



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

January 2019 - Volume 14 Number 1



Happy New Year

**2018 was
GREAT**

**Let's make
2019
even BETTER**

More Amateur Radio Fun !

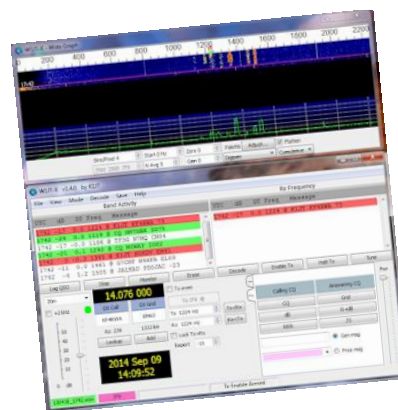


PCARS K8BF

The Club that puts the FUN in Ham Radio!



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Congratulations to the Elected Officers

Congratulations to the PCARS elected Officers for 2019

President - Jim Wilson, AC8NT

Vice President - Nick Wagner, AC8QG

Treasurer - Paul Hyland, KE8EGF

3-Year Trustee - Terry Morris, KB8AMZ

2-Year Trustee - Ed Polack, K8IV

1-Year Trustee - Tom Parkinson, KB8UUZ

With the November elections, the 2018 3-year Trustee moves to the 2-year Trustee position and the 2-year Trustee moves to the 1-year Trustee position. Rick, K8CAV remains as Immediate Past President. The new board members commence their duties on January 1, 2019.

Here are the PCARS Board Members for 2019

President

**Vice
President**

Treasurer

**Past
President**



**AC8NT
Jim**

**AC8QG
Nick**

**KE8EGF
Paul**

**K8CAV
Rick**

**3-Year
Trustee**

**2-Year
Trustee**

**1-Year
Trustee**



**KB8AMZ
Terry**

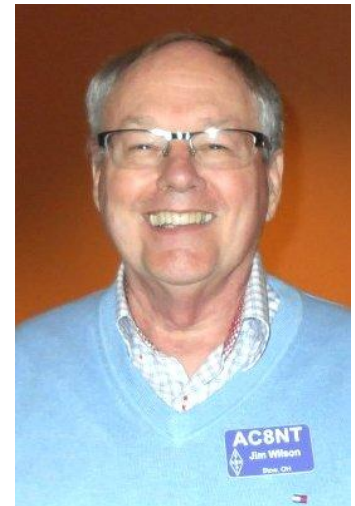
**K8IV
Ed**

**KB8UUZ
Tom**



From the President

Jim, AC8NT
PCARS President



We had some great fun in December. We had an outstanding Christmas dinner. Lots of fun and great conversation. I also had the privilege to present Tom, WB8LCD with a **President's Award for 2018**.

With the help of Rick, K8CAV we also finished a milestone in the cleanup of Bay 3. The big steel bench has been disassembled and a source has been identified to recycle the steel. We also installed a new motion sensing light over the Social Room garage door. It now lights up the parking area any time at night when motion is sensed. It will make it a lot easier and safer to get to and from our cars.

You will hear this a lot, but it has been a great year for PCARS. Just a few of the highlights (not in any particular order):

1. **Hamvention Club of the Year** - This must be in our highlights reel this year. It was a great honor and tribute to this great club. Every club member can be proud of this honor.
2. **Fourth in US for Field Day 2018** - Tony, WA8AR led the team in this event. We had an outstanding time and did VERY WELL. Going forward we WILL win this event.
3. **\$9600.00 to the Center of Hope** - We can all be very proud of our contributions to this great organization. We have given over \$39,000.00 to this organization over the years. This proves that PCARS is a valuable member of our community.
4. **PCARS Wins First Place in the Annual Ohio Section Newsletter Contest** - Thanks to Parky's outstanding work and all of you that created the articles we continue to win awards for our newsletter The RADIOGRAM. The club can't thank Parky enough for the great work he has done on our newsletter.
5. **Dedication of VHF Room and Antenna Tower to Jim, KC8PD, SK** - Jim was a founding member that did so much for this club, it is hard to list. Safe to say, without Jim we would not have a club or a club site. He will be missed.
6. **PCARS expanded its contest participation to include RTTY contests** - Thanks to Chuck, W8PT and George, K3GP our club is now entering these events. We are new at this but we expect to get better quickly. More contests = more fun.
7. **PCARS continued its support of Youth DX Adventure** by contributing \$500 to this organization. - We will continue to support more involvement of youth in our great hobby.
8. **Displayed at two Mini-Maker Faires in Kent and Akron** - We had great turnouts at our displays, especially at the Akron Mini-Maker Faire. These events provide great exposure to our hobby and our club.

9. **We participated in 10 contests this year** – Thanks Chuck W8PT for all your great work in managing our contest activities. You have helped convert several of us to this area of our hobby. Simple fact is they are a lot of fun. We will be working in 2019 to get even more of our members involved in contests.
10. **Improvements in our club site** - Thanks to Family Services for fixing our leaking roof! With the roof fixed and with the help of a lot of members, we have cleaned up and improved our club site. Cleaning, painting and repairing thing has made our site much nicer. Can't thank the volunteers enough for this great work.
11. **Introduction of FT8** – Thanks to the Digital SIG with Rick's K8CAV leadership a lot of our members were introduced to this new mode. Because it requires some computer expertise and a deeper understand of how our rigs and interfaces work, it was not super easy to get this mode to work. Our Digital SiG did a great job helping our members get set up.
12. **Updating our club rigs** – We now have three brand new ICOM IC-7300's. In our shack we only have two different rigs, IC-7300's and the Kenwood TS-590SG. This will make it much easier to run contests and other events from the club. This has been a great improvement.

Now that we have patted ourselves on the back, it is time for some of my **2019 goals**:

1. **Have more Get On the Air Days** and more people operating from the Club Site – We need to use our site more for operations. To that end, we are planning to have more GOTA days both on weekends and during the week. We will also be providing training in the operation of our rigs for any or all of our club members. Let's use our shack more!
2. **Finish up the work on Bay 3** - This will provide more space to hold build days and other events. This will require some cleanup and some paint, but will be well worth the effort.
3. **Get more people interested in our hobby**, especially the younger folks – This means more face time with this demographic and more events focused on introducing our hobby to a broader range of age groups. We will be using Boot Camps to help with this effort.
4. **More participation in the contests the club enters** – We need more members to come to these events and make some contacts.
5. **WIN FIELD DAY!!** – I think this is on everyone's wish list. We can make this happen if we plan and work for it.
6. **Have more build events with a broader range of projects** – We will have a range of project kits available for club members to build. These will include antennas, test equipment, and radio projects. We always have a great time at these events. If you have any ideas for projects, let me know and we will make it happen.

We have had a great year and are planning to have an even better year in 2019. Please send me any ideas you have for improving our club. This includes events and club site improvements. **Have a GREAT NEW YEAR!!** I wish you health, happiness and many great contacts. Plan to have **more fun** in 2019. Each of you deserves it.



From the Vice President

Nick, AC8QG

PCARS Vice President



I'm super excited to be the new Vice President of PCARS! I'm sure it's going to be a lot of work, but I already feel the support of everybody in the club! Since I joined, this club has been a gateway to fun and learning for me and my family. I plan to build on that experience throughout the coming year!

I don't think anybody, including myself, truly appreciates this special era we're in right now. It's not hard to put the past on a pedestal and demonize the current. Technology is advancing faster than ever, and it's easy to miss the awesome things going on around us while we dwell nostalgically on the past.

Well people, this is the golden age of amateur radio.

Think about it. If you have a smartphone or a laptop, you can use EchoLink to get on the air for zero dollars! New digital modes, like FT8, let you stretch the limits of radio propagation and make contacts around the world even when the bands appear dead! Software-defined radio packs more into less space and less weight!

If you like pounding brass, that's fine. Do it! There are tons of CW contests and lots of operators on the air. Show off your skills! If you're having fun, then new hams will want a piece of the action!

Do you prefer to work phone? Great! Microphone technology has advanced and has become more affordable, DSP is cheap and effective, and there are people all over the world waiting to talk to you!

Are you a maker or a programmer? Excellent! From 3D printers and open source software to Arduino and the Raspberry Pi, there are plenty of excuses to play with all the latest gizmos and discover new ways to use them.

Now here's the cool part: PCARS makes everything even better!

- Want to try contesting? We have a SIG for that.
- No space for an antenna? Come out and operate from the club site.
- Shack lacking some test equipment? Check out our lab.
- Break something? Reach out to the group — we'll help!

The list goes on and on.

So, capitalize on the technological achievements we're living through right now! Take advantage of the prosperity of our club! Enjoy this hobby and have fun!



Schedule of Events



On the calendar for upcoming meetings and activities are:

- Jan 7th - Board Meeting at the club site - 7pm
- Jan 9th - ICOM 7300 Radio Training - at the club site in Ravenna - 6:30 pm
- Jan 14th - PCARS Meeting at the Kent American Legion - 7 pm
- Jan 15th - Field Day 2019 Meeting - at the club site - 6:30 to 730 pm
- Jan 16th - IF bad weather on the 9th - ICOM 7300 Radio Training - at the club site in Ravenna - 6:30 pm
- Jan 19th - **DX Engineering Winter Sale Day**



Special Interest Groups (SIGs) - Every Month at the Club Site in Ravenna - 7 pm

First Tuesday* - **Digital** - Moderator: K8CAV

**Note January's Digital meeting will be on Jan 2nd*

Second Tuesday - **QRP/CW** - Moderator: KB8AMZ

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

*** January Antenna SIG will start at 7:30 pm*

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

Fifth Tuesday - **Linux for Hams** - Moderator: KB8AMZ

Fourth Thursday - Net Night at the club site - 6:30 pm



January Meeting Presentation Information:



The January PCARS meeting will feature a presentation by PCARS member Chris Woolverton, N1CJW. Christopher J. Woolverton, Ph.D., is Professor of Environmental Health Sciences in the College of Public Health at Kent State University. He is additionally on the faculty of the NIH National Biosafety and Biosecurity Training Program. Chris oversees KSU's NIH Designated Training Facility, training scientist-users in the safe and secure use of pathogen high-containment facilities.

Chris will be talking about the FEMA "Are You Ready" program which is a comprehensive program for individuals and families to prepare themselves for all sorts of local and national catastrophes that could affect them. Relying on someone else to take care of you is never the best way to survive a catastrophic situation. If you are involved in Emergency Communications, you will not be able to respond if you aren't certain that your own home and family are secure and know what to do.

Chris will also be talking about Bioterrorism readiness. "It can't happen here" is probably the most common response to concerns of Bioterrorism, but it only needs to happen once to really ruin your day! Not exactly a subject that too many of us are familiar with, but even a little knowledge could save your life. Bioterrorism events can spread quickly. While waiting on the professionals to "declare" an event can take time, having an awareness to Bioterrorism and how it spreads can help those at the scene begin to take preventive measures that could significantly slow down the spread of a biological agent.

While just a bit out of the normal for a PCARS presentation, this should be a very interesting evening! I hope you'll all come out and enjoy our first meeting of 2019!

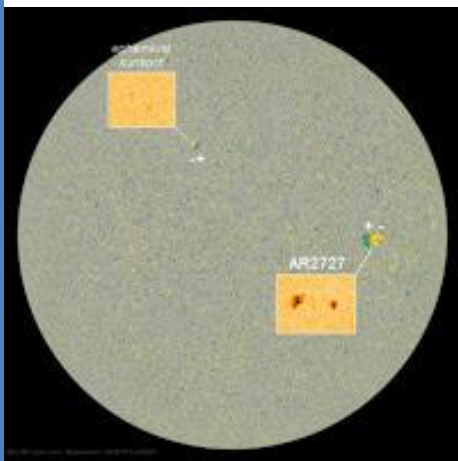
73 Tom, WB8LCD

From the CQ Newsroom

<http://cqnewsroom.blogspot.com/>

Beleaguered DXers, take heart ... **Solar Cycle 25** is starting its engine! SpaceWeather.com reports that in mid-November, a small sunspot made a brief appearance in the Sun's northern hemisphere, vanishing a few hours later. What was notable, however, was that its magnetic polarity was reversed from that of the vast majority of Cycle 24 sunspots. That, along with its location far from the Sun's equator, indicates that this "ephemeral sunspot" is an early messenger of Cycle 25.

According to SpaceWeather.com, this is the third Cycle 25 sunspot observed to date. It points out that it is common for sunspots from different cycles to coexist during the transitions from one cycle to the next, and is generally a process that plays out over the course of a year or two (so Cycle 25 has not yet really started).



The presence of these early Cycle 25 spots appears to provide reassurance that there *will be* a Cycle 25, allaying fears that we may be heading for another "Maunder minimum," a lengthy period with virtually no sunspots. "The solar cycle is still operative," notes SpaceWeather.

November 17, 2018 magnetic map of the Sun shows two sunspots. The one labeled AR2727 at the lower right is a Cycle 24 sunspot while the "ephemeral sunspot" at the upper left, with reversed magnetic polarity, is from the future Cycle 25. (NASA Solar Dynamics Observatory image, via SpaceWeather.com)

PCARS

ARRL Volunteer Examiners:
serving the Amateur Radio
community

First Saturdays 10:00 am
at the club site in Ravenna
February, April, June, August,
October, December



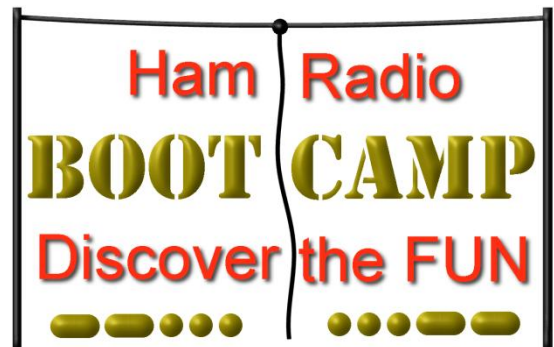
Ham Radio Boot Camp Dry Run

Jim, AC8NT



The Boot Camp dry run is scheduled for Saturday January 12 at 9 AM at the club site. All are welcome to attend. We will be discussing and demonstrating each of the stations that will be used for our first camp. The purpose of this camp is to provide an introduction to our hobby/sport to those who want to learn what ham radio is all about and just how it works. There will be nine stations:

1. Introduction to Ham Radio – A video and short explanation of the hobby.
2. What makes a station (equipment required) – Demonstration of what makes up a station.
3. Making a HF contact – Hands-on making an HF contact. We will have a station set up to make a QSO. We will probably use 10 meters. A script has been written for each attendee to use to make a CQ and complete a simple QSO.
4. Making a Repeater contact – Hands-on making a contact on a repeater. We will be using the radio in the VHF room to make a typical repeater contact. A script has been written to be used by the attendee.
5. Making a digital contact – Hands-on making a contact using FT8. We will be using WSJT-X and the Kenwood TS-590SG for this activity.
6. Antenna setup and tuning – Hand-on activity that allows an attendee to tune a 2 meter dipole antenna.
7. Morse Familiarity – Allows attendees to receive a simple Morse code transmission and a few to transmit a short message.
8. Display of equipment and things you can build – Display in the lab of various antennas, a couple of transceiver projects and other equipment that hams can use to make contacts.
9. Our Club and Training – Here we will explain why it is a good idea to belong to a club and what tests and training are required to get a license.



We will need club members to man these stations. The purpose of the dry run is to show members what is required and how the stations work. I hope to see a great turnout for this dry run. Based on the information collected, a formal Boot Camp will be scheduled. Please come on out and help with this effort.



Carole Perry to Visit PCARS Meeting in March

Tom, WB8LCD



Although it's a ways off yet, I want to give you a "Heads Up" on the March 11th, 2019 PCARS meeting. It's been listed tentatively on the web-site calendar, but I'm guessing not too many of you have checked it out that far in advance yet. It's now confirmed and should be an outstanding presentation!

Carole Perry is the recipient of the prestigious 1987 Dayton Ham of The Year Award, the 1987 ARRL Instructor of The Year Award, the 1991 Marconi Wireless Memorial Award, the 1993 QCWA President's Award, the 1996 Radio Club of America (RCA) Barry Goldwater Amateur Radio Award, the 2009 RCA President's Award, the 2012 RCA President's Award, and the 2015 Vivian Carr Award for Women in Radio. She is the winner of the 2016 SOAR (Sisterhood of Amateur Radio) Legacy award for Pioneering Women in Amateur Radio, and the 2016 recipient of the YASME Foundation Award for Excellence. In 2017 she was the winner of the Brooklyn College Milton Fisher Second Harvest Award for her volunteer work with young people and technology, around the world. In May 2018 Carole was inducted into the "CQ Amateur Radio Hall of Fame." In July "QST" magazine, Carole was the featured member in "Member Spotlight."

Carole is an RCA Fellow, and in 2007 she was elected to the RCA Board of Directors; a position she still holds, and she created the Youth Activities Committee which she now chairs. She serves on the RCA Scholarship committee as well. She also created the RCA Young Achiever's Award, given to students in grade 12 and below who have demonstrated excellence and creativity in wireless communications. One hundred and seven youngsters have received this award along with a stipend, so far. Carole is also presently a Director for QCWA (Quarter Century Wireless Association). The QCWA Youth Activities program was created and chaired by Carole.



Under Carole's leadership, the RCA Youth Activities Committee goes into schools across the country to set up radio/technology programs. Equipment, cash grants, books, and supplies are donated to the chosen schools or youth groups.

Carole has moderated the Dayton Hamvention Youth Forum and Instructors' Forum for 31 years. She is a member/director of QCWA and RCA. She is also a member of ARRL, DARA, (Dayton Amateur Radio Association) AWA (Antique Wireless Association), and Brandeis Women.

Carole is a contributing columnist for CQ Magazine's Youth Column.

Carole will be with us at PCARS! She will be discussing how to get youth involved in Amateur Radio. I cannot think of a more qualified person to talk with us on this topic. I know you'll want to be there. This is again the type of meeting that we will want to promote not only to other clubs in NE Ohio (and beyond), but we might also want to invite anyone and everyone you might know in local education. Starting in January I'll have a lot more information for you on this meeting, but I want to make sure it's on *your* calendar as a "not to be missed" meeting for the coming year.

Andre Maria Ampere - Dead Electrical Dude

Philip, KA4KOE



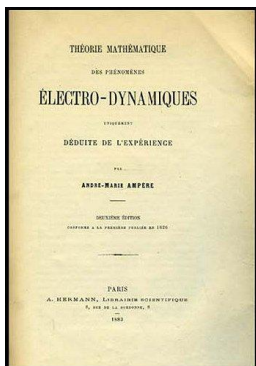
Andre Maria Ampere - Born: 20 January 1775 - Died: 10 June 1836

“Oui, I'm a Pretty Boy!”

After enjoying a brief sabbatical, here is yet another treatise churned up from the dank depths of my twisted mind. Maria makes it an even dozen dudes for our ongoing saga of the pioneers who have made our modern electronic world possible. I doubt if any of us will make a contribution to science so epic as to have a fundamental unit of measure named after us, or perhaps some element or natural phenomenon. “Hey Professor Smith! It measures out to 0.932 Neidlingers!!! Only +3.2% from our calculations!” *Yeah...in my wildest dreams!* To recap, for those of you who have tuned in late, here is a list of our past honorees on this internet website; Messrs. Maxwell, Tesla, Armstrong, Marconi, Ohm, Volta, Hertz, Morse, DeForest, Fessenden, and Henry. So, without further delay, I present our current dude, Mr. Andre Maria Ampere.

Maria can accurately be described as a child-computing prodigy. How many of us can claim to have mastered the calculus while only in our early teens? Maria had a paper rejected for publication by the Academie de Leon at age 13 as he used infinitesimals in his calculations: he was totally ignorant of the use of the differential calculus at the time and subsequently enlisted the services of a monk to tutor him in this complex subject. He learned the new math quickly. Impressive.

A series of tragedies then befell the Ampere family. Andre's sister died from an illness in 1792. Later, his father lost his head to the executioner's guillotine. Understandably, the young intellectual's world was shattered by these events, and he went into a deep funk for the better part of 18 months. It took the love of a woman to snap him out of his destructive reverie. The girl's name was Julie. The couple wed in 1797 and had a child. Unfortunately, Julie died in 1803. Ampere remarried in 1806, and had another child, Albine. But fate was not kind to Andre, as he and Jenny were legally separated at the time of Albine's birth. He subsequently gained legal custody of the child. His children, however, did not bring much joy to the scientist, and he was quite distressed by their behavior in later years. Andre was a singularly unhappy man.



Despite this personal baggage, Ampere made steady progress in his career, progressing steadily from a humble position as a mathematics professor to a recognized scholar. He was elected to the *Institut National des Sciences* in 1814 for a paper on partial differential equations. Of course, Ampere's claim to immortality was assured with the 1826 publication of the paper “*Memoir on the Mathematical Theory of Electrodynamic Phenomena, Uniquely Deduced from Experience*”, which described the properties of electric current, its relationship to magnetism, and how these properties could be demonstrated by a series of experiments. He also established experimental verification of Avogadro's Number, an important constant in the field of chemistry. For Maria's discoveries, the unit of electrical current, the **Ampere**, designated by the letter **A**, was named in honor of him.



Reprinted with permission from Philip Neidlinger, PE, KA4KOE From the series titled: “Dead Electrical Dudes” - No. 12 July 23, 2004

Canadian National Parks On The Air 2019

From the RAC



Canadian National Parks on the Air Event Set to Start on January 1 The Canadian National Parks on the Air event ([CNPOTA](#)) will get under way on January 1 and continue until year's end. A volunteer group of a half-dozen hams in Nova Scotia, working with a zero budget, came up with the notion of attempting to replicate the success of the National Parks on the Air (NPOTA) event in 2016, first created to mark the centennial of the National Park Service. Radio Amateurs of Canada ([RAC](#)) has announced its support for CNPOTA, in cooperation with Parks Canada.



All radio amateurs are invited to activate any of Park Canada's 48 national parks and 171 national historic sites, while "chasers" attempt to land a contact. Activity for activators and chasers will be tracked on a dedicated website and a real-time leader board, and operators may compete for online awards and certificates. For updates on the program's progress, visit the CNPOTA website (<https://cnpota.ca/>).

WSJT-X Version 2 Released - UPGRADE !!

CQ Amateur Radio

From the CQ Newsroom

<http://cqnewsroom.blogspot.com/>

A new version of K1JT's digital communications suite - WSJT-X, Version 2.0.0 - has been released for general use. All users of the software, especially the popular FT8 and MSK144 modes, are encouraged to upgrade promptly. "The FT8 and MSK144 protocols have been enhanced in a way that is not backward compatible with older program versions," according to an announcement on the WSJT home page. It continued that the new protocols became the world-wide standards as of December 10, 2018, and that **"all users should upgrade to WSJT-X 2.0 by January 1, 2019. After that date, only the new FT8 and MSK144 should be used on the air."**



Other modes included in the WSJT-X suite are JT4, JT9, JT65, QRA64, ISCAT, WSPR and the Echo mode for measuring your own signals reflected from the Moon. For more information, visit <https://tinyurl.com/hg6rnxm>.



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.

February 2nd, April 6th, June 1st, August 3rd, October 5th

Also - March 27th at 7pm (end of Tech Class)

Saturday, June 22nd at the Field Day site - 4 pm

What to Bring to the Testing Session

- \$15 is 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 any 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 indicating the credit(s) earned.
- Original and copy of a pre-March 21, 1987 Technician license (this provides credit for the Element 3 [General] exam) - you must be currently licensed to get this credit.

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

Any Questions? Contact: KB8UUZ@gmail.com

PCARS Yahoo Group

Members are reminded that PCARS has a Yahoo Group dedicated to PCARS information. It's a great site to sign up for and get on the mailing list. Check out the PCARS Yahoo Group at: <http://groups.yahoo.com/group/PCARS/>



As most of you may know, the portcars e-mail forwarding system is working anymore. Too many internet providers are looking at our forwarding system as spam and deleting the e-mails we send out through that system. So, what to do?

Two things every member should do.

1. Check the PCARS web site every day, maybe a couple of times a day to see new information that is posted.
2. Another thing to do is to join the PCARS Yahoo 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!!

Exam Info

General Pool Update and 2019 Exam Fee

New General Question Pool to Take Effect July 1

On July 1, 2019, a new Element 3 General-class question pool will take effect for examinations. VECs and VEs will have new test designs available that must be used at exam sessions effective that date.

The newly revised pool, released in December 2018 by the Question Pool Committee (QPC) of the National Conference of Volunteer Examiner Coordinators (NCVEC), must be in use starting on July 1. In this pool, there is one graphic required and 453 questions, down slightly from 462 in the previous pool. To view all three question pools, visit the NCVEC website at www.ncvec.org.

Previous ARRL VEC-supplied General-class exam booklet versions (2015 series) and computer-generated General-class exams that were created from the 2015 question pool are only valid until midnight on June 30, 2019. At that time, VE team leaders may destroy the old versions of the General-class exams.

ARRL VEC has supplied its officially appointed field stocked VE teams with new exam booklet designs. Field stocked teams that no longer meet the field stock requirements or who have not conducted a session in the past year and non-field stocked teams that have been keeping supplies without qualifying through the VEC will not receive an updated package. Non-stocked VE teams should be returning their exam packages and supplies to ARRL VEC after the session is completed. The officially stocked VE teams receive

their exam supplies in a large box, which is a 6-month-to-1-year supply, depending on the team's activity levels. To see if your team qualifies to be field stocked with a bulk quantity of our test materials, visit www.arrl.org/field-stocked-ve-teams.

2019 ARRL VEC Examination Fee Remains at \$15

A \$15 fee is charged to every person seeking a new license or upgrade, as listed on your ARRL VEC Candidate Roster. This fee pays for one attempt at each of the three exam elements. If an applicant retests an exam element, another \$15 fee is charged (and another roster entry is created).

VEC activities and fees are governed by FCC rules. VECs are allowed to collect an examination reimbursement fee from each candidate who takes one or more exam elements. Per FCC Rule §97.527, VECs and VEs may be reimbursed by examinees for out-of-pocket expenses incurred in preparing, processing, administering, or coordinating an examination for an amateur operator license. To use exam fees for anything other than costs directly incurred in relation to exam session administration would be a violation of FCC rules.

As long as the expense is warranted and has been prudently incurred, and the expense is specifically related to exam administration, then ARRL VE teams may retain up to \$7 of this fee. The team should keep a complete record of the expenses paid (with receipts) in team records for 2 years. Records must be made available to ARRL VEC upon request. Costs should not exceed the

Question Pool Schedule

The three current question pools (and any exam designs based on these question pools) are valid as follows:

Technician-class (Element 2) Pool effective July 1, 2018 is valid until June 30, 2022.

Questions withdrawn from use: none.

New General-class (Element 3) Pool will take effect July 1, 2019, and will be valid until June 30, 2023.

Current General-class (Element 3) Pool effective July 1, 2015 is only valid until June 30, 2019.

Questions withdrawn from use: G1E10 and G5B08.

Amateur Extra-class (Element 4) Pool effective July 1, 2016 is valid until June 30, 2020.

Questions withdrawn from use: E9H03 deleted.

The question pools review and update is part of a regular process. Each question pool is reviewed and updated on a 4-year rotation. The Extra-class question pool is scheduled to be updated in 2020.

Important Reminder

The new NCVEC Form 605 (issued September 2017 or later), which includes the updated basic qualification question section, must be used at exam sessions. Older versions of the form are obsolete. Each applicant applying for a new or upgraded license must answer the basic qualification question. A question left unanswered will result in the application being rejected by the FCC. It's imperative for VE teams to ensure the applicants use the correct 605 forms and that the forms are accurately completed.

allowable reimbursement fees and may not be kept if no expenses were incurred. Using the fees for any other Amateur Radio initiatives or activities would be a misuse of the fees.

Exam fee and reimbursement information for VE Teams and examinees are on the ARRL VEC exam fee page at www.arrl.org/arrl-vec-exam-fees.

PCARS Patches & Stickers



New 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

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 !!**

January	
3	N8QE
10	N8XTH
17	AC8NT
24	WB8LCD
31	KE8BWA

February	
7	K8CAV
14	KA8TOA
21	N8QE
28	WB8LCD

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

I am trying to get some new net control operators, anyone interested please contact me.

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 Net Control !

Net Operators: Use the current versions of the Net Script and Log Sheet (with my e-mail address on it). You can find them on the PCARS web site in the Nets section. *Please* download them and use them. Also, remember to e-e-mail me a copy of the log for the club records and certificates.

If you have some issues and can't make it as net control contact me or see if you can trade with someone.



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



Portage County Coms Unit

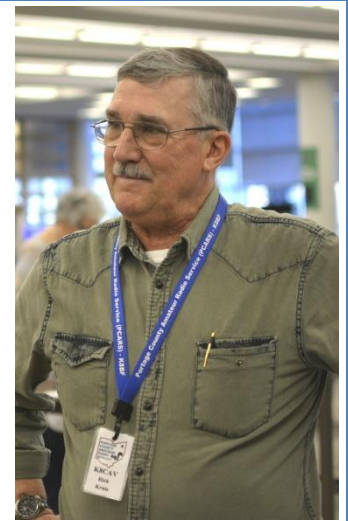
Rick, K8CAV

Portage County Coms Unit Commander

The Communications Unit of the Portage County Office of Homeland Security/Emergency Management, aka the Coms Unit, held its last meeting of the year on Monday December 17th. This has been a very successful year for the Coms Unit and involved lots of training and exercises in addition to participation in an actual incident during the summer.

The mission of the Coms Unit is to provide support to the PC OHS/EM. In most cases this involves communications of one sort or another but it occasionally involves other support such as Damage Assessment when that becomes necessary. The Portage County Commissioners have designated the Coms Unit as an official, sworn unit of the PC OHS/EM. Membership is open to any person who meets and maintains the qualifications necessary for membership. Members of the Coms Unit who are also licensed Amateur Radio Operators are part of the county RACES unit and are authorized to use Amateur Radio equipment and frequencies to support the PC OHS/EM in its mission when requested. The Coms Unit also uses public safety radios and frequencies in its support.

Qualifications to become a member of the Coms Unit is completion of the basic ICS/NIMS courses available at no cost on-line of ICS-100, ICS-200, ICS-700, and ICS-800. Members of the Coms Unit are authorized to attend additional ICS class room training such as ICS-300, COML, and more, when they are available. RACES members of the Coms Unit must also have an Amateur Radio License in the grade of Technician Class or higher. Coms Unit training consist of bi-weekly training nets, monthly meetings, scheduled drills and exercises, and actual incident support. If you are interested in becoming a member of the Coms Unit, please send an e-mail to k8cav.coms@gmail.com and I'll send information and an application.



I want to thank all of the members of the Coms Unit for all of the time and hard work that they put in this year. It was their efforts and serving with integrity that made for a very successful training year and enabled the Coms Unit to achieve its success.

L-R: Paul KE8EGF, Eddie KD8SOP, Ian KE8IED, Greg KA8TOA, Bob N8KBX, Rick K8CAV, Mike KD8FLZ, Steve K8SRR, Ron W8AHC, Andrew KE8BWA and Mike KB8TUY. Not pictured: Bob K8FEY, Sandy KD8JCY and Bob KZ8RLD.



Portage County Skywarn Net

James, KD8VT
Portage County EC



There will be a Skywarn® Net starting early in 2019 and it will be held on the K8IV repeater. I want to thank Ed Polack, K8IV for allowing me to use his repeater for the net.



The net schedule has not been determined as of this time. I am asking for all Skywarn members in Portage County to contact me via my email: jkandrews@hughes.net. When contacting me please let me know which day of the week would be most convenient for you to check in to the Skywarn Net. I will schedule the net so as to accommodate the greatest number of Skywarn member's preferences as to the day of the week. The time will likely be in the 1900-2000 hour EST timeframe.

Watch for updates on the PCARS net or in next month's club newsletter.

Hamfest Calendar

01/27/2019 - TUSCO Amateur Radio Club - Location: Wallick Auctions - 965 North Wooster Avenue - Strasburg, OH 44680 - Website: <http://www.tuscoarc.org> - Contact: Janice Green , KB8YDK - 32210 Norris Road Tippecanoe, OH 44699 - Phone: 740-922-4454 - Email: k8wfn@tusco.net

02/17/2019 - InterCity ARC Hamfest Location: Mansfield, OH - InterCity Amateur Radio Club Website: <http://www.w8we.org>

06/01/2019 - Breeze Shooters Amateur Radio Club - Location: Big Butler Fairgrounds - 1127 New Castle Road - Prospect, PA 16052 - Website: <http://www.breezeshooters.org> - Contact: Cathy Heiles, KB3OYS - 134 Easley Road Pittsburgh, PA 15237 - Phone: 412-600-3846 - Email: kb3oys@breezeshooters.org

Happy Birthday PCARS Members

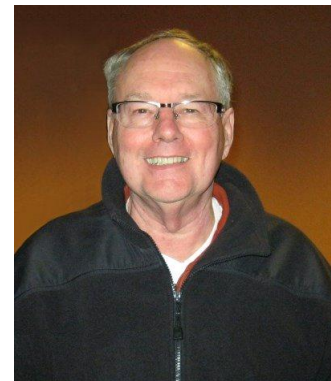
PCARS members having a birthday in **January**:

N8IL	Neil	Gerren
W8BBQ	Mark	Ludwick
NR8W	Russ	Williams
K8EUR	Alex	Dolgosh
N8PXW	Jim	Korenz
K8FS	Michael	Evans
N8NB	Dave	Fairbanks
KE8HNK	Elmer	Thomas
WA8OHK	Thomas	Gregory
KB8SZI	Peggy	Parkinson

NX8G	Rex	Simmons
KD8YXH	Roberta	George
KB8ZWT	Jeff	Phillips
N8GIE	John	Ziccardi
KE8BFA	Janice	Miller
KE8EFW	Robert	Sweitzer
KD8SOP	Eddie	Renfroe
K8MSH	Mark	Haverstock
WA8OKR	William	Hunt
N1CJW	Christopher	Woolverton

President's Award 2018 - Tom, WB8LCD

Jim, AC8NT
PCARS President



We had some great fun in December. We had an outstanding Christmas dinner. Lots of fun and great conversation. I also had the privilege to present Tom, WB8LCD with a **President's Award for 2018**.

Tom has been an officer since the creation of the club prohibiting him from winning this award. This is the first year he has not been an officer. His work as a founding member can't be overstated. He is a great guy and has constantly been working to make this club better.



The past recipients of the PCARS President's Awards:

- 2006 - KC8RJR Errol Jordan
- 2007 - KD8EPA Dan Porcase
- 2008 - N8EQJ (K8IV) Ed Polack and WB9LBI Bill Fraedrich
- 2009 - KB8TUY Mike Ryan, KD8LDY (NR8W) Russ Williams and KD8FLZ Mike DiCarro
- 2010 - KD8VT James Andrews and K8SRR Steve Randlett
- 2011 - K8CAV Rick Kruise
- 2012 - K8FEY Bob Hewett and N8QE Bob Hajdak
- 2013 - KB8UUZ Tom "Parky" Parkinson
- 2014 - KB8AMZ Terry Morris, AC8NT Jim Wilson and KD8WZS Zeb Smith
- 2015 - AC8QG Nick Wagner and KB3GXB Jennifer Andrews
- 2016 - KB8JFF Dick Ward and K8MSH Mark Haverstock
- 2017 - KD8ICP Tim Gehri, N8BI Jack Comer and WA8GCF Dave DeSimio
- 2018 - WB8LCD Tom Sly



For Sale: Two Velvet Vernier Drives, Large 4" dia. Vernier drives used for precision adjustment of air variable capacitors. \$60.00 for the pair.

For Sale: Two (2) Hammarland transmitting capacitors, for a large antenna tuner. Rated 300 pf at 7500 Volts. They would make the ideal capacitor pair for a high power tuner. 13-7/8" L x 5-1/2" W x 4" H. One of the capacitors has had a single plate removed from the rotor. This has had the effect of reducing the capacitance by 4% or 12 pf. Therefore, one of the capacitors measures 288 pf while the other one measures 300 pf. However, 250 pf is all that is required to tune 160 meters in a T-network tuner so this should not be a problem. \$150

For Sale: 4" Coax Entry Port, This 4" entry panel complete with stainless steel mounting hardware, boot and cushion for four cables up to 1/2" in dia. The cushion can be changed out so any combination cable sizes can be accommodated. Two of the holes have removable plugs. \$30.00

For Sale: Andrew Heliac Prep Tool Set, One set consisting of a prep tool for Andrew LDF4-50 1/2" Heliac and one almost new, (used once) Heliac cutter. This special Heliac cutter is designed keep the cut end perfectly round so it will easily fit into prep tools and result in a properly prepared cable end ready for the installation of a connector. \$130 for set

For Sale: Andrew Heliac Prep Tool, Two (2) new prep tools for Andrew LDF4-50 1/2" Heliac \$100 each
James, KD8VT 330-206-4909

Contact James. KD8VT - 330-206-4909 [04/02/19]

FOR SALE: WIMCO 2 Meter Wagon Wheel Antenna - Also known as a cloverleaf antenna. As new, plus save expensive shipping from Germany \$60.00

Contact David, WV8P - email: WV8P@roadrunner.com [04/02/19]

For Sale: Collins 100 Watt Dummy Load DL-1 S/N-5288 dummy load will handle 100 watts for tuning up your rig, can work with any radio transmitter. \$150

For Sale: Used KT-88 Amplifier tubes that just came out of service in a McIntosh MC-2102 100 watt stereo amp. \$150

For Sale: Collins SM-2 microphone with original box, packing, cable, connectors, and mounting stand. \$350

For Sale: Used Collins SM-2 microphone with mounting stand no cable included. \$150

Contact: Jeff, WA8SAJ at (440) 951-6406 [03/02/19]



FOR SALE: WIMCO 2 Meter Wagon Wheel Antenna - Also known as a cloverleaf antenna. As new, plus save expensive shipping from Germany \$60.00

Contact Al, WA8CCU - email: radioflyer73@roadrunner.com [03/02/19]

FOR SALE: Hustler 5-BTV Vertical Antenna - Good Condition with mounting bracket, SO-239 Adapter and home brew 17 M add-on. Delivered FREE anywhere in Portage County. I can also help with set up. \$75

Contact Gene, W8NET - call 330-619-9194 [02/02/19]

FOR SALE: ICOM IC-7300 - NEW - never turned on and still in the box! (I want a 7610) From HRO - \$900.00

Contact Richard, KA8OAT - call 330-506-7068 [02/02/19]

FOR SALE: Two beams for sale. These were made *BEFORE* MFJ started making Cushcraft antennas. **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.

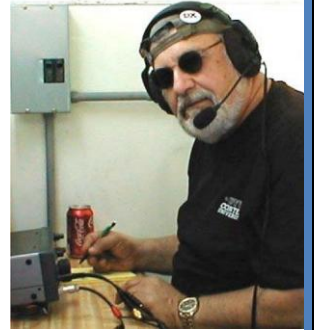
Cushcraft A505S - Five element **6 meter beam**. Cost new \$199.95 - Sell for \$100.00. This beam snagged me 4,900 contacts and 366 different grids on 6 meters. These beams were on a tripod on my roof. Had the roof replaced and took down the antennas.

Contact Tom "Parky", KB8UUZ at kb8uuz@gmail.com [01/02/19]



Charlie the Tuner's HF High-Lites

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



It's the start of a new year with all the possibilities of working some DX that you haven't before. Yes, it's not going to be easy with the propagation the way it is, but it won't be impossible. If you have been on the air at all, you know that there is still good DX opportunities. Twenty meters has been quite active with not only Europe and the Middle East showing up, but the South Pacific and Asia have also been heard here in our part of the US.

What I'm trying to say is that you shouldn't simply take for granted that the bands are dead and that you might as well simply work local Hams on 2 meters. Keep in mind that when there is a popular contest going, the bands are crowded. And not just with normal DX but with countries not normally heard from. If that is the case (and it is), then you also know that you can work some needed DX. Sure, the signals won't be 20/9, but they can be 5x5 and can be worked.

So turn on the rig and get on the air. Use the DX clusters to see what is being heard and worked in our part of the country and don't give in the nay-sayers who spread doom and gloom about the bands.

That being the case, let's see what we all might find in the next few months. Will you be able to work all of the following? No. But you will be able to work a good part of it. So get on the air.

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, AB5K & the AR TelNet Clusters Network, AF1G/C6ATH, NJ1Q & W1AW, NG3K & ADXO, W3UR & The Daily DX, K6VVA, K8GI, K8YSE, W8GEX & 60m DX News, W9ILY, DL1SBF, DL7UXG & The DX News Letter, DxCoffee.com, DXNews.com, DX-World.Net, ES1CW, F5NQL, F6AJA & Les Nouvelles DX, HA1AG, I1JQJ/IK1ADH & 425 DX News, I2MQP & DX Italia News, JI1LET, OZ1ADL, OZ6OM & 50 MHz DX News, 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.

3Y0I BOUVET DXPEDITION NEWS. On December 20th, the 3Y0I team posted a large update on their Rebel DX Group Web site at: <https://www.rebeldxgroup.com> In short, the press release talks about their "50-day long training and preparation period" prior to their DXpedition "to Amateur Radio's "Mount Everest"; 3Y0I from Bouvet Island." They also wrote about their boat that they will use for the DXpedition. The name of the boat was not provided, but the ship has been "entirely refurbished and refitted", and "at a cost north of a million dollars." The team also talks about the zodiac "type" high power boats, ham radio equipment and their "unique QSL cards designed by Stan, SP8S, (there are no such cards in the history of ham radio, yet). Again, the complete press release update can be found on the above Rebel DX Group Web site. No other details to report, other than that there were a few 3Y0I pirates active recently. Departure dates are still not known. It is still a mystery... It takes 12 days to get to Bouvet from South Africa, and they plan to stay on the island for at least 2 weeks, if the weather cooperates. The 3Y0I DXpedition's band plan frequencies (160-6m) and modes (CW/SSB/FT8) can be found at: <https://www.rebeldxgroup.com> <https://bouvetoya.org/3yoi-bandplan> QSL via ClubLog's OQRS (preferred), LoTW or via 3Z9DX. For more details and updates, we suggest to watch the following Web pages: <https://bouvetoya.org> <https://www.rebeldxgroup.com> <https://www.facebook.com/bouvetoya.org> <https://twitter.com/Bouvetoyaorg> <https://www.facebook.com/rebeldxgroup>

4X0, ISRAEL. Members of the Holy Land DX Group will operate from the heart of "Masada Fortress" as 4X0M (M=Masada) between Jan 4-6th. Masada is one of the most attractive sites and has the highest number of tourists visiting. Activity will start on Friday, January 4th, at 0730 UTC, and close down on Sunday, January 6th, 0600 UTC. They will have two stations on the air on 80-10 meters using CW and SSB. Operators mentioned are Ruben/4Z5FI, Mark/4Z4KX, Alex/4Z4AK, Ros/4Z5LA, Yuli/4X6HP, Vladimir/4Z5IW, Amir/4X6YA, Arthur/ 4X4DZ, Jan/4X1VF and Hal/W8HC. QSL Manager is Antonello, IK2DUW.

6W, SENEGAL. Willy, ON4AVT, will once again be active as 6W/ON4AVT from Mbour, Senegal, between February 20th and March 30th. Activity will be on 40/20/10 meters using CW, SSB, PSK31 and PSK63. Equipment is a Yaesu FT891 transceiver into a Buddipole antenna. This time Willy will also take an end-fed for 3 bands (40/20/10m). QSL via his home callsign.

9G, GHANA (Update). Last week we mentioned that Matt, IZ4YGS, is active as 9G5GS from Sanzule, West Takoradi (Western Region), Ghana. Matt informed OPDX of the following [edited]: "I'm travelling to Ghana almost every month for work reasons and it will be so throughout 2019. I'd like to be on-air from 80-6m, but it will take some time to be operational on all bands. I'll start with an FT-891 and wire antennas, SSB and FT8, mainly in the evening after work. Ham radio won't be my main activity in Ghana, but I'll do my best to let everybody have fun." QSL via IZ4YGS, direct or eQSL.

A7, QATAR Matteau, IW1GBV is QRV as A75GP. Active from various locations using QRP power. QSL via ops instructions.

FK, NEW CALEDONIA Phil, F6OBD is QRV as FK/F6OBD until Feb 10. HF bands using only digital modes. QSL to home call.

FR, REUNION ISLAND Pierre, F1TCV is QRV as FR/F1TCV until February 27 while on vacation here. Activity is on 30, 20, 17 and 15 meters using RTTY, PSK and FT8. QSL to home call.

HK, COLOMBIA Special event station 5K6RM will be QRV from January 5 to 12 to commemorate and promote the Manizales Fair. Activity will be on 160 to 2 meters using CW, SSB and various digital modes. QSL via bureau.

HP, PANAMA Special event station H31A will be QRV from January 1 to August 15 to celebrate the 500 years since the founding of the nation. Activity will be on 80 to 10 meters using SSB, RTTY, FT8 and some PSK31. QSL via HP1AVS.

KG4, GUANTANAMO BAY. David, AC8AY, is now active as KG4AY from Guantanamo Bay (NA-015) until March 21st. Activity will be on 80-10 meters using only SSB. QSL via AC8AY, direct, eQSL, LoTW or QRZ.com Log Book.

HS, THAILAND Brad, VK2BY is QRV as HS0ZNR until January 18. QSL via operator's instructions.

RI1, ANTARCTICA. Alex, RD1AV as RI1ANV from Vostok Station, IOTA AN-016, from Dec 25 to mid Feb. QSL via RN1ON.

V3, BELIZE. Paul, VE3AXT, is once again active as V31AX in the northern part of the country, Consejo Shores, Corozal, until mid-May. His rig is an IC-7300 with 100 watts into a Hexbeam G5RV dipole. QSL via M0URX and OQRS. Bureau QSLs are via OQRS ONLY at . Please do not send YOUR QSL card via the Bureau. For more info and pictures, see his V31AX QRZ.com Web page.

V84, BRUNEI. Operators Kom/9M6KOM, Choigonjav/JT1CO, Krassimir/K1LZ, Jeffrey/K1ZM, Patrick/KK6ZM, Adrian/KO8SCA, Nikolay/LZ1NK, Atilano/PY5EG, Roman/RN5M, Adi/S55M, Chris/VK3FY and possibly others will be active as V84SAA from Istana Pantai, Brunei, between February 7-18th. Activity will be on 160-10 meters with a focus on the low bands and the WARC-79 bands. Look for more details to be forthcoming as well as a Web page.

VK0, MACQUARIE ISLAND Norbert, VK5MQ is QRV as VK0AI until March. Activity is on the HF bands. Of late, he has been active on 40 and 20 meters using FT8 at various times. QSL direct to home call.

XV9, VIETNAM. Ops Bogdan/SP2FUD and Zenon/SP2GCJ will be active as XV9FUD and XV9ZT, respectively, from Vietnam, between February 5-18th. Activity will be on various HF bands and modes. QSL via their home callsigns.

Z8, SOUTH SUDAN Diya, YI1DZ is QRV as Z81D from Juba and is here for the next six months. Activity is in spare time on 80 to 10 meters using SSB and various digital modes. QSL via OM3JW.

Well, there you have it. If you want to work some DX, it will be possible BUT you need to get on the air to do it. Until next month, vy 73.

CW/QRP & Linux Special Interest Groups

Terry, KB8AMZ



CW & QRP SIG

Happy New Year to all this year 2019. The second Tuesday of January, the 8th, at 1900 EST is our Special Interest Group (SIG) at the club site. This month we continue the build of the Morse Code Practice Oscillator. I hope to see you at our first 2019 SIG of this great new year.

Linux SIG

The next meeting of Linux for Hams SIG will be January 29th.

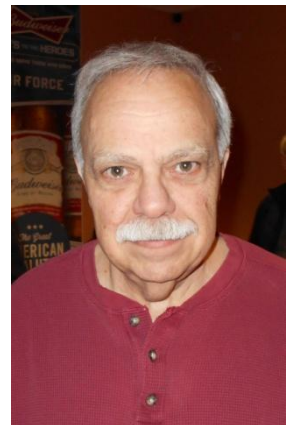
Please bring your Raspberry Pi computer setup. I will be showing how to configure fldigi for use with the ICOM IC-7300 (similar steps can be used for other transceivers).

Only your RPi computer system will be required. Configuration can be done without being connected to the IC-7300. The only OS I will be displaying is the official Raspberry Pi OS, Raspian, so you should have that OS installed on your RPi SD card.

April 30, 2019 will be the second Linux for Hams SIG.

Antenna Special Interest Group

Tony, WA8AR



The Antenna SIG will meet at 7:30 PM in the PCARS club site radio room on the third Tuesday of every month. Please note that our regular meeting time of 7 PM has been pushed back to 7:30 to accommodate Field Day planning meetings which will be held from 6:30 to 7:30, January to June. ALL PCARS Members are invited to attend FD meetings as well. Our January meeting will be held on 1/15/2018. All PCARS members and guests are welcome to attend the Antenna SIG. We will be discussing all antenna related topics including selection, design, construction, trouble shooting and safety for all Amateur Radio bands.

Please note that the PCARS QST email system is functioning very well, so please watch for PCARS QST's for last minute announcements prior to all Special Interest Groups. And, always check the PCARS web site for ASIG updates or last minute cancellations before going to the club site for a meeting.



Digital Special Interest Group

Rick, K8CAV



Due to the New Years Day holiday being on the first Tuesday of January, this month's Digital Special Interest Group meeting will be on Wednesday January 2nd at 7:00 PM at the club site in Ravenna. During last month's meeting I asked about what participants wanted to see more of or change about the Digital Special Interest Group and one item that was discussed and received favorably was Digital Operating at the club site. With the January meeting, the emphasis will be on operating digitally at the club site using the club's stations. Digitally operating as a 'topic' will continue every other month. Depending on the operating band(s) chosen we may be able to operate more than one band at the same time. As the IC-7300's are not yet fully set up we will probably limit digital operations this month to the TS-590 and if there is enough interest possibly using the IC-746 as well. If you aren't equipped to do HF digital at home, come on out to use the club's stations to have a great time operating!

Going forward we'll have three IC-7300's and the TS-590 available. The club is holding a training session on it's new IC-7300's on Wednesday January 9th from 6:30 PM until 8:30 PM and it's important that if you want to use the IC-7300 at the club site effectively including digital, that you attend this training session. If heavy snow or other weather conditions force cancellation an alternate date of Wednesday January 16th is on the schedule.

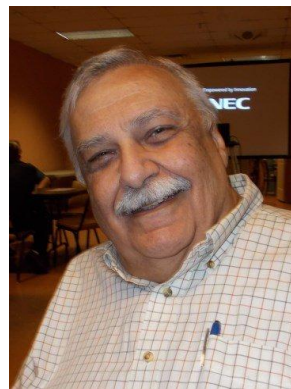
This year we're going to cover some new topics such as D-Star (yes there should be a local D-Star repeater operational at some point in 2019), digital operations through satellites, and others. If you have a particular topic you would like to see addressed, please let me know and I will get it into the schedule.

As always at every meeting, we will make time to help you with any questions, problems, or issues involving digital communications. If you want, please feel free to bring any or all equipment and we'll do our best to help get it up and operating.



DX & Contest Special Interest Group

Chuck, W8PT



General Info:

The DX/Contest SIG meetings are held monthly on the 4th Tuesday at 7PM at the club site. Some of the DX topics that are discussed are: basic listening, basic equipment needed, operating techniques, operating a pile up, and propagation, to name a few.



We also discuss contesting such as contesting for the beginner, how to take part in a contest, do you need high power or pricy equipment, contesting practice and what contests should you start with if new at radiosport.

January's meeting topic will be our upcoming QRP event – Freeze Your Acorns Off. We will also go over the various contests that K8BF will be participating in for 2019.

Contests that will be active at the PCARS Club Site in 2019	
Date	Contest
Jan 26-27	BARTG RTTY Sprint (Used for training for RTTY)
Feb 23-24	NA QSO Party RTTY
Mar 9-10	Idaho and Wisconsin QSO Parties
Apr 27-28	Florida QSO Party
May 4-5	7th Call Area; Indiana; Delaware; New England QSO Parties
Jul 20-21	NA QSO Party RTTY
Aug 24-25	Ohio QSO Party/ BBQ
Oct 5-6	California QSO Party
Oct 12-13	Arizona QSO Party

Contest Training:

On January 26th at the club site, our fellow PCARS member, George K3GP, will be instructing us in the art of RTTY operation for the upcoming North American QSO Party, RTTY mode contest that takes place on February 23-24. He will conduct the training by putting K8BF on the air during the BARTG RTTY Sprint. This will be a hands-on training. Watch for the formal announcement.

Rig Operation Training:



On January 9th at 6:30PM at the club site, our busy friend George, K3GP, will also be hosting the training we promised to have on our new club rigs. As you know, we have three new ICOM IC7300's and before we mess things up, we want to make sure that anyone who wants to operate from the club, is fully familiar with the operation of these rigs. We certainly don't want any repair issues right off the bat. So for those of you who plan to operate during contests from the club or simply operate during one of our open house operating nights, you must attend the training. This will not be the only



training session because we know that not everyone can make a certain date available to take part. So, if you can, please plan to attend the training even before the RTTY training.

I hope to see many of you at the meetings and training sessions.

Contest Calendar

January Contest Calendar	
Contest Name	Times
ARRL RTTY Roundup	1800Z, Jan 5 to 2400Z, Jan 6
North American QSO Party, CW	1800Z, Jan 12 to 0600Z, Jan 13
DARC 10-Meter Contest	0900Z-1059Z, Jan 13
North American QSO Party, SSB	1800Z, Jan 19 to 0600Z, Jan 20
CQ 160-Meter Contest, CW	2200Z, Jan 25 to 2159Z, Jan 27
BARTG RTTY Sprint	1200Z, Jan 26 to 1200Z, Jan 27

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

Some Notes About Field Day

Tony, WA8AR
Field Day Chairman



Our 2018 Field Day effort was very successful. K8BF placed 4th in the nation in class 4A, our best showing to date. That excellent result was achieved thanks to a large number of our fellow members volunteering to pitch in and help with all aspects of our Field Day operation. This year we are shooting to better our score and take PCARS to first place in the nation! To that end we will be fine tuning our operating practices to enhance our score and bring home a 1st place finish for PCARS.

One comment I have heard from a number of members is that “Field Day is not a contest”. In fact Field Day is a multi-faceted event that can be enjoyed by our entire membership. It is our biggest social event of the year; an emergency preparedness drill and yes, it is also a contest. So here is a bit of history:

The First Field Day

In 1933, The June 1933 QST announced that the second Saturday in June, for a period of 27 hours, starting at 4 pm local time, that hams would go into the "field" and set up portable stations. W1BDI, F.E. Handy said: “The real object of this contest is to test ‘portables’ wherever they may be available.... If successful, we want to make it an annual affair.” The scoring of that first contest was each QSO with fixed stations will count 1 point, contacts with other portables count 2 points, and DX contacts count 3 points. Multiply QSO points by the total number of ARRL sections, plus countries worked. September 1933 QST announced the winner of the 1st Annual Field Day was W4PAW. They made 62 QSOs and had 28 sections for a total of 1876 points.

So **YES**, from the very beginning Field day has been, and remains, **a contest** designed to test our Emergency Preparedness skills. Plus it has evolved into a platform to promote Amateur Radio and a social event for the enjoyment of all who participate in this annual event.

So I am inviting all PCARS members to come out and participate in any or all aspects of Field Day that suit your individual interests and help us reach our goal of being #1 in the nation in Class 4A!

Third Annual AM Rally - Countdown Has Begun

From the ARRL

The third annual [AM Rally](#) is on the near horizon getting under way at 0000 UTC on February 2 and continuing until 0700 UTC on February 4. The event aims to encourage the use of AM on 160, 80, 40, 20, 15, 10, and 6 meters while highlighting the various types of AM equipment in use today. The event is open to any and all radio amateurs running AM using any type of radio equipment — modern, vintage, tube, solid-state, software-defined, military, boat anchor, broadcast, homebrew, or commercial.



“We’re very excited about the upcoming AM Rally in February, given its growth over the past 2 years and the positive comments we’ve received,” said Clark Burgard, N1BCG, who is spearheading the event with Steve Cloutier, WA1QIX, and Brian Kress, KB3WFV. “In particular, it’s great to hear how so many ops are giving this classic mode a try, many for the first time, and of the help offered to them by those who have mastered the technology.”

For many, if not most, radio amateurs getting on AM is as simple as pressing the AM mode button on the front panel. Numerous transceivers in use today offer AM capability. A lot of hams enjoy restoring and using vintage Amateur Radio equipment, which typically means a separate transmitter and receiver. Until SSB subsumed it on the ham bands, AM was the primary HF voice mode. The change to SSB did not happen without some pushback, however.

Today, a group of dedicated radio amateurs keeps the flame alive, getting on AM frequently, and for many of them, AM is their primary operating mode. The AM Rally gives the uninitiated a chance to dip a toe into the pool, so to speak.

The [event website](#) has complete AM Rally details, contact information, award categories, logging, and tips on how to get the most out of your station equipment in AM mode. [Contact](#) Burgard for more information.

The event is sponsored by Radio Engineering Associates ([REA](#)), in cooperation with ARRL, which supports all modes of Amateur Radio operation. W1AW will play a leading role in the event, as it has for the past two years.

Certificates will be awarded to stations scoring the highest number of points in each of the five power classes, regardless of rig category, both for most contacts and most states/provinces.

“All it takes is a turn, push, or click to participate!” Burgard said. There’s also plenty of time to dig out and dust off that old AM-capable tube gear sitting in your attic or basement.

Editor’s note: CHECK OUT THE VIDEO !!!! <https://youtu.be/c8CEVvfXHaa>



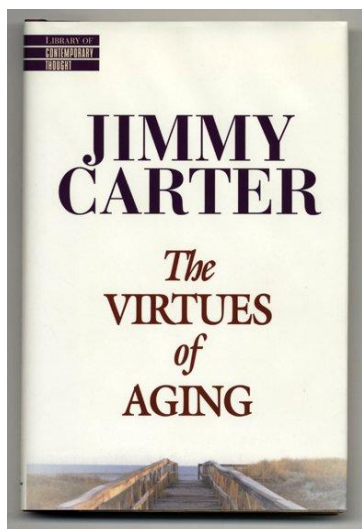
Joe, W8KNO



January starts a new year, we age a year and the amateurs age one year older too. I read an article in "*The VIRTUES of AGING*" by Jimmy Carter. I would like to share it with you.

Introduction: I'm Old, but It's Good!

"Even before leaving the White House, Rosalynn and I received a notice from the American Association of Retired Persons that we were qualified for membership, but we considered



ourselves too young to face the stigma of senior citizenship. However, once back in Plains the point was to be driven home most firmly and clearly. We live 120 miles south of Atlanta and habitually drive back and forth to the The Carter Center and to Emory University, where I am a professor. One morning we left our house quite early and stopped to eat breakfast in Thomaston, Georgia, about halfway to Atlanta. There were four of us in the car, and we all ordered about the same thing. But when the waitress brought my bill, I noticed it was less than the others. Perhaps seeking credit for being an honest customer, I called her back and began to tell her that she had made a mistake. An older farmer, dressed in overalls, was sitting at a nearby table and apparently overheard my conversation. He looked over at us and called out in a loud voice, "Your bill ain't a mistake, Mr. President. Before eight o'clock they give free coffee to senior citizens."

A wave of laughter began at our table, and it still resonated through the restaurant as I paid my bill and hurried back to the car. For several weeks afterward, every time we approached Thomaston I knew that someone would say, "Why don't we stop here for breakfast? There's free coffee for some of us."

You may wonder why I mention this. Our hobby has changed dramatically since I became interested. When I started, CW and AM were the modes. Then came RTTY, SSB and etc. Technology is moving every faster and newer modes are arriving every day. They and other communication methods have changed the landscape. My greatest feeling of accomplishment using amateur radio was while on cruise to South America in 1963 aboard the USS Hammerberg, I operated 26 hours continuously passing phone patch traffic so each crew member could talk to home.



2019 brings each of us the opportunity to achieve new levels of enjoyment in this exciting hobby. Enjoy it!

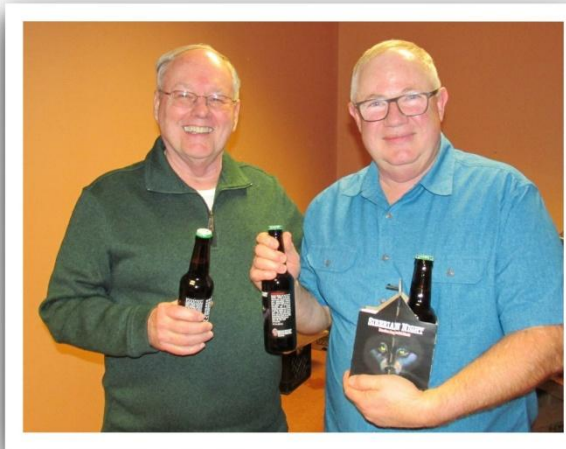
Jim, AC8NT



In the beginning a few good men including Tom, WB8LCD decided they wanted to start a new ham radio club. The club they belonged to didn't seem to do much. They wanted to do more and have more fun. That resulted in the creation of PCARS. Since then Tom has played a consistent role in making sure every event and get together has been a great experience. A good example has been his role in making Net Night at the Club a lot of fun. Whether we work on a project, watch a movie or just have a

lively discussion he is always there making sure everyone has a great time.

This year is the first year Tom has not been an officer in PCARS. He has certainly given his all to our club. But just because he is not an officer doesn't mean his interest in PCARS will dwindle. To recognize his great work, we gave him a President's award for 2018, but to recognize his continuing work we have created the non-officer position of **"Funmeister"**. In this lifetime position he will continue to make sure our events have fun built in.



We also recognize his love of beer and have placed a

plaque in the social room acknowledging his position of Funmeister and his love of the brew. Please welcome Tom to this new position and the next time you visit the club site look at the plaque recognizing his new position. For a lot of us, Tom was our reason to join PCARS. We will always appreciate his great work.



PCARS Ham Radio License Plates Wanted !!!

Dig out an old 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 69 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 Yahoo 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.

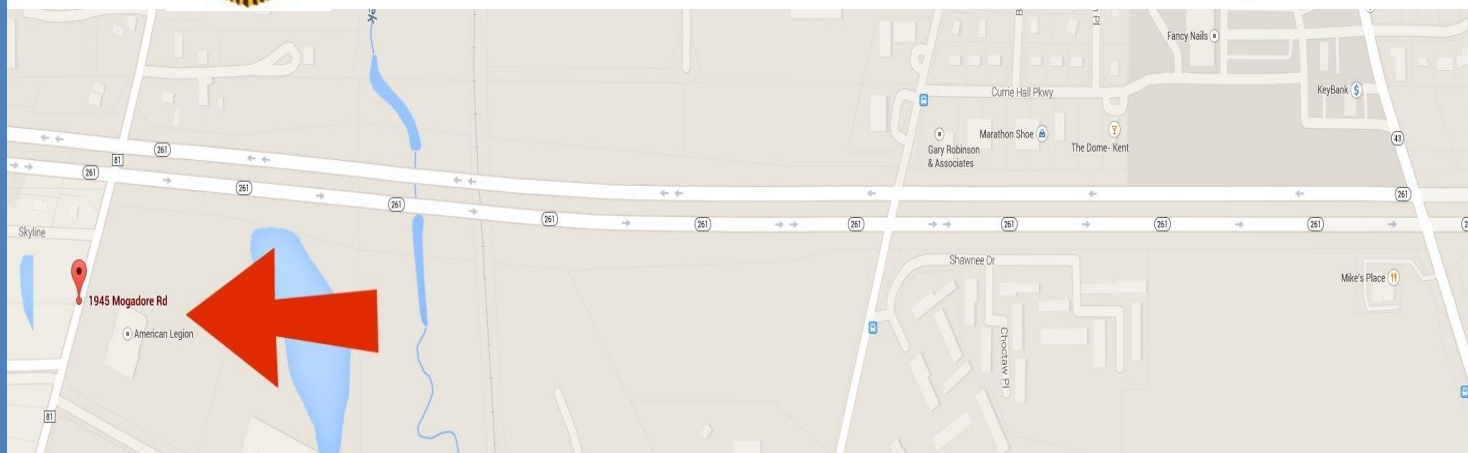


PCARS Meetings

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)*

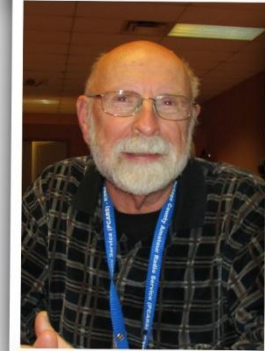
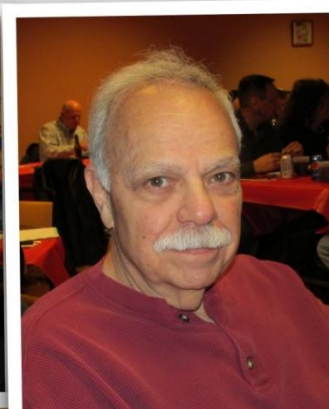
The menu consists of your basic burger / dog / chicken sandwiches, wings, fries, onion rings, and salads. There is also an appetizer selection as well. Adult beverages are available and costs are in line with what you would expect at most bar-restaurant facilities.

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.

Photos from the PCARS December Meeting



PCARS
10
Dec
2018



**10
Dec
2018**



PCARS



Portage County Amateur Radio Service, Inc. (PCARS)

Membership Application [] New [] Renewal

Name: _____ Call Sign: _____ License Class: _____

Address: _____

City: _____ State: _____ ZIP: _____

Phone: _____ E-Mail Address: _____

ARRL Member? [] Yes [] No ARRL Membership Expires Month: _____ Year: _____
Birthday: Month: _____ Day: _____ Year: _____

A \$5.00 initiation fee will be assessed in the first year of membership for all new members.
Membership year is Jan 1 - Dec 31. Dues are due no later than Jan 31st. *If you don't pay by 1/31 - you are no longer a member and you will have to pay the \$5.00 fee again plus dues per the schedule below and you will be issued a new member number.*

Check One	Membership	Membership Rate **			
	Life Member***	\$75-Founder	\$175-Charter	\$250-Regular	\$125-Senior
	Regular Member	\$20.00 Jan-Dec		\$15.00 July-Dec	
	Associate Member	\$20.00 Jan-Dec		\$15.00 July-Dec	
	Senior Member (65+)	\$16.00 Jan-Dec		\$11.00 July-Dec	
	Family Member *	\$10.00 Jan-Dec		\$5.00 July-Dec	

*Family = wife, husband, brother, sister, son, daughter, father, mother that is a licensed amateur radio operator and who's FCC license has the same address as the paid regular member's FCC license.

**A \$5.00 initiation fee will be assessed for all new members.

*** Must have been a member in good standing for previous 5 consecutive years

Checks can be made out to either "PCARS" - or - "Portage County Amateur Radio Service, Inc."

What are **YOUR** Ham Radio interests:

Signed: _____ Date: _____

Mail to: Portage County Amateur Radio Service, Inc.
705 Oakwood Street - Box 12
Ravenna, OH 44266

Date Received:	<input type="radio"/> New <input type="radio"/> Renew
Initiation Fee: \$	+ Dues: \$ = Total \$
Paid: <input type="radio"/> Cash -or <input type="radio"/> Check	Check #
Date Voted:	Results: Member Number:
<input type="radio"/> Database Updated	

Rev. 14 Dec 2018

DX Engineering Winter Sale Day

As you know, DX Engineering has been a *long time supporter* of PCARS in many ways. So, we encourage you to visit and shop at DX Engineering - often.

On January 19th DX Engineering will be having their Winter Sale Day. Stop in, tell them you belong to PCARS and thank them for their support. You may find a few bargains while there as well.

Winter Sale Day



Saturday, January 19th—9 am to Noon
Inside the Summit Racing Retail Store
1200 Southeast Ave., Tallmadge, OH

More Details at DXEngineering.com

**Huge Discounts
on Open-Box Products**

**Try Out the Latest
Ham Radio Equipment**

**Ken Dorsey, KA8OAD,
Presents Digital Mobile
Radio (DMR) at 10 am**

**Cory Gibson, W3CDG,
Presents Emergency
Communications at 10:45 am**

DX ENGINEERING®



PCARS K8BF

The Club that puts the FUN in Ham Radio!



~ Amateur Radio Instruction Class ~

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

is sponsoring an Amateur Radio **Technician** course

that will enable *You* to obtain

Your FCC **Technician** license as an

AMATEUR RADIO OPERATOR



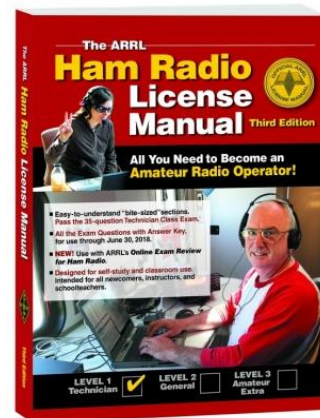
When: Wednesday evening 7:00 p.m. – 9:00 p.m.
February 6, 2019 through March 27, 2019
8 weeks. Official Amateur Radio License testing
will be held at the end of the course (Mar 27th).

Where: At the **PCARS Club Site**
Radio Room located in the
Dietrich Building
705 Oakwood St. in Ravenna

Registration: First night of class

Cost: **\$25.00 Registration fee.**
(No Registration Fee for PCARS Members)
\$30 Text – “Ham Radio License Manual”
(text may be purchased first night of class)

Information: Contact Jim Wilson, AC8NT
e-mail at: jawilson@j3solutions.com
phone at: **330-342-8149**



As a licensed **Amateur Radio Operator** you will be able to

- **Contact other ham radio operators in the area and around the world**
- **Serve your community – ham radio operators are the critical communication link during disasters and emergencies**
- **Participate in a fascinating and rewarding hobby**

THERE WILL BE A FIVE STUDENT MINIMUM (or no class will be done)

Contact Jim Wilson, AC8NT to make your reservation NOW

Jim Wilson - AC8NT, at jawilson@j3solutions.com or by phone at 330-342-8149

Portage County Amateur Radio Service, Inc.



PCARS - K8BF

14th Annual

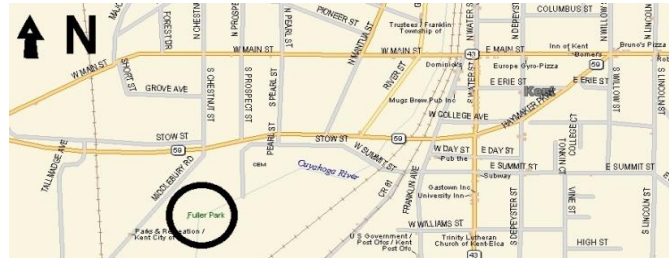
"Freeze Your Acorns Off"
(FYAO) Special Event Station



Where: Fred Fuller Park - 497 Middlebury Rd., Kent, Oh
at the Roy Smith Shelter House

When: Saturday - Feb. 9, 2019
Set up: 9 am

Operating Time: 10 am - 3 pm EST



We will be active on CW & Phone in the General areas of the 6, 10, 15, 20, 40 and 80 meter bands (Repeater & Echolink on the K8SRR echo link node for a certificate) and anything else we can get working. Club Call Sign **K8BF** for a certificate. Other participating stations will be using their own callsign/FYAO, or calling "CQ FYAO" (only stations at the Freeze Your Acorns Off event should use the /FYAO designator). Yes, we'll be braving the cold snowy weather of North Eastern Ohio to set up QRP stations using portable power and antennas.



A beautiful color (suitable for framing) 8" x 10" certificate is available if you contact K8BF on 2 meters FM or EchoLink and send your QSL **with a large SASE** to the club call trustee:

Amy Leggiero, KD8SKL - 6229 Gladys St Unit B - Ravenna, OH 44266

So, from the comfort of your warm radio shack - give us a contact while we're out freezing. We'll need all the contacts we can make to help keep us warm. Your support will be very much appreciated!



Check PCARS out on the web at: www.portcars.org
Questions? Contact Chuck, W8PT at chuckw8pt@gmail.com



Registration Open for Four Days In May



Registration is Open for QRP-ARCI Four Days in May 2019

Registration (<http://adatab.duckdns.org/QRPARCI/registration.cfm>) now is open for the QRP Amateur Radio Club International “Four Days in May” (FDIM), Thursday – Sunday, May 16 – 19, at the Holiday Inn, Fairborn, Ohio. The annual FDIM event for QRP enthusiasts and builders takes place in conjunction with Hamvention®. Registration begins the evening of Wednesday, May 15.

Most of Thursday will be taken up with seminars, “meet the speakers” opportunities, and an open room for casual show and tell. Most of Friday and Saturday are open to attend the Hamvention and visit the QRP-ARCI Toy Store.

Friday evening activities typically include “show and tell,” vendor displays, and a homebrew contest. Saturday evening features social activities and a banquet, while Sunday is open for Hamvention. Attendees are invited to display their QRP-related projects at FDIM. One evening will feature vendors offering QRP-related products, with some offering FDIM discounts. Dress is casual for all events.

Reservations and special room rates for FDIM will be available after January 1 through the **QRP-ARCI website** (<http://www.qrparci.org/>). For more information, **contact** FDIM 2019 Chair Norm Schklar, WA4ZXV (fdim@qrparci.org).

Registration Open for CTU 2019



Registration now (<https://www.contestuniversity.com/registration/>) is open for 2019 ConTest University (CTU), Thursday, May 16, 2019, at the Crowne Plaza in downtown Dayton, Ohio. This is the day before Hamvention® opens in Xenia.

More than 7,500 students have attended CTU sessions over the last 13 years in eight countries, and more than 100 CTU professors have shared their contesting experiences. The faculty lineup, posted on the CTU website, includes several new and returning members. Newcomer Bryant, KG5HVO, will present ideas for attracting youth into contesting, while Dan, N6MJ, and Chris, KL9A - the gold medalists at WRTC 2014 - will present advanced operating papers.

Not teaching but on hand to field questions will be CTU stalwart Frank, W3LPL. The 2019 CTU Dayton course outline will be posted soon. Scholarships (paid registration) are available for CTU attendees through a grant from the Northern California DX Foundation (NCDXF - <http://www.ncdxf.org/>) for students age 25 and younger. Click the “**Contact Us**” tab on the CTU website.

CTU Dayton 2019 registration information is on the **CTU website** (<http://contestuniversity.com/>). Prospective attendees who have given or will give a talk about Amateur Radio to any club, hamfest, or other group since May 16, 2018, qualify for a \$10 registration discount. Choose the “Registration with Club Talk Discount” option.

Charles Shultz Philosophy

You don't actually have to take the quiz. Just read this straight through and you'll get the point. It is trying to make an awesome point!

Here's the first quiz:

1. Name the five wealthiest people in the world.
2. Name the last five Heisman trophy winners.
3. Name the last five winners of the Miss America contest.
4. Name ten people who have won the Nobel or Pulitzer prize.
5. Name the last half dozen Academy Award winners for best actor and actress.
6. Name the last decade's worth of World Series winners.

How did you do?

The facts are, none of us remember the headliners of yesterday. These are no second-rate achievers. They are the best in their fields. But the applause dies. Awards tarnish. Achievements are forgotten. Accolades and certificates are buried with their owners.

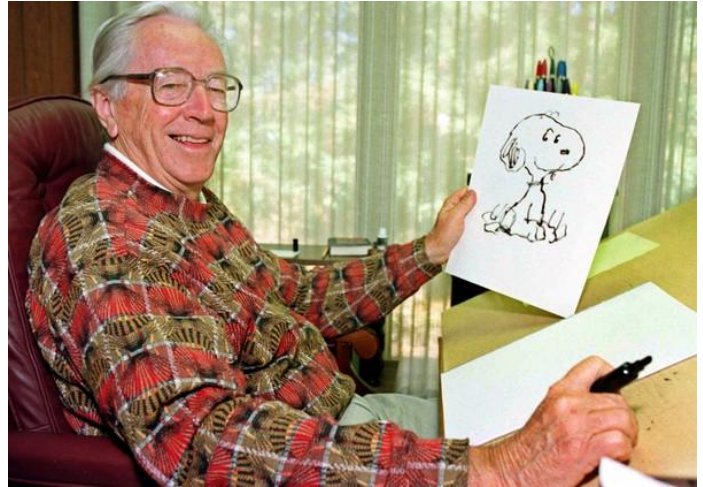
Here's another quiz. See how you do on this one:

1. List a few teachers who aided your journey through school.
2. Name three friends who have helped you through a difficult time.
3. Name five people who have taught you something worthwhile.
4. Think of a few people who have made you feel appreciated and special.
5. Think of five people you enjoy spending time with.
6. Name half a dozen heroes whose stories have inspired you.

Easier?

The lesson: The people who make a difference in your life are not the ones with the most credentials, the most money, or the most awards. They are the ones that care.

"Don't worry about the world coming to an end today It's already tomorrow in Australia."



Thanks & 73



Parky, KB8UUZ
PCARS Newsletter Editor

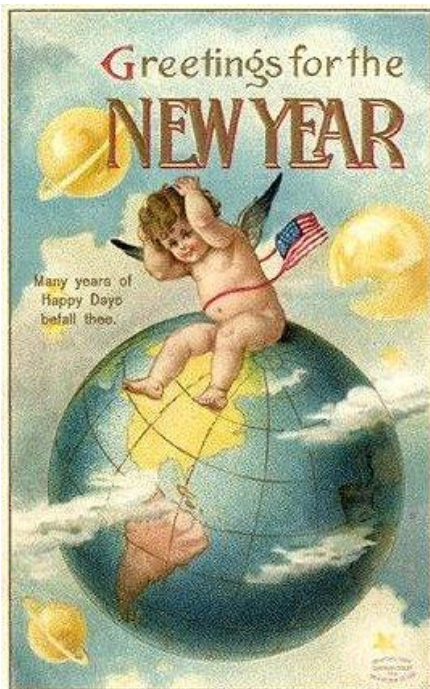


All of our members (and others) look forward to getting this newsletter every month, so keep sending those inputs! I'm sure PCARS is known as the **BIG FUN** amateur radio club with plenty of activities. So chip in and send your report in to keep this newsletter great throughout 2019 and beyond.

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

AC8NT, AC8QG, KB8UUZ, WB8LCD, KA4KOE, KA8TOA, K8CAV, KD8VT, W8PT, KB8AMZ, WA8AR, W8KNO, CQ Newsroom, RAC, The ARRL, DX Engineering, and the World-Wide Web.

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



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

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

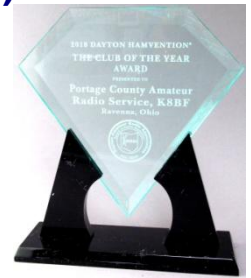


PCARS meets the second Monday of each month at the **Kent American Legion Post 496**, 1945 Mogadore Rd. - just South of Rt. 261 - enter the rear of the building for the meeting room.

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



~ 2019 Officers ~		2019 PCARS Appointments & Committees	
President - Jim Wilson - AC8NT Vice President - Nick Wagner - AC8QG Treasurer - Paul Hyland - KE8EGF 3 Year Trustee - Terry Morris - KB8AMZ 2 Year Trustee - Ed Polack - K8IV 1 Year Trustee - Tom Parkinson - KB8UUZ Past President - Rick Kruis - K8CAV	ARRL Awards - DXCC WAS, VUCC, WAC	W8KNO	Joe Wehner
	ARRL Awards - WAS	KB8UUZ	Tom Parkinson
	Club Site Manager/Liaison	K8CAV	Rick Kruis
	Contest Coordinator	W8PT	Chuck Patellis
	EchoLink & Web Guru	K8SRR	Steve Randlett
	Field Day Chairman, 2019	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	WB8LCD	Tom Sly
	Net Control Manager	KA8TOA	Greg Ash
~ Meetings & Net ~ 2nd Monday of each month. 7pm Thursday night Club Net at 8 pm on 146.895	Net Night - Club Manager	WB8LCD	Tom Sly
	Newsletter Editor	KB8UUZ	Tom Parkinson
	OSPOTA Chairman	KB8UUZ	Tom Parkinson
	Public Information Officer	WB8LCD	Tom Sly
	Secretary	W8NET	Gene Marsh
	Tech, Gen & Extra Class Manager	AC8NT	Jim Wilson
	Volunteer Examiner Liaison	KB8UUZ	Tom Parkinson
	Webmaster	KD8MQ	John Myers



**PCARS
Active
Volunteer
Examiner
Team
Members**

KB8UUZ	Tom Parkinson
WB8LCD	Tom Sly
N8XTH	Deron Boring
N8PXW	Jim Korenz
N8QE	Bob Hajdak
K8IV	Ed Polack
W8RID	Robert Davet
WA8CCU	Al Nagy
NR8W	Russ Williams
W8EZT	Frank Tompkins
AC8NT	Jim Wilson
K8MSH	Mark Haverstock
KA8TOA	Greg Ash
KB3GXB	Jennifer Williams
W8PT	Chuck Patellis
AC8QG	Nick Wagner
N8FUM	Dan Torchia



THE RADIOGRAM

PCARS Incorporated
Nov. 1, 2005

First Meeting
Nov. 14, 2005



ARRL Affiliation
April 20, 2006



Special Service Club
March 22, 2010

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