a 2021 ticket instead (to be mailed around January 1, 2021) Hamvention 2021 May 21-23 or Donate to Hamvention (no refund). For all general

admission (not inside or flea market) online and mail orders, email tickets@hamvention.org with your preference. Emails already received will be processed as indicated.

Inside booth holders please email exhibits@hamvention.org with your refund preference. If you opt for the hold until 2021 they will contact you to verify.

Flea Market staff will be contacting each flea market space holder personally concerning refund of space(s).

If you purchased a ticket at one of our outside vendors then please return to the place of business and they will handle your refund.

Mail correspondence to: Hamvention Tickets – 2020 refunds, PO Box 1446, Dayton, OH 45401-1446

This is the email that James Andrews, KD8VT received from Dave, N8FYQ, Dayton Hamvention® Flea Market Chairman concerning refunds for the cancelled 2020 Dayton Hamvention®:

This is the Flea Market Refund/Credit statement that is being sent out:

https://drive.google.com/open?id=1_tToFIdkPhTV5aHmBFiEC7t8gfjNw_RM . Please feel free to share it with any other vendors. As you'll read, it's fairly self explanatory, with some simple directions for vendors to follow. As we've already received some e-mails, indicating a desire for both refunds and credits, this letter will guide others and we'll be able to start processing requests much sooner. Thank you for your willingness to spread the "accurate" information, as this will help calm the curious crowds. As always, should you have any other questions, please feel free to reach out.

Stay safe and healthy,
73, Dave
N8FYQ
Flea Market Chairman

Other Hamvention® Related Activity Refund Information

Refunds are being processed for Dayton Hamvention®-associated social gatherings, including [Contest University](#), [Contest Dinner](#), and [Top Band Dinner](#).

Each event has its own procedures.

Those who signed up for the [DX Dinner](#) will be able to obtain refunds via PayPal. An email to all registrants will provide details. — *Thanks to Tim Duffy, K3LR, SWODXA*



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Spark - A New Form of Communication

John, KD8MQ



I spent some time tonight perusing the April issue of QST; April, 1920 that is. It's always cool to see where we came from, plus gives me something to write about to boot.

Before we get into the subject of this month's article, I'll put in a plug for the ARRL. Among all the other stuff the league does, one of the member benefits I really enjoy is the QST back-issues. It's kind of cool to be able to see what our Old-Old-Old timers were up to.

So, in April, 1920, this new mode called CW was becoming popular. Before that, it was spark gap. So what's the difference, you ask? Well, to over-simplify, spark gap would send out a very broad signal that would take up a large part of the band. Think of it as keying your transmitter on 40 Meters and wipe out the entire band. I'm not sure if this was a good analogy, but I suspect it was.



So, along comes CW which is a much more spectrum friendly way of communicating. Why wouldn't folks switch over to it?

So, in this article in QST, the author tells of the various stations who are trying out this new CW mode. For instance, 2ZL, the ARRL Traffic Manager was junking his spark setup as "outgrown". His CW station consisted of a "few small oscillators in parallel, with an antenna current of 1.2 Amperes". Transmitting on 275 Meters (around 1.090 MHz) from Connecticut, he was able to pass traffic to Ohio, and Massachusetts when the spark stations could not. Reception was reported as far away as Florida, and Illinois.

It was also noted that these CW signals could be more challenging to tune in, but with careful tuning, and adjustment of the regeneration, it could be done. Spark transmissions, however rarely required careful tuning at all due to the broadness of the signals.

It was noted that CW could often be read through "an inferno of spark QRM". In closing, the editor urged the adoption of CW by all "serious experimenters".

Another interesting part of the article notes that if the CW was modulated by a buzzer, commutator, or by audio oscillation, the signals could then be copied on a non-oscillating receiver (Think crystal set), but the range would be cut in half. Even at that, though the signal would still be far superior to the spark transmission.

I'm glad his suggestion was heeded. That's all I have this month, so 73, and I'll see you hopefully in next month's issue.



Contest Calendar

April Contest Calendar	
Contest Name	Times
Louisiana QSO Party	1400Z, Apr 4 to 0200Z, Apr 5
Georgia QSO Party	1800Z, Apr 11 to 2359Z, Apr 12
Michigan QSO Party	1600Z, Apr 18 to 0400Z, Apr 19
Ontario QSO Party	1800Z, Apr 18 to 1800Z, Apr 19
ARRL Rookie Roundup, SSB	1800Z-2359Z, Apr 19
10-10 Int. Spring Contest, Digital	0001Z, Apr 25 to 2359Z, Apr 26
Florida QSO Party	1600Z, Apr 25 to 2159Z, Apr 26

YES - There are MANY More Contests out there - Check the internet.

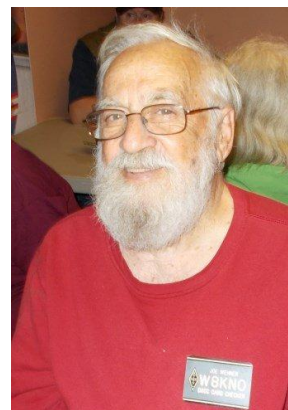
Contests that will be active at the PCARS Club Site in 2020	
<p><u>NOTE: All Contest Activities from Club Site</u></p> <p><u>Subject To Cancellation</u></p> <p><u>Check Web Site for Updates</u></p>	
Date	Contest
Apr 25-26	Florida QSO Party
May 2-3	New England QSO Party
Jun 13-15	ARRL June VHF Contest
Jul 18-19	North American QSO Party-RTTY
Aug 22-23	Ohio QSO Party & BB-QSO Party
Sept 19-20	Washington State Salmon Run
Oct 3-4	California QSO Party
Oct 10-12	Pennsylvania QSO Party
Oct 17-19	New York & Illinois QSO Parties

Paper Chase - Cancelled

Joe, W8KNO

With the current situation about social gatherings, it seems that most Special Event Station activities have been cancelled. Not only here in the USA, but world-wide as well.

Once this pandemic has past and things WILL get back to normal, the Special Events will pick up again. Until then, turn on the radio and make some QSOs. Call CQ.



This is typical of the notices I have been seeing about Special Event Stations:



Hamvention QSO Party

The Dayton Hamvention for 2020 has been [cancelled](#). WWROF, in cooperation with the Hamvention organizers, wanted to create a fun way for people to celebrate the Hamvention experience over the air - the Hamvention QSO Party.



In memory of Ron, W8ILC, who became a silent key just two days after the Hamvention 2020 cancellation announcement. Ron had attended every Hamvention since the beginning.

This is a 12 hour fun event on Saturday of Hamvention May 16, 2020.

Object: To celebrate the Dayton Hamvention by working as many Amateur stations as possible during the QSO Party period.

Contest period: 8 AM to 8 PM EDST (1200 to 2400 UTC), May 16, 2020

Bands: 160, 80, 40, 20, 15, and 10 meters CW and SSB - You can work the same station once per band mode (12 QSOs possible with same station).

Exchange: Signal report and first year you attended Hamvention. If you have never attended Hamvention send "2020".

Entry Categories: Only single operator entries - you may use assistance such as the cluster and the reverse beacon network (RBN). No self-spotting.

There are three power levels:

- QRP - no more than 5 watts
- Low Power - No more than 100 watts
- High Power - no more than 1500 watts.

Scoring: Score is number of QSOs + bonus points = final score. There are no multipliers.

Special bonus points:

W8BI, the club call of the Dayton Amateur Radio Association (DARA is the host of Hamvention) will be activated by DARA members from their home stations. You can add 10 points for each band mode QSO with W8BI (12 available). So you can earn 120 bonus points (this is like having 120 additional QSOs)

To Enter: Post your score at 3830scores.com within 5 days of the event (May 21, 2020). No logs are required.

Awards: An online certificate will be available to all stations that post a score before the deadline.

Questions: Contact Tim Duffy, K3LR, k3lr@k3lr.com

Dead Electrical Dudes - Guglielmo Marconi

Philip, KA4KOE



Entered Mortal coil: 25 April 1874
Assumed Room Temperature: 20 July 1937

Maestro Marconi

Now, in my esteemed opinion, if you haven't heard of Guglielmo Marconi, then you should mail forthwith your amateur radio license back to the Friendly Cookie Company (FCC), with a letter of contrite apology addressed to the honorable Mr. Riley Hollingsworth, K4ZDH, Special Counsel for Amateur Radio Enforcement. At the very best, you may be spared an encounter with the dreaded Wouff Hong (a terrible tool used for dealing out punishment to poor amateur radio operators). To put it simply, Marconi fielded the first practical radio communications system.

GM's investigations were spurred on by the news of the success of Heinrich Hertz's experiments proving the existence of radio waves as predicted mathematically by James Clerk Maxwell.

GM began his experiments in Pontecchio, Italy on his rich Daddy's estate in 1895, aided by his brother. Marconi's DX was an astounding 1.5 miles, a feat rarely accomplished by the memorable Radio Shack CB Channel 14 100mW walkie talkies sold to hapless young waifs more than a half century later, powered by the ubiquitous 9V rectangular battery (great for tingling your tongue, by the way -- neat trick to try on little kids ...heh heh! Evil grin!). Heady stuff, this was. Marconi determined that if he grounded his radio apparatus, performance was dramatically improved. Imagine that! Further experiments and improvements extended the range to 12 miles in 1900, under the auspices of the newly formed Marconi Wireless Telegraph Company Limited. Over the course of 5 years, the Maestro increased the range of his gadget a phenomenal **10.5 miles!** How many of you can match this feat of engineering?

In 1901 Marconi finally got his act together and transmitted the letter "S" in Morse code between Poldu, Cornwall England and Newfoundland, a distance of 2100 miles. Note that the transmitter utilized was a spark gap type. If you've ever seen a high power spark transmitter in operation, it is a treat, since the massive static discharges are spectacular. A little known fact is that the letter "S" (di di dit) was used, as the transmitter would have been damaged by the longer arc duty cycle encountered by sending dahs!!!!

GM carried on with further radio commercial ventures that were a financial success. David Sarnoff, who would later become the head of RCA, started out working for Marconi's company. Did you know that in the early days of Sarnoff's career, he delivered flowers to Marconi's many mistresses? Talk about pleasing the boss!!!



Swap-N-Shop

For Sale: KX2-F KX2 Transceiver - Assembled s/n 1219 with the following options and accessories: KXAT2-F KX2 ATU Option, KXIO2- IO Module/Real Time Clock, KXBT2 Battery Pack (Qty 2), KXBC2 Battery Charger, MH3 Hand Microphone, CS60 Large Travel Bag, KX2ACBL Accessory Cable, KX2GNDPLUG Mini Banana Plug, BNC-BP, Connector BNC to Binding Posts, KX2 Book by Fred Cady, KX3-PCKT Accessory Cable Set, Pro Audio Power Supply, Right-Angle AC Adaptor for power supply, Nifty Mini-Manual for KX2, Nifty Desk Stand for KX2, AlexMic with case (never used), Pro Audio Heat Sink, Left side KX Plate, Side KX Cover, Apache 2800 (similar to Pelican) case.

KXPA100-AT-F 100W Amplifier with Antenna Tuner - Factory Assembled, s/n 2137 with KXPACBL KX3 to KXPA100 Integrated I/O Cable, KX2ACBL Accessory Cable for KX2 and Apache 3800 (similar to Pelican) Case. The KX2 was purchased in November of 2016 and the KXPA100 was purchased in January of 2017. Both have not been used for about 2 years. Total invested is \$3032.58 plus shipping. Asking \$2400.00 shipped and insured to the continental US. PayPal, certified US Bank check or bank money order only.

Contact: Rex, NX8G at: nx8g.01@gmail.com or call 330-936-2192 [07/02/20]

For Sale: Icom IC-735, AT-150 Tuner and PS-35 Power Supply – comes with the HM-12 microphone and power cable. Original Manual and all other associated paperwork included. This was my father's radio system. Handed down to me. Nice rig. Got me going in Amateur Radio. Moved on to a newer rig. Need to make room in the Shack. Asking \$475 plus shipping. CONUS via UPS. I will accept PayPal only. Selling as a package, I will not break them up. Yes, the plastic door is still attached and functioning. All sales are final due to parts swappers.

Contact: Bob, W8RID at: davet102@gmail.com or call 330-425-7313 [07/02/20]

For Sale: Ameritron QSK-5 Pin diode T/R switch 1.5 KW. Works perfectly, in original box with manual. Sold amplifier and now run barefoot so not needed. \$300 **BITX40 40 meter SSB transceiver kit** in unopened box. Bought two and managed to build one without damaging anything so selling backup. \$30 **uBitx V3 HF transceiver kit** in unopened box. Bought two and managed to build one without damaging anything so selling backup. \$60 **Softrock V6.2 with K3 IF crystal for panadapter**. I built this years ago with the plan of making a panadapter for my K3. FREE pickup

Contact: Bob, KD8CGH at: kd8cgh@arrl.net [07/02/20]

For Sale: Hi-Z SIX Direction Triangular Array Receive System – Including THREE DX Engineering AL24 Vertical Elements. Most components are new/not used. Package consisting DXE p/n HIZ-3-LV2-50 6 Direction Array System and 3 (three) of part number DXE-AL24 Vertical element kits. Hi-Z Antennas Triangular Array Systems offer 6 selectable directions of improved, low-noise receive performance and 30 dB front-to-back directivity for the 160, 80 and 40 meter bands, with useful reception from below the AM broadcast band through 30 MHz. \$650

Contact: Mark, W8BBQ at: W8BBQ@AOL.COM or text to 330-770-5442 [05/02/20]

For Sale: Palstar AT-2K Antenna Tuner. 6 months old. The AT2K matches many antenna types. 6 position antenna selector switch. Peak/Peak Hold metering from the PM2000A has been incorporated into the AT2K. Forward power metering two ranges, 300 & 3,000 watts. SWR measurements displayed with illuminated cross-needle meter. **\$485.**

HA8KF Magnetic Keyer Paddle Iambic keyer with red paddles. Solid brass polished hub on a heavy steel base, variegated black powder coating. Pre-wired with a ¼ in. phone plug. New. \$200. **BaoFeng UV-5R Dual Band** 128 Channels dual-band display, Dual Freq, dual-standby, a/B band operation | High/low TX power, busy Channel lock-out. Tri-color background light, FM radio (65.0MHz-108.0MHz) large LCD display. Voice Companding: 50 ctcss/104DCS coder & tone searching. Emergency alert: 25Khz/12.5Khz switchable. LED flashlight: high/low RF power switchable, New in unopened box, **\$25.** **Drake 2B receiver and 2BQ q multiplier**. Antique ham band receiver and speaker q multiplier. Works great for its age. Cabinets need repainted but ok. **\$235.**

Contact Dave, N8NB at 330-501-5031 [05/02/20]

For Sale: Yaesu FT-1000MP AC Version(No power supply required), great contest or DXing radio - excellent condition with operator manual, has extra crystal filters and inrad roofing filter installed. \$750.00 **Yaesu FTDX5000MP**

Limited - 200 watt 160 thru 6 meter transceiver - AC powered, 300 Hz / 600 Hz / 3 KHz roofing filters, two independent receivers, operator manual, with custom equipment cover and Nifty Accessories reference guide. In like new condition, original boxes, \$2995.00 Can demo these transceivers at my station, local pickup preferred, will deliver up to 50 miles

Contact: George, K3GP at: 330-829-9504 evenings or weekends. [05/02/20]

For Sale: MorPower 5-kW continuous, 6,250 kW surge, gasoline generator. 19 years old. I'm getting too old for pull start, Bought new electric start. Generator runs good; I had to use starting fluid to start it. \$225. **You pick up in Brimfield.**
Contact: Rick, WA8TSI at 330-634-0396 [05/02/20]

FOR SALE: ICOM IC-7610 - Brand New, *still in the box*. Decided to upgrade antennas instead of radio. Un-opened box \$2599. **RC-28 - Remote Encoder** for the IC-7610 to easily operate the second VFO - Brand new - \$200. **8 Switch Memory External Keypad for the IC-7610/7850/7851**. Instant access to the 8 stored outgoing messages. Made in Germany by DM2RM. Brand new - \$60. **Cushcraft Ten-3** Three element **10 meter beam**. Cost new \$299.95 - **Sell for \$150.00**. This beam helped me make 7,651 ten meter contacts on a tripod on my roof. Great shape & ready to use. Had the roof replaced and took down the antennas. Will be putting up tower and Opti-Beam antennas - if the ground ever dries out..... well, maybe in Spring or Summer..... **Contact: Tom "Parky", KB8UUZ** - kb8uuz@gmail.com [05/02/20]

Looking for that Transceiver



Daryl, WX4QZ

I've been looking for that new HT just out. You know the one. It's the all band, all mode, self contained battery, 1000 watt, shirt pocket, selling for \$25.50.

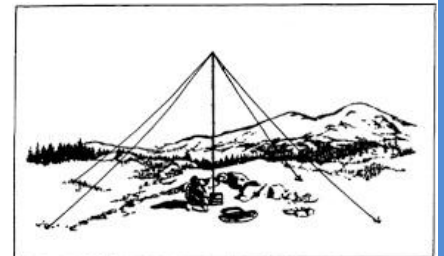
And manufactured by that new Amateur Radio company April F. Ool. If you know who is selling them please let me know.



NVIS Day is Coming

Is your station ready to establish and maintain high-reliability communication with other stations around Ohio when repeaters, phone, and internet service are impaired?

When infrastructure just isn't there, HF radio using Near-Vertical Incidence Skywave (NVIS) propagation offers the ability to stay in contact on frequencies of 2–30 MHz for distances of about 30–400 miles. NVIS Day is the ARRL Ohio Section event to test your NVIS antenna designs and builds. Join us on Saturday, April 25th to show how well amateur radio can keep Ohio communicating! This is not a contest: it's an event for Ohio stations to operate with other Ohio stations and understand how well they hear and are heard.



THE DETAILS

Date: Saturday, April 25 - Time: Start at 10 A.M., end at 4 P.M.

Power: Up to but no more than 100w - Exchange: six-digit grid, power, and true—measured—signal report

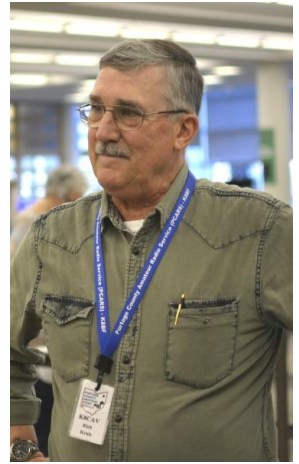
Schedule: This isn't a contest, so take your time! Try different designs! Have lunch!

UPDATE: We've had some questions about NVIS day, April 25. This is not intended to be a large group activity, and it can be done with two or three at a home. That's probably more appropriate this year but parks are still open. So far, we are pretty sure NVIS day will go on as scheduled. We'll watch closely and are open to change.

Coms Unit and EOC Update

Rick, K8CAV

Portage County Coms Unit Commander



Two weeks ago the Portage County Office of Homeland Security/Emergency Management activated its EOC (Emergency Operations Center) in response to the COVID-19 outbreak. The Portage County Commissioners issued a declaration to support the opening and to take actions necessary to mitigate the spread of this virus.

The EOC has established daily meetings via conference call with state and local agencies, along with the heads of each of the fifteen ESF (Essential Support Function) sections. All aspects of our society and day to day lives here in Portage County are being looked at with regard to the effect the outbreak will have on them. Plans are being made to address whatever shortcomings are identified, in the best manner possible.

As it currently stands the county's public safety radio communications infrastructure is adequate to support operations. In the event additional communications personnel are needed, the Coms Unit is prepared to provide assistance. Additionally, the Coms Unit can provide assistance through Amateur Radio should that become necessary. Should the outbreak grow and conventional public communications services such as cell become overwhelmed, the Amateur Radio National Traffic System may be used for health and welfare traffic.

Please do your part to help contain this outbreak by following "The Five":

- 1 HANDS - Wash them often
- 2 ELBOW - Cough into it
- 3 FACE - Don't touch it
- 4 SPACE - Keep safe distance
- 5 HOME - Stay if you can

'Social Distancing' will be difficult and can lead to depression. Stay in touch by phone or other means with family and friends. As Amateur Radio Operators we have even more opportunity to stay connected on the air. Nets abound, contests are still taking place, and calling CQ is a great way to find a pleasant conversation. Stay safe and though trite, "This too shall pass" should be remembered.

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

From the ARRL Ohio Section Manager



Scott, N8SY
ARRL Ohio Section Manager



Hey Gang...

Wow... I thought this would never get this crazy. Bars, restaurants and even tattoo parlors now getting shut down due directly to **COVID 19** and the actions necessary to keep it from spreading. Again, my advice to all of you is to use common sense. If you feel that you are exposing yourself to an environment that could cause you to get sick, avoid it! Nothing is that important that it's worth risking your life for, not even toilet paper! Hi.. Hi..

Listen to what the CDC is saying and following their guidelines to be clean and safe. Use the 6-foot rule whenever possible and stop shaking hands and giving hugs. For now, use your elbows.

Yes, this is a bit awkward, especially at 6 feet, but where there's a way as they say! Most of all, do what your mama taught you... **"wash your hands - often!!"** and don't forget to wash behind your ears too!!

For those of you that were preparing to take one of the Amateur Radio exams, I'm really sorry, but you'll just have to wait a little longer. On the bright side of this, it gives you just a little more time to prepare. I know that this is not what everyone wants to hear, but we do need to heed the warnings and just stay put as much as possible.

I want to encourage all of you to make sure that your ARRL dues are up to date. Now that you are home and have some spare time on your hands, maybe you could take a couple of minutes of that spare time and go on-line and renew your dues now. "Being a part of a great organization like ARRL is really important to you and to all of us. Your voice is heard and heard loud and clear not only here in Ohio, but also at Headquarters.

I hope that the leaders of your local clubs were paying attention to the article about the new teleconference bridge that the Ohio Section has (Zoom). With it you don't have to cancel your club meetings. That's right, you can have an "On-Line" meeting instead. You don't have to have any fancy equipment either, you can connect using a regular hard-wired phone if you wish. Now, if that doesn't appeal to you, or you feel that things have to be done on Amateur Radio, how's about having your meeting on your local repeater?

This past week I have been involved with both, a teleconference meeting as well as an over the air meeting. Both were very effective and got the business done, and after all, isn't that why you go to the meetings?

It's funny how when we close one door to something, another seems to pop up for us to take advantage of. It was probably always there, but until we are forced to change, we never see the obvious.

Whelp, final go around before gong QRT... That's going to do it for this week. Stay safe, enjoy the sunshine when we have it, and most of all... have FUN and don't let the COVID 19 kooties prevent you from getting on the AIR!!



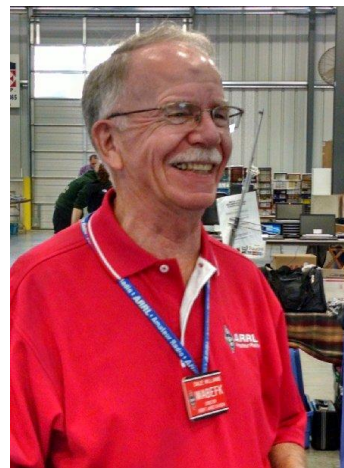
PCARS K8BF
The Club that puts the FUN in Ham Radio!



From the Great Lakes Division Director



Dale, WA8EFK
ARRL Great Lakes Division Director



Great Lakes Division Award Recipients Announced

Unfortunately the Great Lakes Division Convention had to be cancelled due to the **COVID 19** crisis, so even though a formal presentation wasn't done as planned, we still want to take the time to recognize those among us who represent amateur radio in a very significant way, either over the past year or two, or throughout their time as hams.

So, with a big round of applause please... We announce the following persons:

Gary Johnston, KI4LA, winner of the George S. Wilson III, W4OYI, Lifetime Achievement Award;

Steve Smith, N8AR, and **Larry Gauthier, K8UT**, joint winners of the Technical Achievement Award;

John Papay, K8YSE, winner of the DX Achievement Award;

And **"The Radiogram,"** the monthly newsletter of the **Portage County Amateur Radio Service**, as the winner of the Joseph J. Phillips, K8QOE, Newsletter Award.

This year we are also giving a special "Director's Award" for outstanding service to the amateur radio community to: **John Loughmiller, KB9AT**, for his design work on a database for the new Volunteer Monitoring program established at Headquarters.

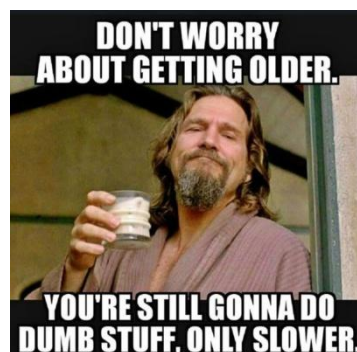
Our sincerest thanks to the many people who made nominations for these and other awards. The quantity and quality of the nominations was excellent this year. Our thanks also to the committee members who had the difficult task of choosing the winners from the many nominations received.

Happy Birthday PCARS Members

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

KE8LWP	Agnes	Wagner
KE8LWL	Mark	Knox
W8YIH	Sylvester	Kaleja
KE8EGG	Alice	Harris
K1ZZ	Dave	Sumner

KW 8KW	Bill	O'Neil
N8QE	Bob	Hajdak
WB2DFC	Dave	Rarrick
KC8FQV	Mark	Studer



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.**

Don't forget - 4th Thursday is NET NIGHT at the Club Site !!

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	
2	WB8LCD
9	KD8WCK
16	KB8TUY
23	KB8UHN
30	N8QE

May	
7	
14	
21	
28	

June	
4	
11	
18	
25	



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

If you have not been a Net Control Operator for PCARS and would like to give it a try, please contact me at: grgory999@roadrunner.com everyone who is a club member is welcome to have a turn - and have fun being the PCARS Thursday Night Net Control !

And - don't forget - when you check in to the PCARS net 10 consecutive weeks - you are eligible for a Certificate - suitable for framing. But you have to make it 10 week in a row. Miss one, and you start over again. When you get those 10 check ins, contact me so I can check the logs and get the certificate made up for you.



PCARS
www.portcars.org



Special Today Only!



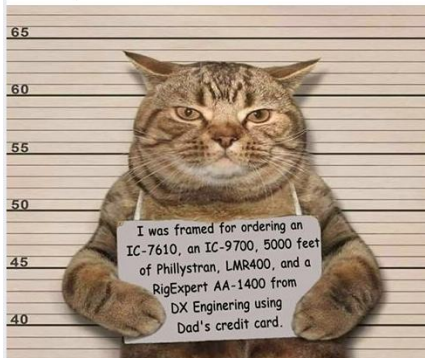
BAOFENG UV6RBAD

Bad UV6R, radio only, no battery, no antenna, no accessories, assorted issues

\$1.95

Special price only good on 11/11/2019 Limit of 2 and Stock on Hand per customer

Bad ol' kitty!



PCARS
www.portcars.org



Field Day 2020 - A Time to Adapt

From the ARRL



Many individuals and groups organizing events for Field Day 2020 have been contacting ARRL for guidance on how to adapt their planned activities in this unprecedented time of social distancing and uncertainty.

“Due to the unique situation presented this year, this can be an opportunity for you, your club, and/or group to try something new,” ARRL Contest Manager Paul Bourque, N1SFE, said. “Field Day isn’t about doing things the same way year after year. Use this year to develop and employ a new approach that is in line with the current circumstances.”

Social distancing and state and local requirements very likely will impact just how — and even whether — you are able to participate in Field Day this year. ARRL continues monitoring the coronavirus situation, paying close attention to information and guidance offered by the Centers for Disease Control and Prevention (CDC). If social distancing means that Class A with a 30-member team set up in a city park won’t work this year, then it’s time for a Plan B. Part of the Field Day concept has always been adapting your operation to the situation at hand. At its heart, Field Day is an emergency communication demonstration. Field Day rules are flexible enough to allow individuals and groups to adjust their participation and strategies in a way that still addresses their needs while being fun. Some possibilities:

Encourage club members to operate from their home stations on emergency power (Class E).

Use the club’s repeater as a means for individual participants to keep in touch during the event.

Family members interested in operating Field Day and unable to participate as part of a larger group may want to consider setting up a portable station in the backyard with a temporary antenna.

One big impact this year will be a decline in public visibility and any interaction with the visitors. Prudence may dictate dispensing with the ham radio PR table to attract passersby, should you set up in a more public location. It’s okay not to score all the bonus points you may have attempted in the past. Local and served agency officials may be unwilling to visit, which is understandable under the circumstances. Do be sure to reach out to them as part of your preparations and remind them that you look forward to continuing your working relationship with them in the future.

The impact will differ from place to place, so ARRL recommends that all amateur radio clubs participating in Field Day stay in regular contact with local or state public health officials for their advice and guidance on hosting Field Day activities.

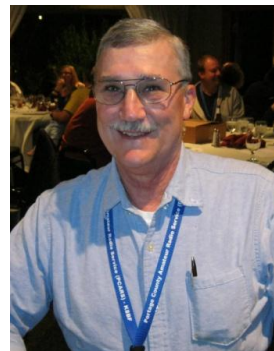
Demonstrating an understanding of the health crisis we all face and your willingness to adapt will show that you and your club or group are good working partners with local or served agencies.

“With any emergency preparedness exercise, it’s not about adapting the situation to your operation, it’s about adapting your operation to the situation that presents itself,” Bourque said. “Try something different. Learn something new about how you prepare. It may be a challenge, and you may have to ask yourself if you’re up to the challenge. We hope to hear you on the air over the June 27 – 28 weekend.” — **Thanks to Paul Bourque, N1SFE, and Dan Henderson, N1ND**

Field Day - Flex Station



Rick, K8CAV
Field Day Flex Station Captain



The operator schedule for the Flex Station is three-fourths full, which is great news! The sooner we have all of the slots filled the sooner we can concentrate on training and tactics to increase our contact total during Field Day 2020. Here is the schedule below so if you see an open spot you want to operate in drop me a line at k8cav.coms@gmail.com. There are also a number of open slots for loggers, who are important to cutting down our QSO time so please consider volunteering for that as well.

DAY	TIME	MODE	OPERATOR	LOGGER
SAT 27 JUN	14:00 - 16:00	40M FT8 DIGITAL	Jim AC8NT / Rick K8CAV	
SAT 27 JUN	16:00 - 18:00	20M DIGITAL	Amy KD8SKL / Wayne K8FF	
SAT 27 JUN	18:00 - 20:00	20M DIGITAL	Rick K8CAV	
SAT 27 JUN	20:00 - 23:00	80M CW	Terry KB8AMZ	
SAT 27 JUN	23:00 - 00:00	80M DIGITAL		
SUN 28 JUN	00:00 - 02:00	80M PHONE	Deron N8XTH	Self-Logging
SUN 28 JUN	02:00 - 04:00	80M PHONE	Deron N8XTH	Self-Logging
SUN 28 JUN	04:00 - 06:00	80M DIGITAL	Rick KD8WCK / Mara KE8KBJ	
SUN 28 JUN	06:00 - 08:00	80M DIGITAL	Andrew KE8BWA	
SUN 28 JUN	08:00 - 10:00	20M DIGITAL	Gene W8NET / John KE8MXR	
SUN 28 JUN	10:00 - 12:00	40M DIGITAL	Mike N8WCP	
SUN 28 JUN	12:00 - 14:00	40M DIGITAL		

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

Field Day - CW Station



George, K3GP
Field CW Station Captain



We are still looking for Field Day CW Operators (June 27-28). Currently, we have 8 operators and the first draft of our operating schedule is based upon three hour shifts.

This schedule is simply a first draft - let me know if you prefer a different time and we will do our best to accommodate.

Additional CW operators are more than welcome, we will adjust the operator schedule and durations accordingly. Email me at rttyfan@gmail.com

DAY	TIME	OPERATOR
SAT 27 JUN	14:00 - 17:00	K3GP
SAT 27 JUN	17:00 - 20:00	N8NB
SAT 27 JUN	20:00 - 23:00	ND8L
SAT 27 JUN	23:00 - 02:00	K8RR
SAT 27 JUN	02:00 - 05:00	W8BBQ
SUN 28 JUN	05:00 - 08:00	KB8AMZ
SUN 28 JUN	08:00 - 11:00	K8IV
SUN 28 JUN	11:00 - 14:00	N8QE

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

Field Day - 20 Meter Station



Tom, WB8LCD

Field Day 20 Meter Station Captain



If you would like to be on “Stand By” – let me know what times you would be at the Field Day site and willing to be on call. If you would be willing to log, PLEASE! Let me know what time slots you would be willing to be a logger. A good logger can keep a good operator going at full speed AND a good logger can make a mediocre operator a better operator!

If you can be at the FD Site before and after operations, we will certainly appreciate your help with the set up and take down of the individual stations as well as the clean up of the site in general.

There will be a training / operations session in APRIL and/or MAY where we will discuss the operation of the radio (Elecraft K3S) as well as our Field Day strategy for the operation of the 20 meter station, and any “back up” scenarios we will want to be prepared for.

Watch for a QST on this.

DAY	TIME	OPERATOR	LOGGER
SAT 27 JUN	14:00 - 16:00	N8WCP	
SAT 27 JUN	16:00 - 18:00	K8KSU	
SAT 27 JUN	18:00 - 20:00	N8QE	
SAT 27 JUN	20:00 - 22:00	KD8SKL	
SAT 27 JUN	22:00 - 00:00	WB9LBI	
SUN 28 JUN	00:00 - 02:00	WB8LCD	
SUN 28 JUN	02:00 - 04:00	W8KNO	
SUN 28 JUN	04:00 - 06:00	KA8TOA	
SUN 28 JUN	06:00 - 08:00	KA8TOA	
SUN 28 JUN	08:00 - 10:00	N8QE	
SUN 28 JUN	10:00 - 12:00	KE8JUZ	
SUN 28 JUN	12:00 - 14:00	N8WCP	

Win a Yaesu FT-450D - June 10th

The **Alliance Amateur Radio Club's** 2020 fundraiser will be the raffle of a New Yaesu FT-450D. Money raised from the raffle will go towards our public service projects in the tri-county area.

Winner need not be present to win. The winning ticket will be drawn at our Pre-Field Day Picnic on **June 10th, 2020**.

Tickets can be purchased in person at any of the Alliance ARCs meetings, or events. We'll also have a table at the following hamfests this year:

- **Cuyahoga Falls (April 11th)**
- **Dayton Hamvention® (May 15th – 17th)**

Tickets can also be purchased online at w8lky.org (Mailing & PayPal fees added to all online orders).

John, KD8MQ



Update from Interim ARRL CEO Barry Shelli, N1VXY



To ARRL Members

This message is to let our members know that the ARRL remains operational to meet the needs of our members during this Coronavirus outbreak. At the same time, we are taking steps to help protect the health and safety of ARRL Headquarters employees in line with the recommendations being provided by U.S. and Connecticut state health officials and governmental leaders.

We have arranged for many of our staff, depending on their job responsibilities and requirements, to work remotely during this unprecedented time. This helps the organization reduce the number of people in the building and improve our “social distancing” capabilities.

At the present time, all departments at ARRL Headquarters are functioning and customer service representatives remain available to answer your questions or direct you to the appropriate department to assist you. During this period, though, we strongly encourage members to use email as the preferred method of communication with ARRL in order to get you the timeliest response possible.

In particular, the ARRL’s VEC Department has been dealing with a higher-than-normal volume of emails and phone calls, and the staff there asks for your patience while they attempt to answer everyone as quickly as possible. There has been some significant disruption to VE exam schedules, given the restrictions that have been placed on gatherings in many locales. As with our employees, the health and safety of our Volunteer Examiners is a top priority and we have informed our VEs that they need to follow their local community's guidelines and then use their best judgment when deciding whether to conduct, postpone, or cancel an exam session.

As previously reported, we have suspended all visits and tours of ARRL Headquarters and W1AW, so we have asked all volunteers to stay home until further notice.

All of these actions will remain in place until further notice. We will continue to monitor conditions from this outbreak and follow any additional guidelines provided by federal and state health professionals and government officials. We thank you for your understanding and patience during this difficult time.

73,
Barry J. Shelley, N1VXY
Interim Chief Executive Officer

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!!



Charlie the Tuner's HF High-Lites

Chuck, W8PT

a.k.a. "Charlie the Tuner"



Greetings to all DXers:

What a time in which to live. The pandemic has really upset the apple cart. There were more announcements of cancelled DX operations than ones actually taking place. So please note many of the listings in this column may be cancelled by the time you read it. Of course, you all know that Dayton Hamvention has been cancelled. Pay attention to the emails about refunds from the Hamvention and the various dinners that would have been held.

I actually had to go through this column and delete some DX announcements that had been listed as of a few months ago. There are several countries that have closed their airports so nothing is going in or out and therefore any DX opportunity, other than someone already in those spots, will not be taking place. But let's see what might still be available.

As always thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, the AB5K's AR Cluster Networks, ARRL Web Page, NJ1Q & W1AW, AA3B, NG3K & ADXO, NY3B, W3UR & The Daily DX, K5GS, AA7A, K8BL, K8GI, K8YSE, W8GEX & 60m DX News, W9ILY, DL1SBF, DL7UXG & The DX News Letter, DxCoffee.com, DXNews.com, DX-World.Net, F5NQL, F6AJA & Les Nouvelles DX, I1HYW, I1JQJ/IK1ADH & 425 DX News, OH2BH, Pete Rayer & ISWL, RN3RQ, Sixitalia Weekly, and VA3RJ & ICPO 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.

CQ NEWS (View FREE March & April Issues!). On March 19th, CQ Magazine announced the following: In view of the "stay at home and flatten the curve" recommendations from the health experts during this worldwide pandemic, CQ would like to give everyone the opportunity to escape the news alerts for a brief period and enjoy the hobby they love through the pages of CQ! View the March and April issues of CQ magazine at no charge! It's easy, simply send an E-mail to (FreeIssues@cq-amateur-radio.com) and we'll send you the March issue now and the April issue on April 1st!

Take advantage of this opportunity to read CQ - free of charge – and keep connected with the latest trends and activities in amateur radio! Stay home . . stay well!

DXPEDITIONS (Cancellations). Over the last few weeks there has been many cancellations of DXpeditions due to the corona virus or travel restrictions caused by it. Many of the DXpedition have postponed, rescheduled for later in the year or planned to be active next year in 2021. The current list of cancellations is as follows (as of print time):

3B8XF	Mauritius (cut short)	T30ET	West Kiribati
4V5H	Haiti	T88HS	Palau
9A1A	Croatia	T88SM	Palau
9K2F	Failaka Island (AS-118)	T88UW	Palau
CE0Y/VE7ACN	Easter Island	TG9BBV	Guatemala
CP6/R7AL	Bolivia	TO7BP	Martinique
CP6/RW9JZ	Bolivia	TU2R	Côte d'Ivoire (Ivory Coast)
CP6/RK8A	Bolivia	V62P	Polap Atoll (OC-155), Micronesia
CP6/RZ3K	Bolivia	V62S	Satawal Atoll (OC-299), Micronesia
CQ3W	Madeira Island	VP2V/KB9DPF	British Virgin Islands
CT9/DF7EE	Madeira Island	VP2V/K0NR	British Virgin Islands

D4C	Cape Verde	VP5/AF3K	Turks and Caicos Islands
DU2/SP5APW	Calayan Island (OC-092)	VP5/W2TT	Turks and Caicos Islands
FK/C	Chesterfield Island	VP5P	Turks and Caicos Islands
HS0ZME	(cut short)	W8S	Swains Island
JW/DF3TS	Svalbard	XR8RRC/p	Riesco Island (SA-091)
JW/DC8TM	Svalbard	XW4XR	Laos
KH7M	Hawaii	ZA/HG2DX	Albania
NH7A	Hawaii	ZC4MK	U.K. Sovereign Base Areas on Cyprus
PJ2/DK5ON	Curacao	ZD7VJ	St. Helena Island
PJ7AA	Sint Maarten (cut short)	ZF2PG	Cayman Islands
PZ5G	Papegaaien Island (NA-092)		

April...

J8, ST. VINCENT. Brian, GW4DVB, will be active as J88PI from Palm Island (aka Prune Island, WW Loc. FK92HO, IOTA NA-025), in the St. Vincent and the Grenadines Island group, between April 6-15th. Activity will be holiday style on 40/20/17/15/10/6 meters using CW, SSB, SSTV and FT8. He will use a Yaesu FT991A into a 10m vertical antenna, a M0CVO HW-40HP off center fed dipole and possibly new antennas. QSL via GW4DVB direct only (PayPal available) to: PO Box 20:20, Llanharan, Pontyclun, Wales - UK CF72 9ZA. ADDED NOTE: Palm Island is an exclusive, private-island resort. This idyllic tropical hideaway is situated near the southern tip of St. Vincent and the Grenadines, an idyllic archipelago of 32 tropical islands and cays known for its stunning natural beauty, clear, warm waters and turtles.

GERMAN NORTH POLE DXPEDITION. Operators Martina/DF3TS and Thomas/DC8TM will activate Svalbard as JW/homecalls to start their DXpedition between April 10-13th. They will then be active from a Russian "Severnyi Polyus" the Scientific Polar Drifting Base (enclave by RFF) approx. 80kms from the North Pole on the Arctic Ocean where they will activate the WWFF area RFF-0176. Operators will use their special callsigns DP0LE (like POLE) and as A/DC8TM/P and RA/DF3TS/P to represent the Russian flag of the camp between April 14-17th. Activity will be on 40/30/20/17 meters using SSB and FT8. Activity from the North Pole (90 Degrees North) - under DP0LE and DC8TM/P together with Martina DF3TS/P will take place sometime during this time (The exact schedule will depend very much on weather conditions) on 20 meters [14244kHz (+/-)]. **!! Activity is limited to approx. 30 minutes!!**

OX80/OZ80, GREENLAND AND DENMARK (Special Event). Many Greenlandic and Denmark radio amateur stations will be celebrating the 80th birthday of H.M. The Queen of Denmark in these two DXCC entities. Look for special event stations OX80HM and OZ80HM to be active on all bands until April 16th. QSL via OZ1ACB OQRS. A special royal award will be available.

PA75, THE NETHERLANDS (Special Event). Ops Harm/PA0HPG, Michel/PA0VCC, Ad/PA2PCH, Nico/PA3ADU, Gerrie/PA7TT, Harm/PD0GIB, Bert/PD2B and Gerard/ PD2VW will activate special event station PA75ASN between April 1st and May 7th. Activity is to commemorate the 75th anniversary of the liberation of Assen City. Ops will be on 80/60/40/30/20/17/15 meters using CW, SSB and FT8/FT4. QSL via PA0VCC, direct or by the Bureau. NO eQSL.

PD2020, THE NETHERLANDS (Special Event). Friso, PD1JFD, will use the special callsign PD2020GP during the Dutch F1 Grand Prix 2020 Zandvoort between April 3rd and May 3rd. QSL via the Bureau.

Z6, KOSOVO. Operators Erik/ON4ANN and Erik/ON4CCV will be active as Z68AN and Z68EC (callsigns pending), respectively, from Kosovo between April 27-30th. They are there scouting out and making arrangements for a later trip between September 21-29th, with a much larger team of operators. During this trip, activity will be limited to 40/20 meters. The September trip will focus on the low bands. Look for more details and a Web site to be forthcoming.

May...

FJ, ST. BARTHELEMY. Operators Thierry/F6CUK and Gerard/F6EHJ will be active as FJ/F6CUK and FJ/F6EHJ, respectively, from the QTH of FJ5AB, between May 4-16th. Activity will be on various HF bands using CW and SSB. The duo and FJ5AB are planning to operate from Tintamarre Island (NA-199), St. Martin, sometime during their stay using a special callsign. Look for more details to be forthcoming.

HI, DOMINICAN REPUBLIC. Members of the La Loma Del Toro Contest Club will be active as HI3Y during the

CQWW WPX CW Contest (May 30-31st) as a Multi-Single/Low-Power entry. This operation is dedicated to the memory of their good friend and operator Edwin Nunez, HI3K/SK. Operators mentioned are Jamie/WP3A, Julio/HI3A, Lor/HI3Y, Tino/HI3CC, César/HI3CMM and Franky/HI3TT. QSL via LoTW.

IOTA NEWS...

AS-207. (NEW) Members of the Russian Robinson Club (RRC) will be active as R207RRC from Kosa Dvukh Pilotov Island (RDA CK-05, WW Loc AP18gg, RRA RR-11-05) in the Chukchi Sea Coast Centre group for the first time ever between **April 3-10th** (estimated dates). Operators mentioned are Victor/UA3AKO, Yuri/UA0KBG and Alexander/ RA3AV. Activity will be on 40/30/20/15 meters using CW, SSB and possibly FT8 (F/H). QSL via UA3AKO, direct, by the Bureau or ClubLog's OQRS.

NA-070. Members of the Russian Robinson Club team will be active as KL7RRC from **Kiska Island** between **June 10-15th**. Operators mentioned are Vyacheslav/OK8AU, Yuri/N3QQ, Yuri/UA9OBA and possibly Tim/NL8F and Alexey/NW7M. Activity will be on 40/30/20/17/15/12/10/6 meters using CW, SSB and FT8(FH), with three stations. The frequencies will be published on their web site.

NA-092. Markus, DJ4EL, is planning to be active as PZ5G from **Papegaaien Island, Suriname**, sometime during Easter (**April 12th**). Activity will be on various HF bands. QSL via ClubLog's OQRS or LoTW. More details forthcoming.

OC-092. (Cancelled) Jacek, SP5APW, who was expected to be active as DU2/SP5APW from **Calayan Island** in **April**, has canceled his operation due to possible travel issues because of the Coronavirus.

SA-029. Members of the CabreuvaDX Team will once again be active as ZV1C from **Cedro Island** between **May 1-3rd**. Activity will be on 160/80/40/20/17/15/10 meters using CW, SSB and FT8. There will also be activity on 2 meters satellite. QSL via PU2VCP. For more details and updates, see QRZ.com.

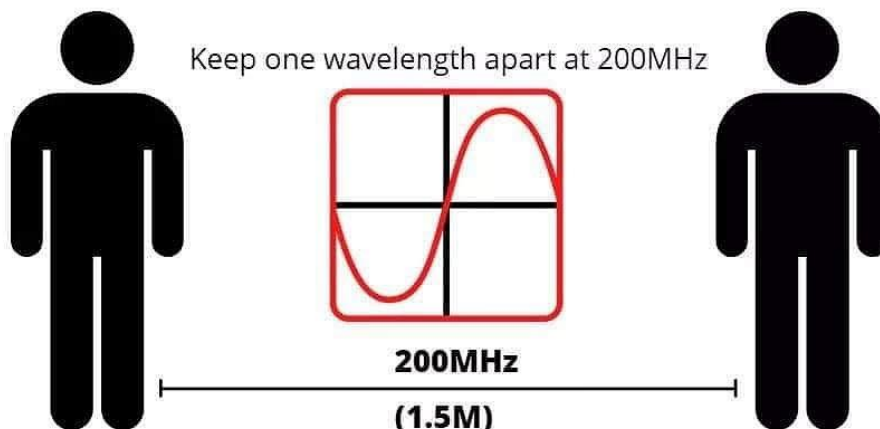
There you have it for the next three months. Stay safe and don't venture out and about much at all other than to take a walk in your backyard to get some exercise. And get on the air!! You can use this time to keep you rigs powered up. As I've said before, it's the greatest hobby in the world so why sit back and let the world pass you by. **73 until next month.**



TECSUN
RADIOS AUSTRALIA

AMATEUR RADIO ENTHUSIAST GUIDE TO SOCIAL DISTANCING

Keep one wavelength apart at 200MHz



CW/QRP & Linux Special Interest Groups

Terry, KB8AMZ



CW & QRP SIG

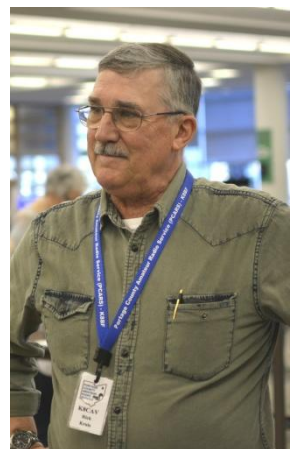
For the past 7 months our SIG has had "Get On the Air" for those Ham's that know Morse but either lack the equipment or need an Elmer to coax them along with their first contact. There are members of the SIG that lack the ability to copy CW and often say they want to learn CW but have obstacles with other activities or work. Unlike those of us that learned CW from someone sending Morse from a Code Oscillator, 78 RPM record, cassette tape player, etc. hams of the 21st Century have many methods to learn Morse. Cassette tapes are still available for self practice but it is rare that people don't have access to a computer or smart/android cellular phone where software or a phone app can be installed FREE to aid in the learning process. What hasn't changed though is practicing to learn. Thirty minutes per day is all that is required. Two 15 minute sessions to learn the characters, numbers, and punctuation. There is free software for the popular computer operating systems, Microsoft OS, Apple OS/X, Unix, and Linux. A favorite learning source for me is LCWO.net. Yes, all that is required is a computer with a browser connected to the Internet. You need to register for a FREE account. LCWO stands for Learn Morse Code (CW) Online. Your progress of learning is held for you so you can gage your rate of learning. I use this web site to learn Morse Code because I haven't attained the level of usage that I want, that is hearing words rather than characters and copying in my head for QRQ CW at 50+ wpm and higher. So until we meet again as a group you can use this time off to learn and practice Morse Code.

Linux for Hams SIG

June 30, 2020 should be the next date for Linux for Hams SIG, ONLY IF, the PCARS executive board approves re-opening. The board members discussed cleaning the club site, prior to the "Stay at Home" policy. It will be a requirement, in my opinion, that the club site be cleaned with disinfectant cleaners to ensure our membership has a safe environment to use. The Radiogram and Club Calendar on the web site will be your guide to future club activities.

Digital Special Interest Group - On The Air

Rick, K8CAV



With social distancing becoming an important part of our daily lives for the near future, the Digital Special Interest Group will not be meeting in-person. Rather than look at this as a negative I think we can view this as an opportunity to enhance our digital skills.

Starting in April and continuing until it is deemed safe to again meet in-person, the Digital Special Interest Group will meet on the air. Our first virtual meeting will take place on Tuesday April 7th at 7:00 PM on the K8IV VHF (146.895 (-) 118.8PL) repeater.

This will be a semi-formal net that will open in voice with me as net control station. I will take check-ins on the net and when everyone has checked in we can start by taking questions about anything digital. We can also conduct digital operations on the repeater using fldigi. If there is interest we can also try some HF digital operations while the net is taking place. During the net I would also like to try switching to the K8IV UHF (444.575 (+) no PL) repeater to compare coverage with net participants.

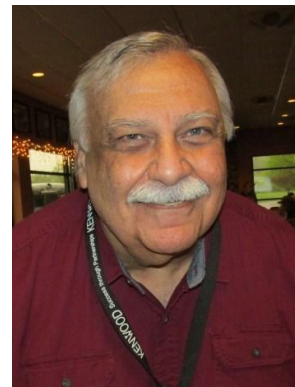
For future nets I want to see if we can have some on-the-air presentations on various topics. If you have a topic you would like to see covered please drop me a not to k8cav.coms@gmail.com and I'll try to get it scheduled.

This is a great opportunity to spend some time together with fellow PCARS members while helping to contain the COVID-19 bug by not meeting in person. Hope to see you all there!

DX and Contest Special Interest Group

Chuck, W8PT

Since we are not meeting in-person until this virus clears out, let's talk about some of the **FUN** we had in the recent past. The weekend of March 14 & 15 found K8BF on the air during the Idaho and Wisconsin QSO Parties. The Idaho Contest took place over both days and we were able to have 9 operators on the air. During Saturday, we had 10 members show up. We only worked this contest on Saturday with the station on the air until Midnight.



On Sunday, we switched to the Wisconsin QSO Party, held only on this day, and again had a good turnout and were able to have 8 operators man the operating positions.

Even with the bands being somewhat stingy everyone that sat in an operator chair had fun. I really enjoyed watching young Ben, KE8JUZ, have a ball when he would put another contact in the log and pump his fist.



Seeing that brings back memories of one's first contest contacts.



Knowing that there are not a lot of Idaho stations out there, we still were able to submit a raw score of 130 pts. That may seem low, until you understand



that our best score was last year and we only had a score of 40 pts.

Our score in the Wisconsin contest was better than a year ago with a point total of



3225. Both of these efforts show that we are getting better in every contest we enter and will soon really start to make K8BF a station recognized in the contesting community.

My thanks to all those who participated and hopefully we can get by this temporary derailment due to the virus, and get back to having BIG FUN at the club site.

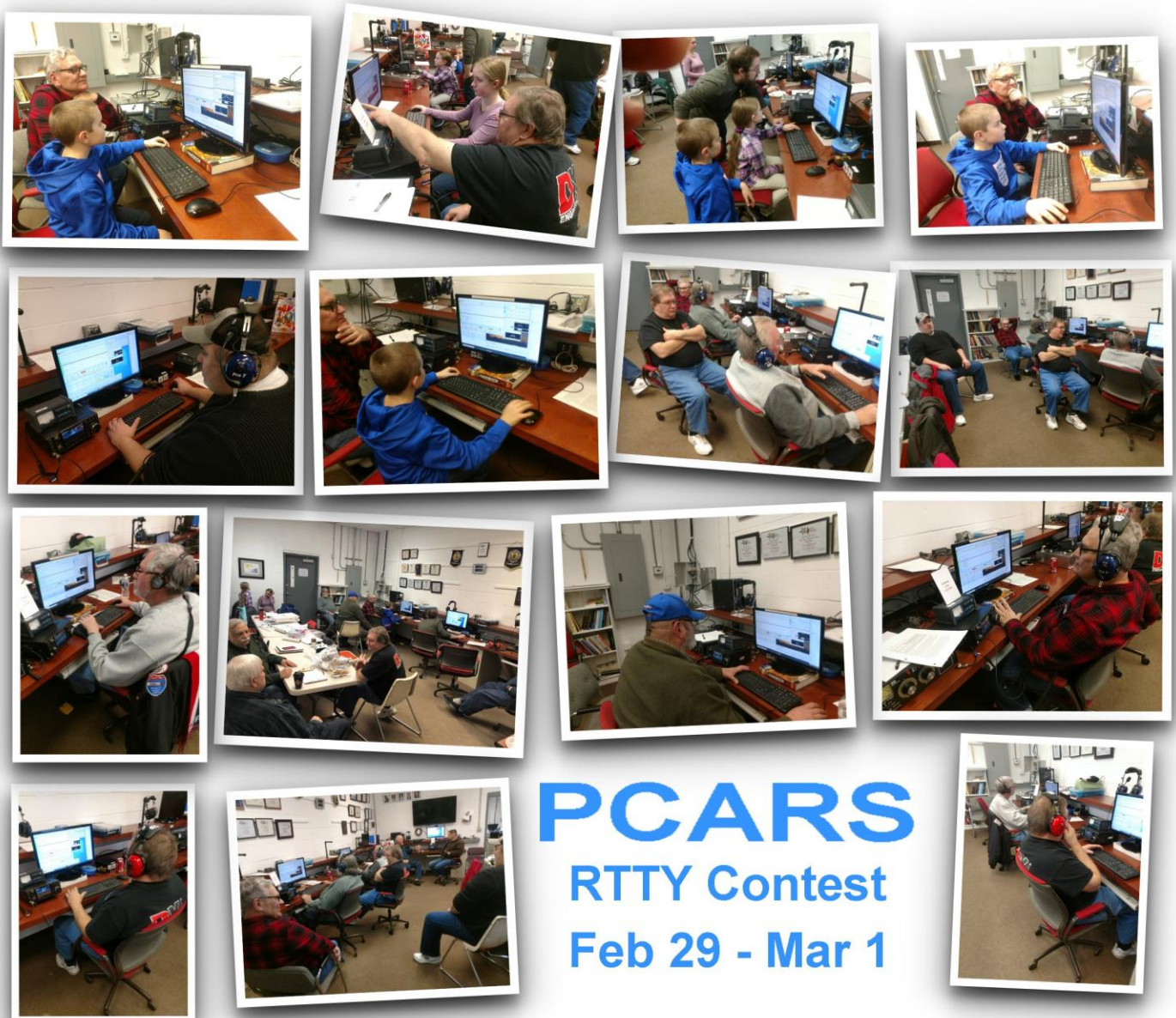


On the weekend of February 29-March 1, K8BF participated in the **North American Winter QSO Party - RTTY**. George, K3GP was our fearless leader and faced a few obstacles that Murphy threw at us, but we prevailed. My appreciation goes out to George for his tireless efforts to make sure that all those who came to the club site, were able to have fun working the RTTY contest.

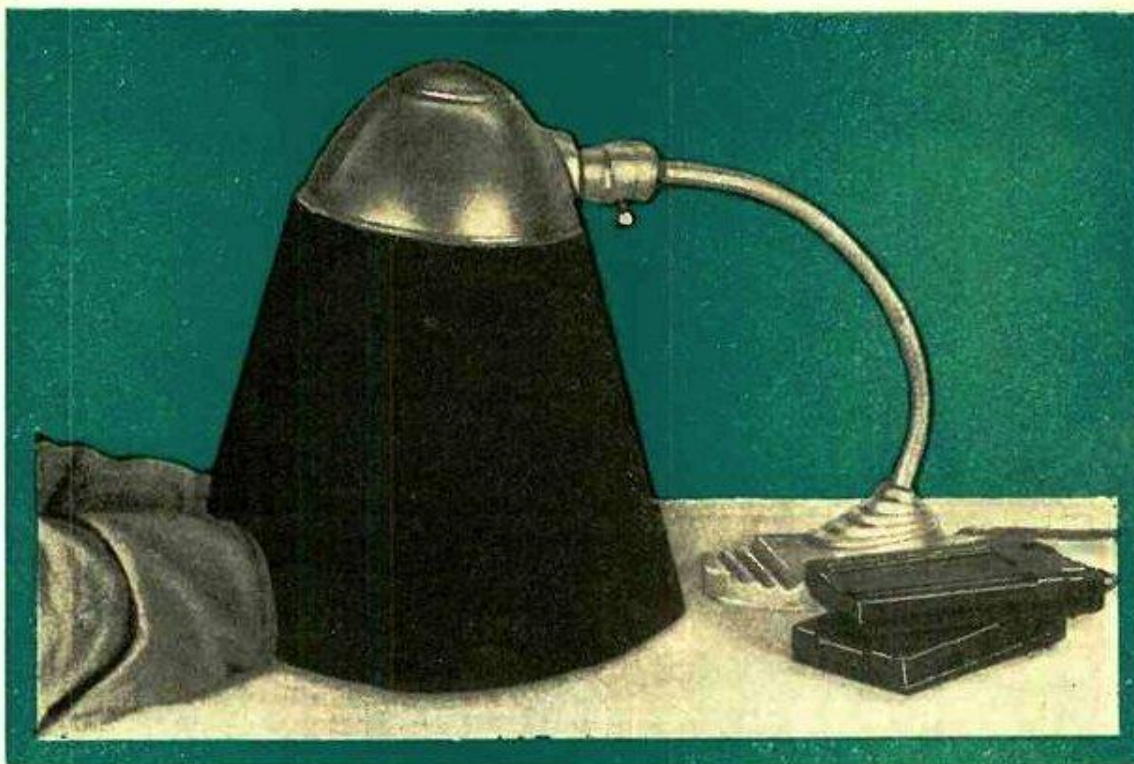
I also want to thank the 15 individuals who showed up and the 12 of those attending who actually placed themselves in the operator chairs. (K8IV, NX8G, WA8US, KB8TUY, N8QE, K8YLK, KE8LWO, KE8LWP, KE8JUZ, AC8QG, KB8AMZ, K3GP). It was especially fun to watch three of Nick's (AC8QG) children, Ben KE8HUZ, Agnes KE8LWP, and Bernadette KE8LWO take their turns working RTTY contacts.

With the efforts of all those who came, we made a very good showing based on a comparison of how we did last year in February. We operated the full 12 hours and ended up making **489 contacts for 45,966 points** which was our best performance ever in this contest. Last February we did not even break 30K. We seem to be getting better in every contest we enter. I'm hoping that we continue this trend and I trust that with the help of those members who like to contest, we will achieve this goal.

We are looking forward to the same contest in July, **IF** the virus situation is over by then.



PCARS
RTTY Contest
Feb 29 - Mar 1



Negative light, produced by contra-polar energy, removes light from the area affected.

Contra-Polar Energy

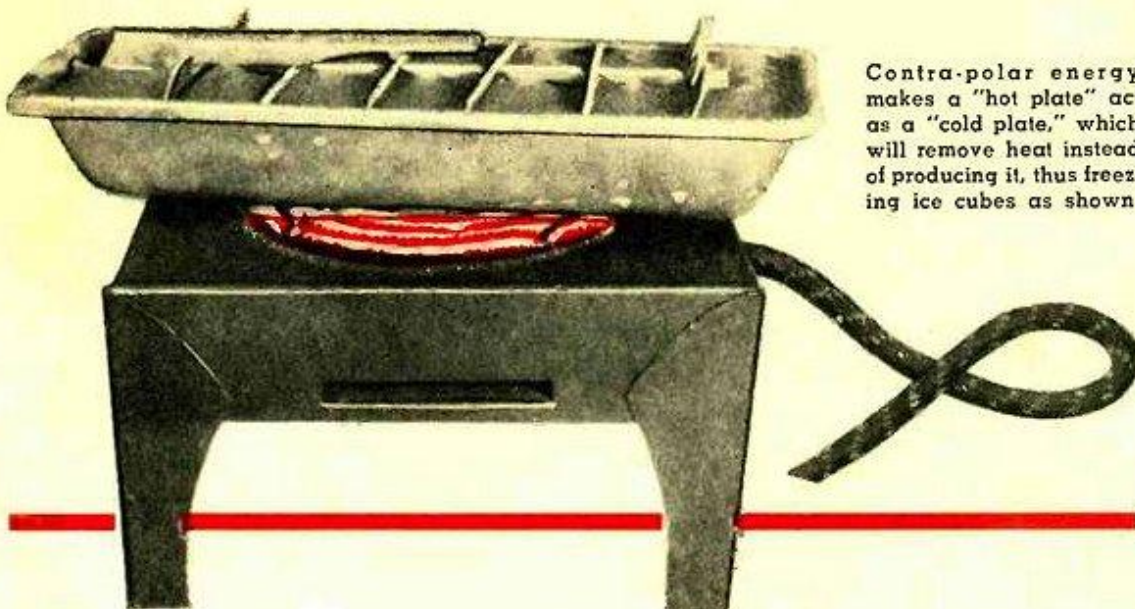
In keeping with the first day of April

MANY developments in electronics which took place during World War II are still secret, because of the requirements of military security. However, the announced policy of the Government is not to apply security classifications to information which might be of use to the general public unless such classification will serve an actual military requirement. Also security classifications are removed when the conditions which originally necessitated them no longer exist. POPULAR ELECTRONICS is now in a position to reveal to the general public one of the most interesting phenomena yet discovered in the field of electronics—that of “contra-polar energy.”

Those who are familiar with the development of the atomic bomb will remember that the feasibility of the bomb was first demonstrated mathematically by Dr. Lise Meitner, the German mathematician, several years before World War II, and that its theoretical feasibility was first called to the attention of our Government by Dr. Albert Einstein. The problem then became one of finding out how to apply the mathematical formulae. The case of “contra-polar energy” is similar, but, since some of

our readers may be more interested in the applications of the new principle than in the mathematical basis of it, we shall defer the mathematics to the end of this article.

The photographs on these pages illustrate three simple applications of “contra-polar energy,” which are useful to the general electronic hobbyist and experimenter. In two cases, where “contra-polar energy” is applied to a soldering iron and an electric hot plate, heat is not produced, but taken away, and cold results, as proved by the formation of ice crystals on the soldering iron and freezing of water in the ice-cube tray. When “contra-polar energy” is applied to an ordinary table lamp, light is not produced, but taken away, and the area affected by the lamp becomes dark. (*Editor's Note:* This phenomenon should not be confused with “black light,” so-called, which actually is merely light without any visible elements. As far as the human eye is concerned, “black light” is equivalent to zero light; the light produced by contra-polar energy might be designated “negative light,” since it subtracts from light already present.)



Contra-polar energy makes a "hot plate" act as a "cold plate," which will remove heat instead of producing it, thus freezing ice cubes as shown.

has not yet become popular among home experimenters is that an understanding of its production requires a knowledge of very advanced mathematics. Contra-polar energy, on the other hand, can be explained by simple algebra. Many of our readers are, no doubt, familiar with the formula for the resonant frequency of an *LC* circuit,

$$f = \frac{1}{2\pi \sqrt{LC}}$$

This formula involves a square root; elementary algebra tells us that the square root of a positive number may be either positive or negative. That is, +4 equals either +2 times +2 or -2 times -2, so the square root of +4 equals either +2 or -2. If the square root of *LC* may be either positive or negative, it follows that *f*, the resonant frequency of the circuit, may be either positive or negative.

Now, the reactance of an inductance is proportional to the frequency used; if the frequency is negative, the reactance would be negative. The current through an inductance is equal to the voltage divided by the reactance and a negative reactance would produce a negative current. A small

amount of resistance in series with the inductance would not shift the phase of the current very much and the current through the resistance would still be negative, or 180 degrees out of phase with the voltage. Power dissipated in the resistance would be equal to the voltage multiplied by the current, but if the voltage is positive and the current negative, the power would be negative. In other words, with an alternating voltage of negative frequency applied to a large inductance and a small resistance in series, the resistance would not absorb power, it would deliver power!¹ It has been known for some time that so-called "negative resistance," as in the dynatron² and transitron³, would deliver power, but this is the first indication that ordinary positive resistance also can be made to deliver power.⁴ **END**

¹ Those of our readers who may be unfamiliar with the foregoing mathematical relationships between electrical quantities can find an explanation of them in any standard textbook.

² Albert W. Hull, "The Dynatron—A Vacuum Tube Possessing Negative Electrical Resistance," *Proceedings of the Institute of Radio Engineers*, Vol. 6, p. 5, 1918.

³ E. W. Herold, "Negative Resistance and Devices for Obtaining It," *Proceedings of the Institute of Radio Engineers*, Vol. 23, p. 1201, 1935.

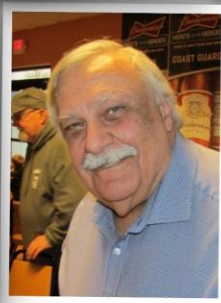
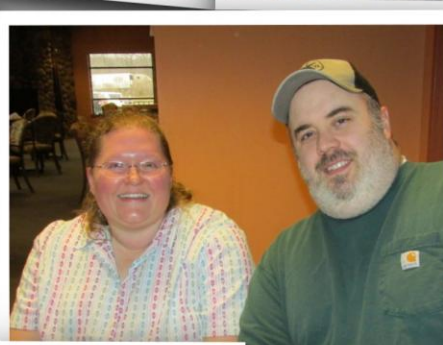
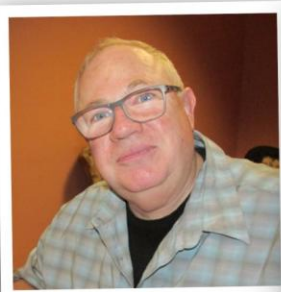
⁴ *Transactions of the Contra-Polar Energy Commission*, Vol. 45, pp. 1324-1346 (Ed. Note—A reprint of a document found in a flying saucer).



Another effect of negative heat: when a soldering iron is plugged into a socket carrying contra-polar energy, ice crystals are formed.

POPULAR ELECTRONICS

Photos from the March PCARS Meeting



PCARS
March 9
2020





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.

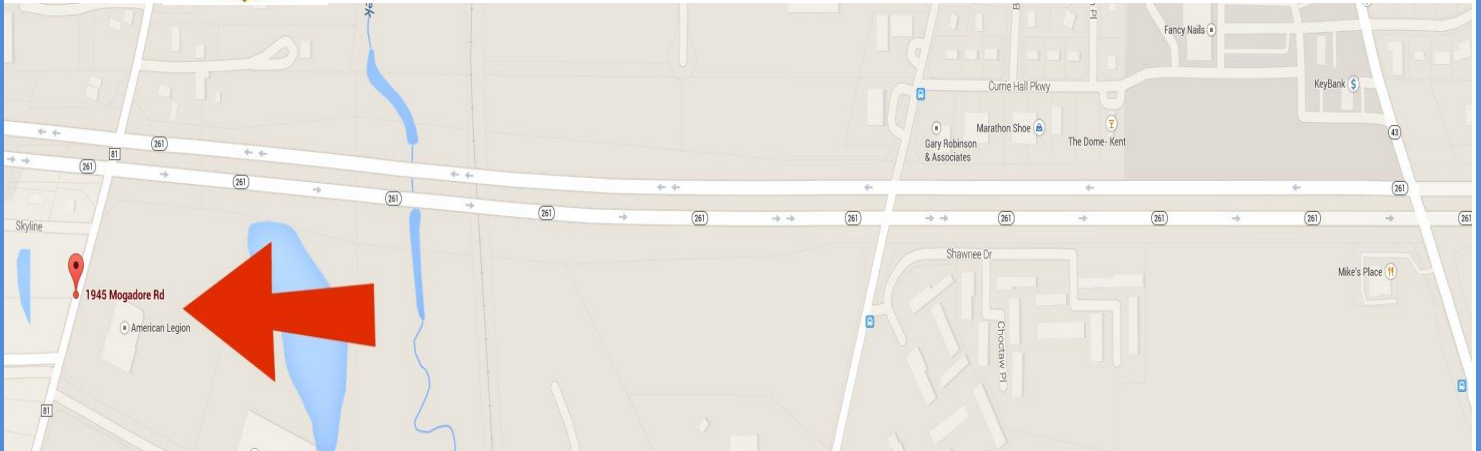


PCARS Meetings

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



*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.

Al, WA8CCU



These may have been around, but who cares??

- When one door closes and another door opens, you are probably in prison.
- To me, "drink responsibly" means don't spill it.
- When I say, "The other day," I could be referring to any time between yesterday and 15 years ago.
- Interviewer: "So, tell me about yourself." - Me: "I'd rather not. I kinda want this job."
- Cop: "Please step out of the car." Me: "I'm too drunk. You get in."
- I remember being able to get up without making sound effects.
- I had my patience tested. I'm negative.
- Remember, if you lose a sock in the dryer, it comes back as a Tupperware lid that doesn't fit any of your containers.
- If you're sitting in public and a stranger takes the seat next to you, just stare straight ahead and say "Did you bring the money?"
- When you ask me what I am doing today, and I say "nothing," it does not mean I am free. It means I am doing nothing.
- Age 60 might be the new 40, but 9:00 is new midnight.
- I finally got eight hours of sleep. It took me three days, but whatever.
- I run like the winded.
- I hate when a couple argues in public, and I missed the beginning and don't know whose side I'm on.
- When someone asks what I did over the weekend, I squint and ask, "Why, what did you hear?"
- I don't remember much from last night, but the fact that I needed sunglasses to open the fridge this morning tells me it was awesome.
- When you do squats, are your knees supposed to sound like a goat chewing on an aluminum can stuffed with celery?
- I don't mean to interrupt people. I just randomly remember things and get really excited.
- When I ask for directions, please don't use words like "east."
- It's the start of a brand new day, and I'm off like a herd of turtles.
- Don't bother walking a mile in my shoes. That would be boring. Spend 30 seconds in my head. That'll freak you right out.
- That moment when you walk into a spider web suddenly turns you into a karate master.
- Sometimes, someone unexpected comes into your life out of nowhere, makes your heart race, and changes you forever. We call those people cops.
- The older I get, the earlier it gets late.
- My luck is like a bald guy who just won a comb.

Thanks & 73



Parky, KB8UUZ
PCARS Newsletter Editor



To all my fellow ham friends: Hang in there during these difficult times. Remember, we have our radios and can still talk to others - all over the world. This too shall pass and we can get back to normal in-person gatherings like meetings, SIGs, hamfests and other social gatherings as well. Keep up your humor to help get through this. I want to thank all of the people that have contributed to this newsletter. 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 that we do get. 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 report in to keep this newsletter great for 2020 and beyond.

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

WB8LCD, AC8QG, KB8UUZ, KA8OAD, AC8NT, KS2G, WB8SCT, N8FYO, KD8VT, K3LR, KD8MQ, W8KNO, KA4KOE, WX4QZ, K8CAV, N8SY, WA8EFK, KA8TOA, NF8R, NO8D, W8BBQ, K3GP, N1VXY, N1SFE, N1ND, W8PT, KB8AMZ, WA8CCU, The ARRL, RSGB, IARU, Popular Electronics, and the World-Wide Web.

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



PCARS
www.portcars.org



Stay Indoors = Ham Radio!

By DK4WV4 - March 22, 2020

The Handshake



The greeting that spreads the most germs



The High-Five



Transfers half the bacteria of a handshake



The Fist Bump



Transfers 90% fewer germs than the handshake



THE QSO



**100%
Safe**



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

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

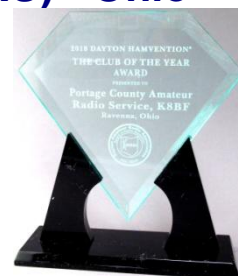


PCARS meets the second Monday of each month at the **Kent American Legion Post 496**, 1945 Mogadore Rd. - just South of Rt. 261 - Enter the rear of the building for the meeting room.

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: **K8SRR**

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



~ 2020 Officers ~		2020 PCARS Appointments & Committees	
President - Tom Sly - WB8LCD Vice President - Nick Wagner - AC8QG Treasurer - Paul Hyland - KE8EGF 3 Year Trustee - John Myers - KD8MQ 2 Year Trustee - Terry Morris - KB8AMZ 1 Year Trustee - Ed Polack - K8IV Past President - Jim Wilson - AC8NT		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, 2020	WA8AR Tony Romito
		FYAO Chairman	W8PT Chuck Patellis
		Historian	KB8SZI Peggy Parkinson
		K8BF Callsign Trustee	KD8SKL Amy Leggiero
		K8BF QSL Manager	KD8SKL Amy Leggiero
		Membership Chairman	AC8NT Jim Wilson
		Net Control Manager	KA8TOA Greg Ash
		Net Night - Club Manager	WB8LCD Tom Sly
~ Meetings & Net ~ 2nd Monday of each month, 7pm Thursday night Club Net at 8 pm on 146.895		Newsletter Editor	KB8UUZ Tom Parkinson
		OSPOTA Chairman	KB8UUZ Tom Parkinson
		Public Information Officer	
		Secretary	N8WCP Mike Szabo
		Social Media	KD8SKL 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
	W8EZT	Frank Tompkins
	AC8NT	Jim Wilson
	K8MSH	Mark Haverstock
	KA8TOA	Greg Ash
	W8PT	Chuck Patellis
	AC8QG	Nick Wagner
	N8FUM	Dan Torchia
	W8GWI	Dave Seckel



THE RADIOGRAM

PCARS Incorporated
Nov. 1, 2005

First Meeting
Nov. 14, 2005



ARRL Affiliation
April 20, 2006



Special Service Club
March 22, 2010

The **RADIOGRAM** is the official newsletter of the Portage County Amateur Radio Service, Inc. (PCARS) - Hamvention® 2018 Club Of The Year - copyright ©2020. The **RADIOGRAM** is an **Award Winning** newsletter: **ARRL Ohio Section Newsletter - Third Place 2015 - Second Place 2014, 2016 - 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



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Ravenna, OH 44266 USA



NLC

