



The **RADIOGRAM**

When All Else Fails ~ Amateur Radio Works

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

March 2017 - Volume 12 Number 3

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In This Issue -

FYAO 2017 RESULTS



Expanding Your Knowledge



Agent Radio Operations in WW2



PCARS K8BF

The Club that puts the FUN in Ham Radio!



Feature Articles

From the PCARS President	3
From the PCARS Vice President	4
FYAO - The Results Are In !	6
FYAO 2017 - Pictures	7
FYAO - Winning Recipes	11
Move Forward	14
First Call for the Flex Station - Field Day 2017	15
Expanding Your Knowledge	18
Get On The Air Day at K8BF	19
New HF Amp Will Shock Ham Radio	20
Tech Tips - Winding a Toroid	22
Dues are Over Due	29
Why Are There So Many Techs?	30
Agent Radio Operations During WWII	32
Listen - Listen - Listen	36
Ski Your Acorns Off	37
California QSO Party Certificates	37
A PCARS Crossword (answers on page 45)	41

Mark Your Calendars

Schedule of Events	5
Daylight Saving Time - March 12th	5
Wisconsin & Idaho QSO Parties	16
Cuyahoga Falls Foxhunts Start in March	17
Contest Calendar	22
VE Test Sessions	21
Hamfest Calendar	28
Net Info & NCS Schedule	31
Meetings, PCARS	40
Important Days This Month	46

Regular Departments

Patches & Stickers, PCARS	16
EmComm	23
YouTube - PCARS	24
Charlie the Tuner's HF High-Lites	25
Happy Birthday	28
Digital SIG	29
Swap-N-Shop	38
Member Ham License Plates Wanted	39
Yahoo Group - PCARS	39
Pictures from the Last PCARS Meeting	42

Finals

Thanks & 73	48
Membership Application - New or Re-New	49
Skaywarn Information Flier	50
PARF Dayton Bus Trip Information	51
Club Information and Fine Print	52



CENTRAL
INTELLIGENCE
AGENCY



From the President

Rick, K8CAV
PCARS President



PCARS has spent a lot of time and effort putting together a first-class Radio Room with radios, triplexer, filters, antennas, and station accessories so that we as a club can be competitive in the contests we participate in. This month we have two popular contests coming up, the Idaho QSO party on Saturday March 11th and Sunday March 12th, and the Wisconsin QSO party on Sunday March 12th and Monday March 13th. In addition to our fine radio room, we have a club Contest Coordinator, Chuck W8PT that puts a lot of time and effort into organizing the contests. Despite all of that, we don't see as many of you participate at the club as we'd like. Now I know not everyone is a contester, but I also know from personal experience that it's often a matter of not knowing what you're missing until you've tried it. We're very fortunate to have guys like Chuck and other more experienced contesters in our club that bend over backwards welcoming and teaching newcomers to contesting when they show up for one of these events but – you have to show up! If you've given even the faintest thought about how much fun contesting might be, please make it a point to drop an e-mail to Chuck (w8pt@portcars.org) to let him know you'll be there this month. I promise you you'll have a great time!

Besides supporting contesting, we've given new purpose to our radio room by establishing “**Get-On-The-Air**” days at the club site. So far this year, we've had one in January and February with the plan in mind that “**if you come we will build it**” (apologies to Mr. Kostner and Field of Dreams hi). We had good attendance in January and February so our plan is to continue this on a regular basis as long as you continue to attend. The idea behind Get-On-The-Air day is to provide you with a place, and some help and expertise to get on the air. If you are a Technician class licensee, this is a perfect opportunity for you to dip your toes in HF waters under the supervision of a control operator. If you've always wanted to try digital but don't have the equipment? Come on out to the next session and jump right in! Newly licensed and having problems with that new hand held? Bring it and your manual and we'll walk you through the ins and outs. No matter what the reason, if you haven't been on the air, come out to the next one scheduled and learn what the fun is all about!

Chuck W8PT and his crew have been busy planning for **Field Day 2017**. The ARRL has released the 2017 packet and we're well underway to having another great K8BF Big Fun Field Day! Chuck has worked out some of the bugs that cropped up during our first year and our new location and this year promises to be our best yet for PCARS. **Antenna Day** is scheduled for Saturday May 6th and will be a full-blown dress rehearsal, with Field Day taking place on Saturday June 24th and Sunday June 25th. We always get a pretty good turnout for Field Day but one of the things we'd like to see this year to help out station captains is for all of you to let your station captain know, in advance, when you would like to operate or log at your station of preference. This goes a long ways towards planning and will help us set a new PCARS record in 2017.

Just about all of those deferred maintenance tasks like repairing lights, and cleaning up at the club site have finally been accomplished and we're now starting the next phase of installing the new computer for the echolink node. Once this node is up and running, it will not only be more stable but will also allow remote reboots if it becomes necessary so we should have a much better and more reliable node moving forward. We're also putting the final touches on the plan for our 'lab' at the club site so we can get construction and configuring the room finished up soon. Many thanks to Jim AC8NT for all of the hard work and time put in for these projects.

With all of the things we have going on at PCARS, I hope to see you all taking advantage by participating with your fellow PCARS members. You are by far and away the most important part of PCARS and we're just not the same without you so make plans to come on out and have some **K8BF BIG FUN!**

From the Vice President

Jim, AC8NT
PCARS Vice President



For a short month a lot of work has been done and events were held. The club site finally has all lights working. It has been cleaned up and a whole lot of stuff removed. It looks great.

We have cleaned out the lab and started the process of repairing and calibrating equipment for use by club members. We have three working scopes, a good RF generator, working DVMs, good variable low voltage lab supplies and a Bird Power Meter.

We have much left to do including:

1. Installing new computers for EchoLink and firewall.
2. Repairing 30 amp rig power supply
3. Building a two station bench for soldering including magnifying lights for small circuit boards.
4. Finding slugs for the Bird watt meter. We need slugs for 3-30 MHz, 2 meters, and 70 cm. This would give us a good start.
5. We need an audio frequency generator including sweep functions.

Along with this list we need help with the work required to finish this project. Please let me know if you want to help in the effort.

We had a great February meeting including a presentation by Hans Summers talking about low power modes and his QRP-Labs. He covered the use of QRP-Labs equipment for WSPR radio, circumnavigation balloon projects and a wandering buoy in the Pacific ocean. Even with the 7 hour difference in time, his Skype talk was great. We will be looking for more talks via Skype for future meetings. This tool opens up many areas for presentations.

We had a great **Build Day/Get-On-The-Air Day** with help provided with Digital modes and WSPR projects. *We are planning more of these events.* They are becoming more popular and fun to attend. Future builds that have been requested include baluns, new antennas, and another "Replay for Kids" event. If you have any suggestions, please send them to me: AC8NT@portcars.org.



Schedule of Events

On the calendar for upcoming meetings and activities are:

- March 1st - 7 pm - End of Tech Class VE Test Session at the PCARS Club Site - Walk-ins Welcome
- March 11 & 12 - Wisconsin & Idaho QSO Parties - K8BF On The Air - at the club site
- March 12th - Daylight Saving Time Starts - 'Spring Forward' 1 hour
- March 13th - PCARS Meeting - 7 pm at the Kent American Legion
- March 20th - Skywarn Training - Maplewood Career Center - 6 pm - see flier in this newsletter
- May 6th - Antenna Day - Rehearsal day for Field Day 2017
- June 24-25th - Field Day 2017

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



- First Tuesday - **Digital** - Moderator: K8CAV
Second Tuesday - **QRP/CW** - Moderator: WB8LCD
Third Tuesday - **Antenna** - Moderator: WA8AR
Fourth Tuesday - **DX & Contest** - Moderator: W8PT
Fifth Tuesday - **Linux for Hams** - Moderator: KB8AMZ

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



Daylight Saving Time Starts March 12th

SPRING FORWARD - FALL BACK

Yep, Sunday March 12th Daylight Saving Time starts. At 0200 local, turn your clocks ahead 1 hour.

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



Examples:

March 11th - we are still on **EST** (Eastern Standard Time).
At 0800 EST (8 am for you non-military people) it is 1300 UTC (1 pm) - That is a five hour difference between Ravenna, OH and Greenwich, England.

March 12th - we are now on **DST** (Daylight Saving Time).
At 0800 EDT (Eastern Daylight Time) it is 1200 UTC (noon) - That is a four hour difference between Ravenna, OH and Greenwich, England.

FYAO 2017 - The Results Are In !!!



Chuck, W8PT

Well, the Freeze Your Acorns Off (FYAO) for 2017 is now history. It started off a little slow but it didn't take long for things to pick up. We ended up with 6 stations operating - 4 out in the weather. Frankly, there was a lot less freezing this year than in years past.



And if you didn't make it out to Fred Fuller Park, you missed a lot of fun and a lot of good food. It always is surprising to me the amount of food that finally shows up when only a couple of people let me know that they were planning to bring something. I'm certainly not complaining, since I enjoyed chili, Sloppy Joe's, various soups, and more.

We had over 30 visitors and many stuck around for several hours simply talking and eating and enjoying the day.

So I'm sure you want to know how things turned out.

The winner this year is Gene Bunner - AC8RH with 3180 points

Second place goes to John Myers - KD8MQ with 1424 points

Third place goes to John Tomasik - KB8UHN with 586 points

Not to neglect the other ops:

Bob Benedict - KD8CGH finished with 406 points

Rick DeMattia - KD8WCK stepped up and ran his station as K8BF (328 points).

Those contacting Rick will be eligible to receive a certificate suitable for framing.

Tom Sly - WB8LCD finished with 274 points.

Congratulations to Gene! His name will be added to the Freeze Your Acorns Off winners plaque.

We also held our second annual Best Recipe cook off. And I have to say if you went away hungry, it was your own fault. We had three impartial judges, whose names will remain secret to protect them from angry contestants.

The winners this year are:

First Place - Amy, KD8SKL with her Polynesian Meatballs over Rice

This dish went so fast that she probably didn't have to scrub the slow cooker.

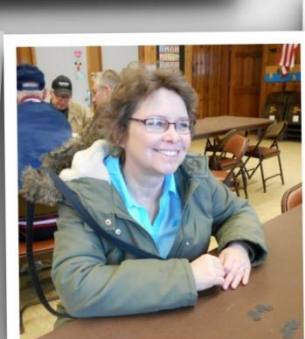
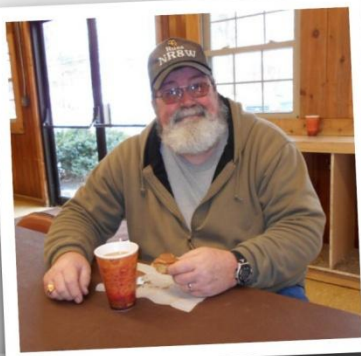
Second place went to Karen, N8HUC with her Buffalo Chili

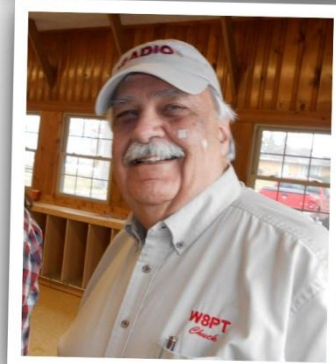
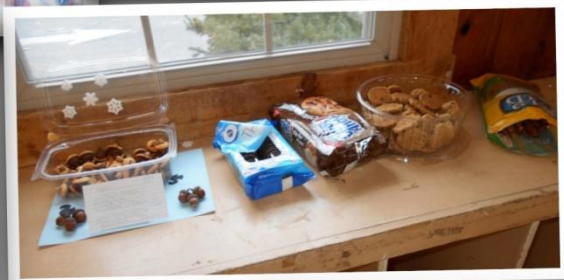
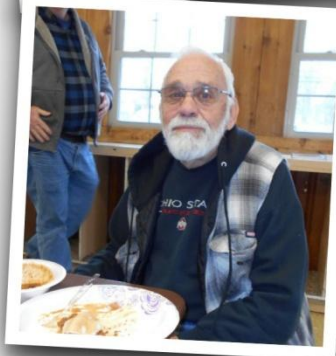
Third place went to Ned, N8GPS with his Sausage Soup

Fourth place went to Rick, KD8WCK with his Potato Cheese Soup - yum!

There you have it. **Congratulations to all the winners and participants in this year's QRP event.** I really believe that everyone who attended had **BIG FUN!**

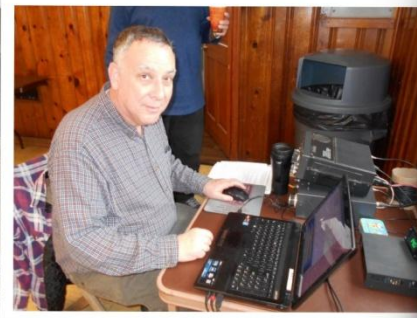
FYAO 2017 Pictures





**FYAO
2017**

**P
C
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S**



12th Annual Freeze Your Acorns Off QRP Event



Winning FYAO Recipes

We were asked “Hey, why not put the winning FYAO recipes in the newsletter?” Well, the winners were contacted and asked to send in their winning recipe and here you go:



**Some of the great
food available during
FYAO 2017 !**

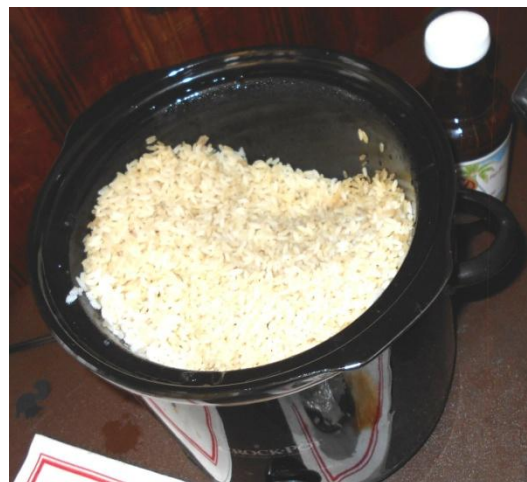
Polynesian Glazed Meatballs - Amy, KD8SKL

- 1 tsp oil
- 1 large red pepper, chopped
- 1 onion, chopped
- 1/4 cup Kraft Original BBQ Sauce
- 1 tsp ground ginger
- 1 tsp garlic powder
- 2 cans (8 oz each) pineapple chunks, drained, liquid saved
- 3/4 lb frozen fully cooked meatballs
- 2 cups instant rice, uncooked

Heat oil in a large skillet on medium-high heat. Add peppers and onions; cook 5 min. or until crisp-tender, stirring frequently

Stir in BBQ sauce, ginger, garlic powder and pineapple liquid. Add meatballs; stir until evenly coated. Cook 10 min. or until meatballs are heated through, stirring occasionally. Meanwhile, cook rice as directed on package.

Stir pineapple chunks into meatball mixture. Serve over rice.



Buffalo Chili - Karen, N8HUC

- Ground Bison Meat
- Sausage
- Hot Chili Powder
- Onion & Garlic
- Dark Red Kidney Beans
- Chives, Peppers, Crushed Red Peppers
- Diced Tomatoes

Cook meat completely. Add ingredients to crock pot. Cook Chili in crock pot. Eat & Enjoy!



Smoked Sausage Soup - Ned, N8GPS

TOTAL TIME: Prep: 10 min. Cook: 5 hours MAKES: 6-8 servings

- 2 cups chopped onions
- 2 tablespoons butter
- 2 cups cubed cooked chicken
- 1 pound smoked sausage, cut into bite-size pieces
- 3 cups sliced celery
- 3 cups sliced summer squash
- 2 cups chicken broth
- 1 can (8 ounces) tomato sauce
- 1/4 cup minced fresh parsley
- 2 tablespoons cornstarch
- 2 tablespoons poultry seasoning
- 1 teaspoon dried oregano



1 teaspoon ground cumin

1 teaspoon liquid smoke, optional 1/2 teaspoon pepper

In a small skillet, saute onions in butter until tender. Transfer to a 4- or 5-qt. slow cooker. Stir in the remaining ingredients. Cook on high for 5-6 hours or until vegetables are tender. Yield: 6-8 servings (2-1/2 quarts).
Editor's Note: The stew may also be cooked in a Dutch oven on the stovetop. Cover and simmer for 1-1/2 hours.

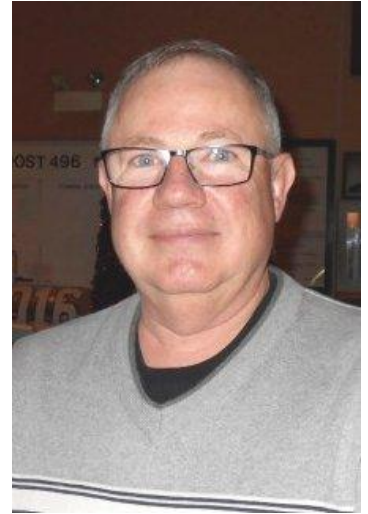
Mara's Potato Cheese Soup - Rick, KD8WCK

My favorite Potato Soup Recipe is made of Potatoes, 2 cups diced and cooked, per 2 cups milk.

Cook 1/4 cup diced onion with the potatoes in one pot. In the other pot, start a white sauce, 2 Tbsp butter, 2 Tbsp Wheat flour, or Potato Flakes for gluten free, and 2 cups of milk melted and stirred on low heat for several minutes. Add Parsley, Dill weed, Salt and Pepper to taste, as you add the cooked potatoes which have been drained of water.
Thanks for asking, Mara



Tom, WB8LCD



Moving Forward

Sometimes we get stuck. We can't move forward. It can happen in our job, it can happen in our relationships, it can happen in our hobby. The whole key to moving forward is to remain engaged – in other words: **Don't just sit there – DO Something!** But, what are you going to do? If you're feeling a bit unmotivated, uninspired, unable to get going, here's some things to think about doing that can help you get back in gear, help you get moving forward again.

Teach a Class: Help someone else get their license and get involved in the hobby. You'll be amazed at how much you forgot about Amateur Radio, and at the same time you might just be amazed at how much you remember. New hams are vital to the continuation of the Amateur Radio Service – and you could be an important part of its overall survival. Teaching the General or Extra class might just give you an opportunity to learn some things you never really understood before!

Become a VE: Test sessions happen all the time, and VE's are important to their success. Work with all the clubs in your area to make their test sessions a success. Volunteer at the local hamfests. Look for opportunities as schools, with the Boy/Girl Scouts.

Build Something: Work to your level of competence. Even building a crystal set can give you a sense of accomplishment and bring back some of the awe and amazement of how radio works, even in its simplest forms. (get yourself a grandkid, niece, nephew or young neighbor and include them to open their eyes to radio!) Work from a kit. Rejuvenate a piece of old gear. Try a new antenna. Maybe even build a new operating desk – get everything neat and tidy in the shack and you might feel better about sitting in the chair and getting on the air!

Chase Awards: Already Worked All States? That was easy. How about DXCC? Want a real challenge? Try Worked All Counties (there's 3077 counties in the US). You might have to learn some efficient operating habits, some propagation science, and some ERP boosting techniques. Set a goal, then get on the air and complete it.

DXpedition: You don't have to spend \$100,000+ to go somewhere freezing cold to operate from. Remember those 3077 US counties? Some of those are pretty sparsely populated and you could be a real hero for activating them. Like working from the Ohio State Parks (especially during OSPOTA)? Other states have them too! (A number of years ago, I had a ball working portable from Chimney Rock State Park in North Carolina) Check out “Summits on the Air” (SOTA) and you'll find a lot of neat places to operate from. Use your imagination here, come up with something unique and get the word out about it ahead of time. Working the pile-ups is a lot of fun!

EmComm: Get involved with your local ARES® / RACES or other emergency communications groups. Emergency communications is a lot more organized now than what it may have been in the past. Ham Radio is actually more highly regarded as a more important component in the overall emergency response plans both nationally and locally. There will be lots of new stuff to learn and you'll do lots of public service in the guise of training. If ever needed, you'll be providing a valuable public service.

Presentations: How about putting together a couple of presentations on a couple of topics in ham radio that you are proficient in. Let it be known that you have these programs “ready to go”. Clubs are always looking for meeting presentations and you could soon be considered one of the more accomplished hams around, simply because you share your ideas, insights and experiences with the other hams. Other clubs in the community are also looking for meeting presentations – a generic “Ham Radio” presentation could be very well received by other types of clubs. It would go a long way to building “good will” for Ham Radio. It might even spark an interest where none existed before, bringing in more new hams to the hobby.

Satellites: There's a whole bunch of new birds up in the sky. Most are easier to work and have a bunch of new features. Many can be worked with a handi-talkie and a hand held antenna! Don't forget the International Space Station either.

Digital: There's a lot going on here. Computers and radio have melded together in many different ways. Start with sound card modes. Simple. Look at some of the new modes like WSPR. How about SDR? If you don't have the computer skills necessary I'm pretty sure there's an 11 year old kid somewhere in your neighborhood that does. Ask them to help you, and at the same time introduce them to all the different things they could do with Ham Radio!

Rag chew: At the very least, get on the air. Take it easy, no pressure, just meet some new people and have some pleasant conversation. All you gotta do is put your A\$\$ in the chair and turn the rig on!

Ham Radio is the one hobby where it's going to take a lifetime to do it all. Nothing could be sadder than hearing someone brag about their “40 years of experience as a ham”, when you know they've only had one year of experience, they've just repeated the same thing 40 times. *Get out there and try something new!*

First Call for the Flex Station - Field Day 2017

Rick, K8CAV



CQ CQ CQ all PCARS members interested in operating or logging at the **FLEX Station** for Field Day! The FLEX station will be operating SSB on 10m, 15m and 80m. And we'll be using Digital and CW on 10m through 80m.



The FLEX station will be equipped with a Yaesu FT-991 transceiver, Winkeyer and the sound card interface.

For antennas we will have the 80m dipole, 40m dipole or a 20m dipole that will also be used for 15m and 10m.

Best of all the FLEX station trailer is air conditioned for your operating and logging pleasure! So don't wait, drop me a note at k8cav@portcars.org to let me know when you want to operate or log!



Wisconsin & Idaho QSO Parties - 2017

Chuck, W8PT



As it is with all the months of the year, the month of March has many contests taking place. K8BF will be participating in two that take place on March 11th and 12th.

The first is the Idaho QSO Party that starts on Saturday the 11th at 1900 UTC (2PM local time) and continues until 1900 UTC (3PM local time) on Sunday the 12th. The second is the Wisconsin QSO Party that starts at 1800UTC (2PM local time) on Sunday the 12th and continues until 0100UTC (9PM Local Time) on that evening. It may be confusing to some since 0100UTC is actually counted as March 13th. But I assure you that it is Sunday evening locally.

We have participated in both of these events in the past and have done reasonably well.

The nice thing about both of these contests is that they are very laid back so those who have not participated in contesting, can play in both without the pressure of trying to make several contacts every minute. In fact, they are more of a search and pounce type of contest than many others. Because of this aspect, I would encourage those who have not played in a contest in the past, to come out to the club site and try your hand at either of these contests. It's an excellent way to get your feet wet in contesting.

We will be meeting about noon on Saturday to review the rules and other documentation associated with these two contests and to get a good idea of what the propagation will be like.

So come on out and have some BIG FUN with your fellow PCARS members. And remember, you don't have to be a PCARS member to join in the fun.

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

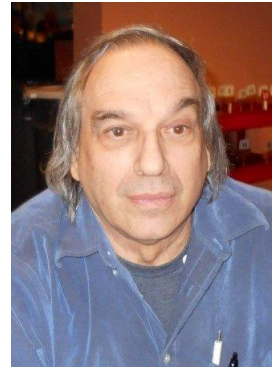
meeting. There are 2 types of stickers available - a 4" x 6" oval and a 3" x 10" bumper sticker. Stickers are \$1 each. Show your pride in PCARS - Wear a patch, use the stickers! See the club

Treasurer: Amy, KD8SKL or e-mail her at: KD8SKL@portcars.org



Cuyahoga Falls Foxhunts Start in March

Jim, N8PXW



The Cuyahoga Falls Foxhunts Start March 15, 2017 6:30 PM. This is just a heads up notice for the Cuyahoga Falls Amateur Radio Club foxhunts for the 2017 season.

We have 5 Wednesdays in March this year: 1st, 8th, 15th, 22nd and 29th. Since Daylight Saving Time 2017 in Ohio will start at 2:00 AM on Sunday, March 12th, that eliminates the 1st Wednesday of the month. Therefore, the first foxhunt of the 2017 season will be on the 3rd Wednesday, March 15th at 6:30 PM. Sunset for that date is 7:32 PM, so we will have the full 1 hour time limit for the hunt. Since we have 5 Wednesdays this month, another "bonus" hunt will occur on March 29th.



Anyone interested in learning about hidden transmitter hunting is welcome. Our hunts are a hidden mobile, on public accessible locations. We have limited space for ride-alongs but we will try to accommodate anyone who shows up. We meet after the hunt for supper and to discuss what we did wrong - or right.

The hunt details follow:

The Cuyahoga Falls Amateur Radio semi-monthly (1st and 3rd Wed) foxhunt will start at 6:30 PM this Wed, Mar 15 at the Scout House in Silver Lake, Ohio. The mailing address is 2850 Church St, Stow, Ohio. The GPS coordinates are 41 09.0117 81 27.54714 . It is located on Church St. a block south of RT 59, Kent Rd.

The talk-in freq. is 147.27 MHz, the club repeater. The hunt freq is 147.525 MHz simplex. Directions from the RT 8 freeway are as follows: From the South Exit at Rt. 59 (to STOW) and follow the road 3 or 4 traffic lights, till you see a church on the South-East side of the road, and a "Silver Lake" sign on the North side. Turn right, and go South for about 1/2 block, the parking lot will be on your left, behind the church. It's harder from the North. Exit At 2nd st. That puts you in the wrong direction but go to (I think) a traffic light, turn left, go 1 block and it dead ends on a 1-way to your left on Front St. and Rt. 59. Then follow the previous directions to the Scout House.

Radiosport

ARRL International DX Contest

- CW — February 18-19, 2017
- Phone — March 4-5, 2017

No contest season is complete without the running of our annual International DX Contest.

▶ **Get On the Air!**

Expanding Your Knowledge

Jim, AC8NT



Want to expand your knowledge. Wait for a child to ask you a question.

First a note: If you plan to work with kids interested in STEM and ham radio be prepared for this type of scenario. Also, if you think Morse code is hard to learn in the U.S., look what it is like in other countries.

A year ago I was working with a group of children that were robot enthusiasts. One was a young boy of Chinese descent who was also interested in (of all things) ham radio. His father had told him he needed to learn Morse code. He knew I was a ham so he asked me some very interesting questions. First, I told him that it was no longer necessary to learn Morse, but a lot of hams continued to use code for making contacts. He still thought it would be “neat” to learn the code. This started a conversation that would take me back to the Cold War days. Here are a couple of the questions he wanted answered. By the way, it took three Saturday sessions to give him the answers and teach him a little code.

1. He asked “Do all ham radio operators in the world need to know English? If they used Morse code they would obviously need to know English?” This took an example.

I explained that when I was learning Russian in college I had the same question, after all I was a ham. At the time I was learning Russian few Russians used English but they did use telegraphy. Using a contact I had in the Air Force, I received a copy of the telegrapher’s code for the Cyrillic alphabet. (Folks, it was before the Internet.) In that alphabet there are 33 characters plus numbers and

Cyrillic	Latin	Code	Cyrillic	Latin	Code	Cyrillic	Latin	Code
А	A	••••	Л	L	•••••	Х	H	•••••
Б	B	•••••	М	M	•••••	Ц	C	•••••
В	W	•••••	Н	N	••••	Ч	Ö	•••••
Г	G	•••••	О	O	•••••	Ш	CH	•••••
Д	D	••••	П	P	•••••	Щ	Q	•••••
Е	E	••••	Р	R	•••••	Ъ (b)	X	•••••
Ж	V	•••••	С	S	••••	Ы (b)	Y	•••••
З	Z	•••••	Т	T	••••	Э	É	•••••
И	I	••••	У	U	•••••	Ю	Ü	•••••
Й	J	•••••	Ф	F	•••••	Я	Ä	•••••
К	K	•••••						

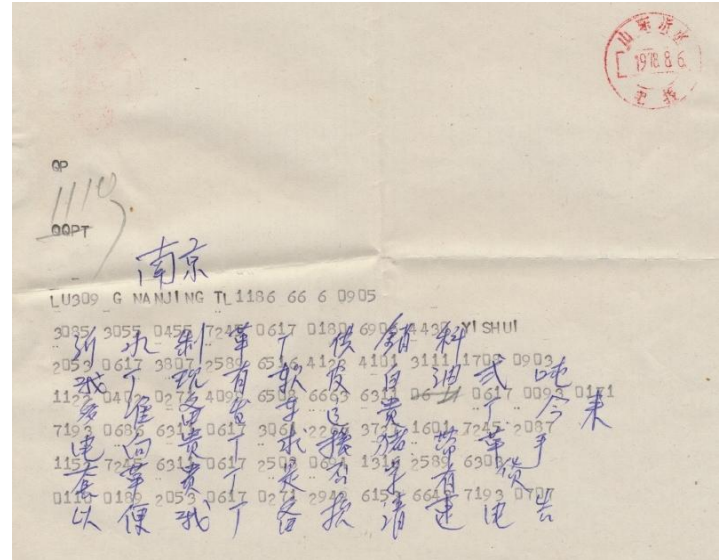


limited punctuation. I explained I had used it to make a couple of contacts in 1973. This was an example of how most languages have their own telegrapher’s code. He was impressed that I knew another language, something he said most Americans had never accomplished. He was even more impressed when I demonstrated a sample communication using Cyrillic code. The next question was harder.

2. “How would it work in Chinese?” This was a good question that required a bit of research.

The Great Northern Telegraph Company introduced a telegraph code for Chinese in 1871. A code book was printed in 1872 by Septime August Viguier a Frenchman. This code was very interesting. The code book consisted of almost a hundred pages each containing 100 characters arranged into 10 rows by 10 columns. As an example (wen) meaning “script” is 2429 located on page 24 in row 2 column 9. Once converted to a number the number was sent using Morse code. Yes, the same code we use. He said that was great, he only needed to learn 10 characters and

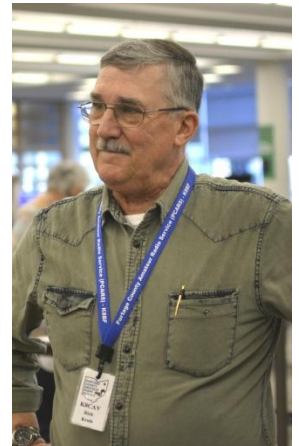
they all formed nice patterns. I said sending was easy if you could remember the thousands of number combinations required to translate the message. This little boy then explained to the dumb Westerner how some Chinese dictionaries were organized by strokes and that would be no problem. Maybe not for him. It was interesting to learn that this telegrapher's code has been used far more widely in China than Morse in the US. A great many documents use the "coded" equivalent of people's names to avoid issues with pronunciation variations. Codes are used for government and business documents. We found the code for his grandmother's name on her passport. This coding system is also used to input Chinese into computers using a stylist and tablet. A sample page of the 1872 manual is shown below. Note how it is organized by strokes located on the left side of the page. A webpage that can be used to translate codes can be found at <https://www.njstar.com/tools/telecode/>. I have also included a sample telegram using the codes.



Get On The Air Day at K8BF

Rick, K8CAV

January 28th was our first 'Get-On-The-Air' day of 2017 and it was a great success! Scott K8SWJ, Ned N8GPS and Dan KD8WBC showed up to learn about the basics of the PCARS radio room and equipment and to then get on the air in their favorite mode and band. Mike KB8TUY and myself provided help and guidance.



Although the radio room briefing didn't go into detail about each radio and it's features and menus, it did cover the basics about what antennas we have, how to connect them to different radios, how to connect and use the triplexer and filters, and above all safety.

The briefing also covered basic capabilities of each of the radios, and talked about accessories such as the signalinks, headsets and the like. After the briefing it was on to radio time with both a voice and a digital station activated.

If you've always wanted to get on the air but haven't had the radios, antennas, or other equipment to try this is a great place and time so keep an eye out for the next scheduled 'Get-On-The-Air at K8BF' day and make plans to attend!

New HF Amp Will Shock Ham Radio

Gary, WBØRUR



WELLSBURG, Missouri – In a jaw-dropping announcement at the Consumer Electronics Convention (CEC) in Las Lunas, New Mexico, the Peanut Whistle Transmitter Company – makers of the famous Peanut Whistle 250 transmitter – announced a companion line of HF amplifiers to please even the most discerning amateur radio operator.



The new “Skeeter” line of high frequency amplifiers are optimized around the “desktop kilowatt” concept perfected by famous amplifier designer Tom “My Finals Are on Fire” Watson, a long time Montana ham now a silent key (hence the nickname).

“The CEC is the perfect place to pull the curtain back on this new line of amplifiers,” says Director of Marketing Erastus Pflemming

“Surrounded by these innovative thinkers and the cutting-edge equipment; let’s just say we really stand out from the crowd. You are going to want to swat this

Skeeter right onto your operating desk!” he says.

Features of the “Skeeter” include:

- Variable vacuum tube circuitry

- No tune operation

- Tremendous cosmetic and ergonomic designs

- The “Skeeter” introduces a high pitched whine – like a swarm of mosquitoes – into your audio signal, which “alerts your presence to domestic and foreign (DX) stations alike.”

“When you fire up your station,” exclaims Pflemming, “your buddies will know you are using a Skeeter amplifier from Peanut Whistle! I guarantee it!”

Sold by the output power at \$.015 per watt in 75, 150, 250 and 1000 watt models, Skeeter amplifiers promise “MORE HOLLER FOR THE DOLLAR” and will be available at fine ham radio stores everywhere, according to promotional materials.

HamHijinks.com

HAM HIJINKS
HAM RADIO NEWS OF THE FUNNY VARIETY

NOISE
BLANKS PRODUCTION



PCARS VE Test Sessions

Robert, N8RLG
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.

April 1st - June 3rd - August 5th - October 7th - December 2nd

Plus: March 1st - 7 pm at the end of the Technician Class - June 24th 4 pm at the Field Day site

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 copy of your expired Amateur Radio License - you must take and pass Element 2 to re-instate your license.



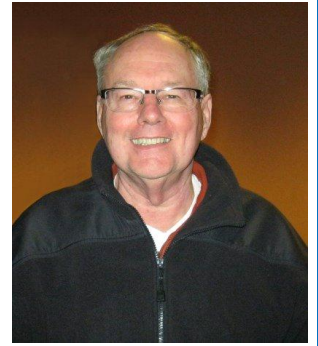
Contest Calendar

March 2017		
Contest Name	Click for more info	Date - Times
ARRL Inter. DX Contest, SSB	Link	0000Z, Mar 4 to 2400Z, Mar 5
Idaho QSO Party	Link	1900Z, Mar 11 to 1900Z, Mar 12
North American Sprint, RTTY	Link	0000Z-0400Z, Mar 12
Wisconsin QSO Party	Link	1800Z, Mar 12 to 0100Z, Mar 13
CQ WW WPX Contest, SSB	Link	0000Z, Mar 25 to 2400Z, Mar 26

Google the Contest Name - Read the Rules & Have Fun. YES - There are MANY More Contests out there - Check the Internet

Tech Tips - Winding a Toroid

Jim, AC8NT



We have had several Build Days at the club that involved the winding or use of toroids. To some hams winding a toroid is second only to mounting surface mount devices in terms of scary work. It really isn't all that bad. Following a few simple tips will make it possible for even a beginner to wind a working toroid. Here are a few tips:

1. Start with enough wire to finish the project. Often designs will specify the length of wire necessary for completing the wind. Just remember that a little extra wire is a lot easier to deal with than finding you are one turn from the finish without any wire left. If you know the toroid type and the number of turns required, you can use calculators to determine the amount of wire you need. One such calculator can be found at www.toroids.info.
2. Use the correct wire. Make sure the gauge is correct and the insulation is appropriate. I have seen baluns wound with enameled wire with incorrect insulation actually catch fire. Baluns can get very hot and high temperature insulation is a must.
3. If the toroid is a bifilar or trifilar or quadfilair use different colored wire to keep the windings identified. It will also prevent wire crossing mistakes in multiple winding toroids.



4. Not all toroid materials are the same. Don't substitute materials unless you have the information and savvy to pick a correct substitute. Also, if two toroids are the same physical size and the same color it doesn't mean they are made of the same material. Color codes vary somewhat between suppliers and have varied significantly over time. Buying toroids at hamfests and other venues can be problematic.

5. When wiring low power toroids like those used in small signal applications, remember the wire is small and can be easily broken. This is true especially if the wire is "worked" hard. Carefully wind your turns with a minimum of wire tugging and avoid using large forces to push the wire thru the hole using tools. Work hardening of copper wire

can cause failures long after the toroid is finished and in service.

6. Turns should be evenly spaced around the toroid. No toroid should ever use less than 75% of the ring and good practice uses >90%. Even spacing will also make the distance between the winding ends as close as possible. This reduces adding stray capacitance to your circuit. There are toroids that have multiple windings that are separated around the toroid. Make sure the independent winds are evenly spaced around the toroid.
7. Watch your winding directions. A good example of this is the winding of a simple balun. Here is a very good video of one such wind. <https://www.youtube.com/watch?v=AJHfzeqaW5U>
8. Unless the toroid specifies multiple windings should be made with twisted wire, DON'T cross the windings. This can be a serious issue in tuned circuits.
9. If you are winding baluns or other high powered toroids, insulate the toroid before wiring. Glass tape is a good solution and offers good insulation at high temps. Plumbers tape (used for sealing threads on plumbing fixtures) works great for modest power and is very easy to wind. Just tuck the finished end of the tape under one of the turns. See the video suggested in note 8 for one such example. Note: In this example video he insulated the toroid with electrical tape. Glass tape should be used for high power. At 200 watts the tape in this example has a good chance of melting.



These are a few simple tips to help making a great wind the first time. Next month I will show an example of how a toroid is designed.

Jim, KC8PD

Radio Officer, Portage County
Communications Unit/RACES



Remember that scene in the movie “The Graduate” when a friend of Benjamin’s (Dustin Hoffmann) parents comes up to him and says “I have one word for you. Plastics”? Well if Benjamin was a ham and the movie was made today that line might be “I have one word for you. Digital.”

Such is the nature of our hobby today because one of the major areas of growth is the design and implementation of the digital modes. Whether it’s D-Star, SSTV, DMR, any and all of the soundcard modes, Pactor III, digital SSB phone, or HSMM, and on frequencies from the HF bands to 2.8 GHz, digital is the wave of the future.

I know, I know...nothing will replace SSB phone, let alone the original digital mode of CW (is it digital because it is binary or because you use your fingers?), for the traditionalists. Nor should we be concerned about these modes disappearing. The amateur radio community has a huge investment in the hardware for these modes and they will have utility for decades to come.

What does this digital trend have to do with emcomm? First, digital modes can be extremely efficient at moving detailed traffic, particularly under poor band conditions. Second, digital modes can provide significant security from prying eyes or ears accessing the traffic being passed. Third, digital can also provide multi-mode (voice, data, video) communications in formats that served agencies may already be familiar with. Fourth, but not at all last, digital can provide seamless transfer of data from the airwaves into the internet.



So, should be a natural and easy fit for Emcomm, right? Well, not so far, and for a variety of reasons.

Changes are occurring at the FCC and let's just say that the new chairman is all about the commercial side of spectrum usage. These staffing changes provide a reminder of just how valuable radio spectrum is. As they say, like oceanfront property, they aren't creating any more spectrum. The only question is how you divvy up the finite amount that is available.

The portion of the spectrum allocated to ham radio is, in the grand scheme of things, pretty small. But it still has value and, as we are often reminded, we may face a use-it-or-lose-it situation.

How are we using it? And who gets to use which portion of the ham bands? We know that we have FCC regulations and “gentlemen’s agreement” band plans to maintain order on the ham frequencies. Unfortunately, we don’t always get along like ladies and gentlemen and squabbles arise about the sometimes conflicting uses of different modes on the bands.

I don’t know about you, but the vast majority of the time (read that as non-contest time) that I tune up and down the HF bands on the major portion of each band there is little to nothing to be heard. Where is the problem?

Keeping in mind that Emcomm users of digital modes such as Pactor III that can have a bandwidth of two to three kilohertz only run them as necessary to maintain and develop skills and to ensure that their equipment is functioning properly, or to employ them in drills or actual events. The rest of the time they are off the air. So why do we hear the complaints? And why are so many hams upset about proposals to expand permitted bandwidth for HR digital signals?

Plus, the good news is that there has been a lot of movement toward the use of the digital modes supported by fldigi as well as the use of Winmor, a soundcard based mode for Winlink 2000 users.

And no matter the mode, we always want to make sure that we are prepared to meet our community's needs when disaster strikes. So let's make sure that we leave room for new modes or those that meet specialized needs. Allow them their portion of the airwaves. Remember, if we don't use those bands we may lose them.



Skywarn training by the National Weather Service is underway in Northeast Ohio. This year the training is being sponsored by the Portage County Office of Homeland Security and Emergency Management and its Communications Unit. It will be held at 6:00 p.m. on Monday, March 20th at the Maplewood Career Center, 7075 St. Rt. 88, in Ravenna.



The training is open to the general public, you do not have to be an amateur radio operator to attend. The information is useful for everyone. Spring weather will, hopefully, soon be here bringing with it the risk of rain and snow melt that can lead to flooding. **Get trained and be prepared.**

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.

https://www.youtube.com/channel/UCFVsDD_gwCLtTw-FPuBcYtA



Charlie the Tuner's HF High-Lites

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



I sure hope that many of you have taken advantage of the great WX we have been having. I've renewed my work on my second tower and am extending it to 50'. May not seem like much but the Tennadyne T-12 LPDA will work fine at 52' with a 6m Yagi and a 2m Yagi stacked above it.

As I am writing this it's 61 degrees outside but a little damp. It supposed to get better before more cold WX moves in. I'm just looking forward to Spring and counting this as a tease by Mother Nature.

The bands have been cooperative also. Twenty meters and 15m have both been active with good signals into the UK, Europe and Asia. So I hope that those of you who have been on the air in the early AM have worked some good DX. Let's take a look at what will be happening in March.

I continue to thank the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn Packet cluster Network, AB5K & the AR TelNet Clusters Network, K1XN & GoList, NJ1Q & W1AW, NG3K & ADXO, W3UR & The Daily DX, N4AA & QRZ DX, W4DN, K8GI, K8YSE, W8GEX & 60m DX News, W9ILY, N0FCD, CO3JK, DL1SBF, DL7UXG & The DX News Letter, DxCoffee.com, DXNews.com, DX-World.Net, ES1CW, F5NQL, F6AJA & Les Nouvelles DX, I1JQJ/IK1ADH & 425 DX News, I2MQP & DX Italia News, IZ5HQB, OZ6OM & 50 MHz DX News, RSGB IOTA Web Site, Sixitalia Weekly, VA3RJ & ICPO, VHF-DX-Portal(MMMonVHF) and VU2DSI for the following DX information.

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

5K0, SAN ANDRES. (Reminder). Operators WJ2O, Will/AA4NC, AJ9V, HK6F and Tim/LW9EOC are active as 5K0NA from San Andres Island until March 13th. They plan to be active on various HF bands and 60 meters. Activity will include the ARRL International DX CW Contest (February 18-19th) and ARRL International DX SSB Contest (March 4-5th) as a Multi-Single entry. QSL via LW9EOC. Also, Tim, LW9EOC, will be in the CQWW WPX DX Contest (March 25-26th) as a Single-Op/All-Band entry signing 5K0NA. QSL via LW9EOC.

5U, NIGER (Update). Members of the Tifariti Gang/DX Friends will be active as 5U5R in a multi-national DXpedition between March 9-21st. Operators mentioned are Toni/EA5RM (Team Leader), Alberto/EA1SA, Roberto/EA2RY, Javier/EA5KM, Manuel/EA7AJR, Jose-Ramón/EA7KW, Bernard/F9IE, Faber/HK6F, Simone/IK5RUN, Fabrizio/IN3ZNR and David/K3LP. Pilot stations are Tony/ F8ATS (Chief Pilot) and Rick/W6ENZ (NA Pilot). Activity will be on 160-10 meters including 30/17/12m using on CW, SSB and RTTY, with at least 4 stations on the air at the same time. Suggested frequencies are:

CW - 1824, 3524, 5360, 7004, 10104, 14024, 18074, 21024, 24894 and 28024

SSB - 1845, 3780, 5360, 7065/7160, 14195, 18145, 21295, 24945 and 28495

RTTY - 10140, 14080, 18100 and 21080 kHz

PLEASE NOTE: 6 meters is not allowed in Niger for Amateur Radio...QSL via EA5RM or the OQRS on their Web page (after the DXpedition goes QRT).

6E, MEXICO. A group of Ham Radio operators from Southern Mexico will be operating from some Mayan archaeological sites from the Mexican States of Yucatan, Campeche, Tabasco, Chiapas and Quintana Roo, using the special call sign 6E3MAYA between March 18-21st. Activity is to commemorate the Spring Equinox which is so important for the Mayan culture. Activity will be on 80-6 m - CW, SSB, the satellites and Digital modes. QSL via XE3N.

8P, BARBADOS (Update). Bob, G3PJT, will be reactivating his old Barbados call sign, 8P9IF, between March 7-13th. Activity will be holiday style on various HF bands especially the 30/17/12 meter bands using mostly CW. Look for him to be in 80th 2017 BERU (British Commonwealth) Contest (March 11-12th) from a site on the east coast of the island. QSL via his home call sign or ClubLog's OQRS.

9N, NEPAL. Members of the newly formed EI DX Group (EIDX) will be active as 9N7EI from Nepal between March 8-20th. Their Web page states, "For the 1st time, this all 'Echo India' DXpedition team will operate up to 5 stations continuously for 9 consecutive days on all bands and modes from 80m through 10m. Our QTH is located 30 kilometers outside Kathmandu, in a quiet suburb sited at 5,600' above sea level, with great views and take off across the Himalayas." They will have 11 operators. Operators mentioned are Enda/EI2II, Thos/EI2JD, Peter/EI4GZB, Jeremy/EI5GM, Dermot/EI5IQ, Pat/EI5IX, Declan/EI6FR, David/EI9FBB, Declan/EI9HQ, Patrick/EI9HX and Hugh/EI9KF. QSL via M0OXO (OQRS, log search, bureau). QSL direct (w/\$2.00 & SAE) to: CHARLES WILMOT, 60 CHURCH HILL, ROYSTON, BARNSELEY, SOUTH YORKS, S71 4NG, ENGLAND – U.K. For more information and updates, see: <https://9n7ei.com>

A3, TONGA (Rare IOTA/Update). Masa, JA0RQV, will once again be active from Tonga. This time he will activate Niufo'ou Island (OC-123) as A35JP/P between March 22-28th [He was originally schedule to go between Sept 28th and Oct 4th, 2016, but had to postpone]. It has been 7 years since last activation of A33A (by K6HFA). OC-123 is currently claimed by 17.9% of participants based on IOTA Web site (as of 17th Feb 2017). Operations will be on 40-6 m using CW and SSB. His equipment is an IC-7300 (100W) into a vertical antenna. QSL via his home call sign, by the Bureau, direct (SASE w/1 IRC), LoTW or ClubLog. For more details and updates, visit his Blog page at: <http://blog.goo.ne.jp/rqv>

AS-046. Members of the Kuala Lumpur DX Team (KLDX) will be active as 9M4IOTA from **Tioman Island**, West Malaysia, between March 3-5th. Activity will be on 80-10 meters using CW, SSB and the Digital modes. Operators who will be involved at this time are 9M2OOO, 9M2AIS, 9M2V DX, 9M2ZDX, 9M2ODX, 9M2ROL, 9M2UDE, 9M2JEP, 9W2NMX, 9W2FEL and 9W2NYO. QSL via address on QRZ.com.

BW, TAIWAN. Koji, JL3RDC, will once again be active as BW/JL3RDC from Taipei during the CQWW WPX DX SSB Contest (March 27-28th) as a Single- Op/All-Band entry. QSL via JL3RDC.

BW, TAIWAN. Kushi, JP3PZG, will be active as BW/JP3PZG from Taipei during the CQWW WPX DX SSB Contest (Mar 27-28th) as a Single-Op/All-Band entry. QSL via JP3PZG.

FY, FRENCH GUIANA. Gerard, F6CKD, is again active as FY/F6CKD from French Guiana until March 28th. Activity is on 40-15 meters using SSB. QSL via his home call sign.

KH2, GUAM. Antonio, EA5BY, will be active as KH2BY from Island of Guam (OC-026) between March 29th and April 10th. Activity will be on 80-6 meters (60m included). Antonio states, "I will make an effort to operate on the bands/modes where Guam/KH2 is most needed. If in need, E-mail to ea5by@yahoo.com for a sked." QSL only via EA5BY (see QRZ.com), direct, by the Bureau, ClubLog's OQRS or LoTW.

OA0, SOUTH SHETLAND ISLANDS (Update). Members of the Peruano Radio Club of Peru are active OA0MP the Machu Picchu Antarctic Base on King George Island, South Shetland Islands (AN-010), between January 9th and March 31st. Activity will be mainly on 40/20 meters using SSB. QSL via OA4O.

OC-177. A group of Indonesian operators will be active as YE0S from **Sebira Island**, part of Seribu Islands, north of the Jakarta City, between March 20-27th. The Sebira Island is the outermost island of Jakarta Special Capital City District of the Republic of Indonesia. Activity will be on 160-6 meters using CW, SSB and the Digital modes. An Online QSL Request Service (OQRS) will be used for this DXpedition, and if you want a direct QSL you will need to send minimum 3 USDs for each card to cover the cost of the postage to your country. Maximum five QSOs on one QSL card. All DIRECT QSL cards are addressed to ORARI Daerah DKI Jakarta address: Gedung Prasada Sasana Karya Lt.10 Jl. Suryopranoto no.8, Jakarta 10130, Indonesia.

S2, BANGLADESH. Juris, YL2GM, will lead a team of operators to be active as S21GM and S21KW from Bangladesh between March 15-27th. The S21GM call sign will be used in the first half of their DXpedition, and S21KW during the second half. This is caused by the specifics of the regulations in Bangladesh, and not because they want more duplicated QSOs in the log. They state, "Please do not attempt to make QSOs with both of these call signs on the same bands and modes. Please treat both call signs as one, thus giving other fellow HAMs better chance to make their QSO with us, potentially All Time New One (ATNO)." Operators mentioned are Juris/YL2GM, Valery/YL3CW, Jack/YL2KA, Kaspars/YL3AIW, Dmitry/UT7UJ, Oleg/US7UX, Sasha/UT7UV, Andrey/UX1UF, Syed/S21ED, Anup/S21TV and possibly two other operators. Activity will be on 160-10 meters using CW, SSB and RTTY.

Suggested frequencies are:

CW - 1826.5/1821, 3526, 7019, 10119, 14029, 18086, 21029, 24904 and 28029

SSB - 3795, 7100, 14190, 18140, 21290, 24940 and 28490

RTTY - 3583, 7043, 10136, 14083, 18103, 21083, 24923 and 28083 kHz

QSX CW up 2 (160m dwn 2, JA 1810 - 1820).

QSX SSB/RTTY up 5.

QSL via YL2GN, direct, by the Bureau, ClubLog's OQRS (for direct or Bureau) or E-mail requests via yl2gn@lral.lv. A full LoTW upload will be done in 3 months time after the end of their trip. For more details and updates, see: <http://www.lral.lv/s21gm/index.html>

SA-061. (Update) Members of the LU8YE Radio Club de los Andes and North Patagonia DX Group Members (NPDXG) will be active on an IOTA DXpedition as XR5M from **Mocha Island** between Mar 8-13. Activity on the HF bands and 6 meters using CW and SSB. QSL via IK2DUW. Operators mentioned are Claudio/ LU7DW, Marcos/CE6VMO, Richard/LU1YW, Martín/LU3VMS, Rafa/LU7VCH, Sergio/LU7YS and Alex/LU8VCC. For more details and updates, see: <https://xr5m.blogspot.com.ar> Also on Twitter: https://twitter.com/xr5m_2017

XT2, BURKINA FASO. YL Elvira, IV3FSG, will be active as XT2SE from the city of Ouagadougua between February 17th and March 13th. Activity will be limited to her spare time on 80-10 meters using SSB, RTTY and PSK31. She is there working on a project for the Informatici Senza Frontiere ONLUS. QSL via IK3GES.

ZA, ALBANIA. Operators Kees/PE1KL, Lennart/PD5LKM and YL Lisa/PA2LS will be active as ZA/PA2LS from Albania between March 22-29th. Activity will be on 160-10 meters as well as 6m and 2m using CW, SSB, PSK and RTTY. They will also be in the CQWW WPX SSB Contest (March 25-26th). QSL via PA2LS, direct or by the Bureau.

There you have it for March 2017. Try not to miss the operation from Tonga as it really is a rare event. And make sure that you follow any DXpedition's instructions regarding contacting them. If you don't you may find yourself being excluded from their operation. Get on the air and work some DX. **You never know what you will hear if you don't GET ON THE AIR.**

Hamfest Calendar

03/05 - WinterHamFest - Location: VFW Post 1079, 500 Abbe Road, Elyria, OH 44035 - Website: <http://noars.net> - Northern Ohio Amateur Radio Society - Public Contact: Darlene Ohman KA8VTS, 4122 Bush Avenue Cleveland, OH 44109 - Phone: 216-398-8858 - Email: dohman@roadrunner.com

03/19 - Toledo Mobile Radio Association Hamfest and Computer Fair - Location: Owens Community College' 30335 Oregon Road, Perrysburg, OH 43551 - Website: <http://www.tmrahamradio.org> - Sponsor: Toledo Mobile Radio Association - Public Contact: Brian Harrington WD8MXR, 4463 Holly Hill Drive, Toledo, OH 43614 - Phone: 419-385-5624 - Email: wd8mxr@gmail.com

04/08 - CFARC 63rd Annual Hamfest - Location: Emidio and Sons Party Center, 48 East Bath Road, Cuyahoga Falls, OH 44221 - Website: <http://www.cfarc.org/hamfest.php> - Sponsor: Cuyahoga Falls Amateur Radio Club - Public Contact: Michael Luoma K8MAL, PO Box 614 Cuyahoga Falls, OH 44222, Phone: 234-206-0270 - Email: hamfest2017@cfarc.org

05/19-20-21 - 2017 Hamvention® - Location: Greene County Fair & Exposition Center, 120 Fairground Road, Xenia, OH 45385 - Website: <http://www.hamvention.org> - Sponsor: Dayton Amateur Radio Association, Public Contact Phone: 937-276-6930 - Email: info@hamvention.org

07/09 - 20/9 Radio Club Hamfest, Computer & Electronics Show - Location: Austintown Senior Center, 112 Westchester Drive, Austintown, OH - Website: <http://20over9.org> - Sponsor: 20/9 Radio Club, Inc. - Public Contact: Dotti ONeil-Meleski KC8SYF, 17520 Denver Drive Lake Milton, OH 44429 - Phone: 330-651-8420 - Email: hamfest@20over9.org

08/05 - 2017 Columbus, Ohio Hamfest and Ohio ARRL Section Conference - Location: Aladdin Shrine Center, 1801 Gateway Circle, Grove City, OH 43123 - Website: <http://columbushamfest.com> - Sponsor: Voice of Aladdin Amateur Radio Club, W8FEZ - Public Contact: John Lehman K8PJ, 7415 Hagerty Road Ashville, OH 43103 - Phone: 614-571-5179 - Email: voiceofaladdin@gmail.com

Happy Birthday PCARS Members

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

W8KNO Joe Wehner

K8SRR Steve Randlett

AE8YL Erica Pelz

WA4WGA Ray Mahorney

W8CYN James Shoemaker

WX1DER Daryl Stout

KB3GXB Jennifer Andrews

K8QF Russ Conklin

KD8CGF Art Dembinski

WB8LCD Tom Sly



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



Dues are Over Due

Please, help keep PCARS going by paying your annual dues. The sooner you get them paid, the easier our Treasurer's job will be.

You can mail in your dues, bring them to a meeting, or better yet - pay **On-Line** using **PayPal**. Yes, we have that option right on the PCARS web site.

You pay a slightly higher amount to cover the PayPal fee, but it's easy and fast. Check out the PCARS web site under the "Club Info" tab.



Pay your Dues With Paypal!
You can now pay your dues via Paypal. Just click the button below.

PCARS Dues Options

Full Membership (1yr) \$20.91 USD
Full Membership (1yr) \$20.91 USD
Senior Full Membership (1yr) \$16.79 USD
Family Members (1yr) \$10.62 USD

Buy Now

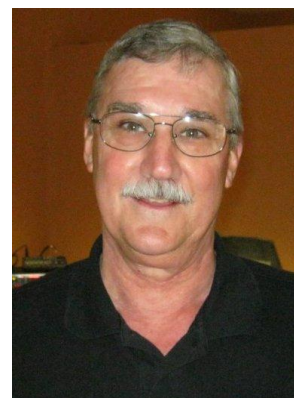
    

At the end of this newsletter is a dues form. Please use the form so we have all your correct information on file.



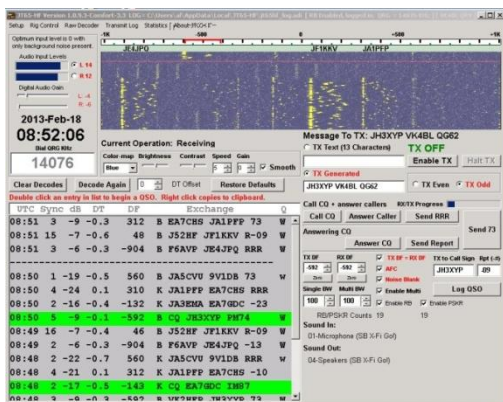
Digital Special Interest Group

Rick, K8CAV



The next Digital Special Interest Group meeting will be held on Tuesday March 7th at 7:00 PM at the club site in Ravenna.

Due to getting the flu, last month's Digital SIG was cancelled so this month we'll be doing the JT-65HF presentation I had planned for last month. We'll talk about where to get software, how to load and configure it, and tips on using this mode. As always, we'll also have time to answer any questions or help with any problems you may be having digitally. Hope to see you there!



Why Are There So Many Techs?

Dan, KB6NU



Recently, one of my readers asked, "Why do most people have a Technician license and not a General or Extra? Is it simply not interesting enough to get more privileges?"

This is a very interesting question, one that I've written about before. I think there are several issues at play here. In no particular order:

- * It's pretty easy to get a Tech license, so a lot of people get them just for the challenge, but really never intend to use the license.
- * Some people get a Tech license, but then find out that amateur radio isn't what they thought it was going to be.
- * Some people get a Tech license, then can't find an Elmer to help them. They lose interest and give up on ham radio.
- * Some people get a Tech license, buy an HT, and think that's all there is to amateur radio. They quickly lose interest in amateur radio, because talking on the repeaters just isn't all that interesting.
- * Some people get licenses to participate in local emergency communications or CERT organizations. There's no need for them to get anything more than a Tech license.
- * Since it's so easy to get a Tech license, even those that aren't technically inclined get them. Getting a General Class license requires a fair amount of study, and because they don't see the benefits of putting in that kind of work, they just don't bother.

I posted this question to my blog and got several interesting replies. Perhaps the most cogent was by Kenneth, W6KWF. He wrote: *"The only thing General/Extra gets you is HF, which is becoming an increasingly small fraction of the possibilities of the amateur hobby. Amateurs could easily spend their whole lives moving from FM repeaters to microwave to VHF packet to EME to CERT/event support, etc, etc, without having any interest to explore what few facets of the hobby need HF privileges."*

I think this is a great point. When incentive licensing was put into place in the late 1960s, HF was where the action was. Nowadays, more of the "cool stuff" is happening on VHF, UHF and microwaves. Getting additional HF privileges is not really a big deal anymore for many hams.

Yet another new license class?

Right on the heels of this discussion, the ARRL posted a news item, "ARRL Seeks Opinions Concerning Possible New Entry Level License" (<http://www.arrl.org/news/arrl-seeks-opinions-concerning-possible-new-entry-level-license>). According to this report, the ARRL Board of Directors set up an An Entry Level License Committee in September 2016.

The committee is gathering member input via an online member survey (<http://www.arrl.org/license-1>) and will make recommendations to the Board for possible rules changes to submit to the FCC. They note, "The result could mean changes to the Technician license, but it could also be an additional, but simpler, license with privileges that would give a newcomer a taste of most facets of ham radio from HF to VHF and UHF. The survey will be online until April 7, 2017."

According to the survey page, the committee is trying to address several issues, including:

- * The declining population of new hams under the age of 30.
- * A decline in the number of new licensees who actually get on the air.
- * Amateur Radio's lack of appeal for those under the age of 30, compared to other technical hobbies.
- * The increasing challenge of engaging and retaining Technician licensees.
- * A reluctance in much of the amateur community to embrace newer technologies of interest to the younger segment of the population.

Personally, I don't think that coming up with a new entry-level license class with privileges that are even more limited than the Technician Class is a bad idea, but whether or not it's successful will depend completely on the implementation. Unless the new class of license is accompanied by some kind of program that will help these new licensees really become engaged with amateur radio, then we're just creating another class of inactive licensees. I don't know exactly what this program would consist of, but without it, this effort is doomed to failure.

And, who's going to develop and run this program? The only organization that has the horsepower to make this work is the ARRL. They are going to have to step up big time. Most clubs don't have the people or resources to do it properly. If you have any thoughts on this, I urge you to contact your ARRL division director (<http://www.arrl.org/divisions>).

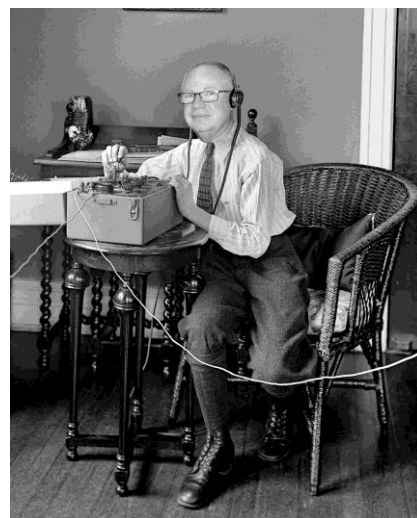
When he's not pondering questions about the licensing structure, Dan blogs about amateur radio at www.KB6NU.Com, writes the "No Nonsense" amateur radio study guides, and teaches ham classes. You can contact him by e-mailing cwgeek@kb6nu.com.

PCARS Thursday Net Control

Tom, WB8LCD
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 out the new receiver located in Sugar Bush Knolls - using a PL tone of 118.8.** The Rootstown receiver still uses the 110.9 PL tone.

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



March	
2	WB8LCD
9	K8CAV
16	N8QE
23	KB8UUZ
30	N8RLG

April	
6	KB8UHN
13	KC8PD
20	WB2DFC
27	NR8W

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: WB8LCD@portcars.org Everyone who is a club member is welcome to have a turn!

Agent Radio Operations During WWII



CENTRAL
INTELLIGENCE
AGENCY

From the CIA

APPROVED FOR RELEASE
CIA HISTORICAL REVIEW PROGRAM
22 SEPT 93

Agent Radio Operation During World War II

Anonymous

During World War II the use of clandestine radio for agent communications was widespread. Literally hundreds of agent circuits were operated during the war. On the enemy side they ranged in type from highly organized nets involving German diplomatic installations to single operations in such widely scattered places as Mozambique and isolated locations in the United States. On the Allied side there was no part of Axis territory where we did not have clandestine communications representatives - "Joes," as they were called. It was almost impossible to tune a communications receiver of an evening without running across signals which were so obviously not what they were trying to seem that you wondered why they were not wrapped up the first time they came on the air.

On both sides the signal plans (call signs, frequencies, and times of transmission) and procedures used by agents were for the most part of utmost simplicity. One service was also easily distinguishable from another by their different characteristics. The random contact times and frequent changes in wavelength considered so essential today were represented by uncomplicated regular patterns simple to reconstruct. In many cases the rota -- the cycle in which the plan repeated itself -- was of only a week's duration. Often only the list of call signs was carried out to a 31-day rota.



The agent was generally given a reasonably good range of operating frequencies, usually between five and ten, to help protect him from detection and arrest, but he was often his own worst enemy. Certain times and frequencies, because they afforded better operating conditions either radiowise or from a personal standpoint, became his favorites. Almost nothing his base could say or do would convince an agent that he was endangering himself when he abandoned even the simple non-repetitive pattern of his signal plan in favor of the convenience of operating day after day on the same frequency at the same hour. It must be said, in all fairness, that in some cases this practice was almost unavoidable because of the agent's need to live his cover. In others, however, it was stupidity, laziness, or complete incomprehension of the need for good radio security. Security laxness was particularly foolhardy of those who operated alone and without benefit of "watchers" to warn when enemy personnel were approaching.

Four types of agent radio operators can be distinguished -- those who operated in metropolitan areas in concert with well-organized watcher organizations; those who operated on their own in cities; those who were with the guerrilla groups; and those who worked alone in isolated rural areas.

The City Mouse

In cities a variety of techniques was employed to protect the operator. In one case as many as five operators in widely separated areas were geared to function as one station. All had transmitters on the same frequency and copies of the traffic for a given schedule. If the enemy approached the vicinity of a particular operator, he would stop transmitting when signaled by his watcher, and at the same time another operator in a remote part of the city who had been listening to his colleague would, with hardly a perceptible pause, continue the transmission. As necessary, a third would take over from the second and so on, much to the frustration of the opposition. In another instance long-abandoned telephone lines were used to key distant transmitters, whose remoteness from the operator greatly increased his security. These and other sophisticated devices were employed successfully in target areas where an extensive and highly organized underground was able to create the conditions for them.

In the main, however, a less imaginative but equally effective means of protecting the operator was used -- teams of watchers strategically placed in the streets around or on the roof of the building in which the agent was working his set. When enemy direction-finding trucks or personnel with portable sets were spotted approaching, a signal would be sent to another watcher either in the room with the operator or close enough to warn him to stop transmitting. Usually the warning was enough; but one agent was so intensely anxious to get the traffic off that he repeatedly ignored the warnings of his watcher on the roof above him. A string had to be fastened to this man's wrist, with the roof watcher holding the other end, so that he could literally yank the operator's hand away from the key!

Less is known about the singletons who operated in cities. They lived lonely, frightened lives, particularly tense during their transmissions. Frequently they had the feeling that the enemy was just outside the door waiting for the right moment to break in, and sometimes he was. The most grateful moment in the singleton's day came when he heard the base say "Roger. Nothing more." Sometimes the base operator would impulsively end with the letters GB ES GL -- "Good bye and good luck" - even though he knew it was against the rules.



The lone agents who survived owed their lives to a highly developed sense of security and intelligent use of the resources available to them. They went on the air only when they had material they considered really important and they kept their transmissions short. They either were or became such good operators that they approached the professional level in skill. Sometimes they were able to change their transmitting procedure from what they had been taught to one which enabled them to reduce greatly their time on the air. They took advantage of unusual operating locations and moved frequently. In addition, they undoubtedly owed something to good fortune: many who were caught were victims as much of bad luck as of enemy action. One German agent in Italy who had most skillfully and successfully evaded Allied apprehension over a long period was caught only with the casual help of an Italian woman. After watching with curiosity the efforts of a DF crew in the street for some time, she finally approached the officer in charge and diffidently offered the suggestion, "If you're looking for the man with the radio, he's up there."

Some singleton agents who were unable to live alone with their secrets were spotted because of their inability to keep their mouths shut. Their compulsion to tell a sweetheart or a friend or to draw attention to themselves by living or talking in a manner out of keeping with their covers resulted in their apprehension. And yet they sometimes got by with incredible indiscretions. There was one case in which the base, having taken traffic from a "Joe" in northern Italy, was about to close down when Joe, in clear text, asked if it would take traffic from "George," an agent who had been trained and dispatched from a completely different location. The base operator was flabbergasted, but took down the transmission and then asked the man in the field to stand by for a short message, which was being enciphered, to the following effect: "Where did you get that traffic and where the hell is George?" The answer was prompt and again *en clair*: "From George, he's on leave." For several days Joe continued to send in George's messages, evidently prepared in advance, as well as his own, until George showed up on his own schedule and resumed business as usual. To the best of our knowledge these two agents remained unmolested and free of control; they were contacted regularly until Allied troops overran the area.

The Country Mouse

The radio operator with a guerrilla group came in for his share of difficulties too. First of all, he usually arrived at his destination by parachute. Often his equipment was damaged in the drop. Many times he had to lug it over almost impassable terrain in a wild scramble to protect it and avoid capture. Sometimes he never got on the air at all, and he and his teammates would be the subject of melancholy speculation on the part of his comrades at headquarters until some word trickled back as to what had happened to them. The radio man was expected to do his share of the fighting when the

situation demanded it; and injured or sick, he was supposed to keep at his radio as long as he was strong enough to operate it.

The singleton in the country usually had a specified mission such as the retraining of an already infiltrated agent or the transmission of information being gathered by specific sources. He frequently could use some city-type methods of operation, being protected by watchers as he worked in some lonely spot, or had the advantages of the guerrilla type, in that he was among friendly irregulars or in their territory. Very often he had little privacy, let alone security, of operation, and his sole protection was the good will of the populace of the area through which he was traveling. Frequently he had to meet contact schedules in the open in broad daylight, with interested indigenous bystanders looking on. Given good will, however, this circumstancing was not bad; it provided volunteers to crank the generator and hold up the poles on which his antenna was strung.



The country singleton was usually no worse off than his counterparts in other situations, and sometimes much better off; occasionally he was treated as an honored guest. But his status varied with the moods and political views of the so-called friendly leaders of the area, and at times he was viewed with suspicion or open hostility. The agent or agents he was supposed to retrain often resented him and added to his difficulties. He developed skills beyond those he had brought with him: equivocation, tact, flattery, subterfuge, and downright dishonesty became abilities essential to the doing of his job. His one thought was to get it done and get out in one piece and on to the next assignment.

Occasionally the agent operator interjected into his otherwise anonymous transmission bursts of temper, displeasure or eloquent disgust. Usually these outbursts were spontaneous profanity, unenciphered, directed at the quality of the base signal, the base operator's poor sending, or some other immediate cause of annoyance. They most often came in the agent's mother-tongue, but a certain group of German clandestine agents used to swear at their base operators with great eloquence in beautifully spelled-out English.

Not all such expressions of opinion were sent in the clear. Over the years, enciphered messages have been generously spiked with agent invective and profanity. One such message received during the war, a marvel of succinctness, spoke volumes on the subject of what makes an agent tick. The agent in question had been trained as a singleton. It had been planned, with good reason, that he should be dropped several hundred miles ahead of the bulk of his equipment, of which there was a great deal, and make his way to it later. The operation went according to plan except in this respect; all the agent's gear was dropped with him. In due time the base heard him calling, established contact, and took a brief but carefully enciphered message, which when decoded was found to consist of one extremely vulgar French word. The agent was never heard from again.

The Ingredients of Partnership

What kind of person made a good agent operator? His special qualifications required that he be young or old, tall or short, thin or fat, nervous or phlegmatic, intelligent or stupid, educated or unlettered. His political views were of no consequence. If he had a burning resentment at having been thrown out of his country, of having lost family or friends to



the enemy, so much the better -- or maybe worse: uncontrolled hatred could create security problems. He didn't even have to like radio very much. About the only attributes he really needed were: ability to put up with all the unpleasantness of six weeks of radio training to get at least a nodding acquaintance with the subject; a willingness or desire to go anywhere by any reasonable means of conveyance -- "reasonable" includes dropping fifty feet from a plane into water -- and stay for an unspecified period of time; and the abiding conviction, in spite of feeling constantly that someone was looking over his shoulder, that it would always be the other guy who got caught. In short, he must come to like his work and take, with the well-educated call-girl, the view that he was just plain lucky to get such a good job.

At the base end of a clandestine circuit a good operator was, in his own way, different from any other radio operator developed during the war. And he was proud of it. In the first place he had to learn to live in a world of noise, an experience which occasionally resulted in permanent psychoses or suicide. The agent transmitter was and is a miserably feeble communications instrument, capable under the best of circumstances of putting only very small amounts of radio energy into the ether. Being illegal, it had to compete with jammers, commercial telegraph, and broadcast stations, whose signals often exceeded its power tens of thousands of times. If the reader can picture himself surrounded by the brass section of a large orchestra playing one of the lustier passages from Wagner while he is trying to hear and identify a different melody coming from a piccolo played by an asthmatic midget in the balcony, he will in some measure approximate the auditory frustrations of the base radio operator searching for and copying some of the typical agent signals.

Yet this small group of men not only took pride in their work, but because they understood the problems of their unseen friends on the other end of the line, went out of their way to make sure that their agents got the best service possible. Frequently they would become so concerned about a certain agent that they would get up during off hours at what ever time of day or night their particular Joe was scheduled to come on, to make sure that he would be properly copied, even though the base operator assigned to that watch was thoroughly competent. And the regular operator never resented this interference with his watch; he probably had done or would do the same thing himself.

The devotion and skill of these otherwise apparently undedicated and average men was equal to almost any demand. Sometimes as many as five operators would voluntarily concentrate on one agent transmission, piecing together the fragments each made out, so the man could get off the air as fast as possible. They learned to recognize the agent's signal as he was tuning up, in order to shorten the dangerous calling time. They managed to make sense of the spastic tappings of obviously nervous agents and through their own efforts and example frequently instilled confidence in them. If they did not accept with good grace the often unwarranted criticism leveled at them by the agent, at least they did not reply in kind.

They recognized their special friends by the way they sent their characters and were in many cases able to tell when the agent was in trouble or had been replaced at the key by an enemy operator. In many instances they developed a sixth sense which enabled them to hear and copy signals correctly through prolonged bursts of static or interference, and they developed shortcuts which further reduced the agent's time on the air. Many of these shortcuts became the foundation for more efficient and sophisticated methods of operation.



The good ones came from all walks of life. Unlike the agents, they were trusted nationals of the country operating the station. They were draftees, professional communicators, amateur radio operators, philologists; but almost without exception they had imagination, skill, and a deep (if frequently unrecognized) love for both radio and that type of radio work in particular. They were in short a new breed, the clandestine intelligence service radio operator.



Their patience was truly marvelous. When necessary, they would sit day after day listening for a man who had never been contacted or who had disappeared for months. That he might be without equipment, drunk, or dead made no difference to them. As long as his schedule was on their contact sheet, he was real and they looked for him. If he showed up they nearly always established contact.

Not every man assigned as radio operator to this type of base station made the grade. Some tried and just didn't have it. These nobody criticized, and other useful duties were found for them; but those who didn't take the work seriously were not tolerated and soon left the

Listen - Listen - Listen

Neil, N8IL

Lessons learned after forty years of Ham Radio.

I can't tell you how compelling those words are. They cannot be emphasized sufficiently. I find the more time I listen, the less time I spend transmitting. To clarify, that's less time wasted trying to gain some advantage against the increasing number of rude and careless operators.

I participated in the ARRL CW DX contest last weekend, and those words rang truer than ever. I ran in the high power, unassisted category and made over 800 contacts, operating for perhaps 12 hours. My goal in the contest was to listen more than ever. Rather than parking on a band and 'running,' I spent 99% of my operating time searching and 'pouncing' just tuning up the band, then back down again. Every now and then, I came across a large pile.



In virtually every single pile, there was an operator sending 'CALL?' over and over, right on top of the DX station. Why were they doing that? Because they refused to listen. In that circumstance, it is the DX operator's prerogative to reply to calls without sending his call. It's a valid method of thinning out the pile. Good operators will mark the frequency, and move on, returning later. Impatient operators simply pass on to the next station. LIDS will send "CALL?" because they are impatient, and believe that in spite of the fact that others have been patiently calling for 5 minutes, they are entitled to establish contact after "waiting" thirty seconds. In those situations, good

operators tuned a little above or below and made their calls. In some cases, they tuned as much as 15 kHz away. If you listen for the replying station, using your second VFO, or your RIT/XIT offset, you can zero beat his signal, then tune a touch up or down from there, and make your call when the contact is completed. This approach worked very well for me.

The same thing happened tonight with the massive pileups for TR8CA and 9X2CW. When working those stations, my first call was answered because I listened. I listened to establish where the DX station was operating, and I also determined which way he was tuning, and planted myself directly in his scan up or down the band. More time listening, very little time transmitting, zero frustration, and a satisfying feeling of accomplishment. The same practice holds true for any operating mode!

Listen, Listen, Listen!

Stay Tuned - Next Month Neil talks about: Improving reception on 160 through 40 meters.

Freeze *Ski* Your Acorns Off



2/11/2017 was the annual "Freeze Your Acorns Off" QRP event at Fred Fuller Park in Kent! I thought it seemed unusually warm at 48 degrees. Then I saw this squirrel waterskiing past me in the ditch.

We had many operators and visitors to the shelter house and the weather was very cooperative. I

heard the bands were not the best, however the stations kept up the effort all day!

It was a great day until this guy showed up wearing the same outfit as me. (*Just kidding John*)

Amy, KD8SKL



California QSO Party Certificates

At the last PCARS meeting the certificates for the October 2016 California QSO Party were handed out to the K8BF Contest Team Members present.

K8BF ran Multi-Multi Low Power and came in **FIRST Place in the USA and FIRST Place Ohio**

Congratulations to the K8BF California QSO Party 2016 Team Members:

KB8TUY, W8PT, N8BI,
W8KNO, K8MSH, K8CAV
(not pictured KB8AMZ)



Swap-N-Shop

FOR SALE: Base Antennas & Mosley Classic 36 6-element Tri-Bander There are 2 Commercial Base Station antennas manufactured by **Antenna-Specialists Model: ASP-680** factory tuned for the 2-meter band both just came out of service with mounting clamps and N-connectors on the pigtails. **2 ROHN tower standoffs**, various coax cables, extra antenna clamps for mounting. This entire package and all for a price of \$300 for pickup only in N.E. Ohio (Cleveland area). **Yaesu FT-60**-\$100 100 **Bird VHF slugs** - \$50 each. **Antenna Specialist 100 watt mobile amp** - \$100

Contact: Jeff, WA8SAJ by phone at **440-951-6406** [3/2/17]

FOR SALE: Cushcraft Model XM-520 20 Meter 5 El Beam \$200 **Yaesu FT-757GX-II** HF Radio \$250
Kenwood SP-430 Speaker \$25 **Nye Viking, MBI-001** Tuner \$100 **Sencore TF151**, Transistor tester \$15
Shure model PE515, Microphone \$15 **Shure model 444D**, Microphone \$15 **Digital Multimeter** \$15
AEA model QT-1, Antenna tuner \$25 **Radio Shack 2 meter HTX-202** \$25 **Heathkit VTVM IM-11** \$25
Astron Power Supply Model RS-20M \$50 **Variable Voltage Power Supply** +18 and -18 \$20
Pyramid Power Supply model PS-25 \$50

Misc tower parts, lots contact me if interested. Will accept all reasonable offers.

Contact: Al, AB8AA at 330-207-3296 or ab8aa@arrl.net [3/2/17]

FREE TO A GOOD HOME: The following **QST Magazines** (good condition). Thanks to the magic of downloadable archives, I'm getting rid of a ton of old QST's that I've hung on to over the years.
June-Dec 1993 Jan-May 1996 All of the following years: 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015

Contact: Deron, N8XTH at N8XTH@portcars.org [3/2/17]

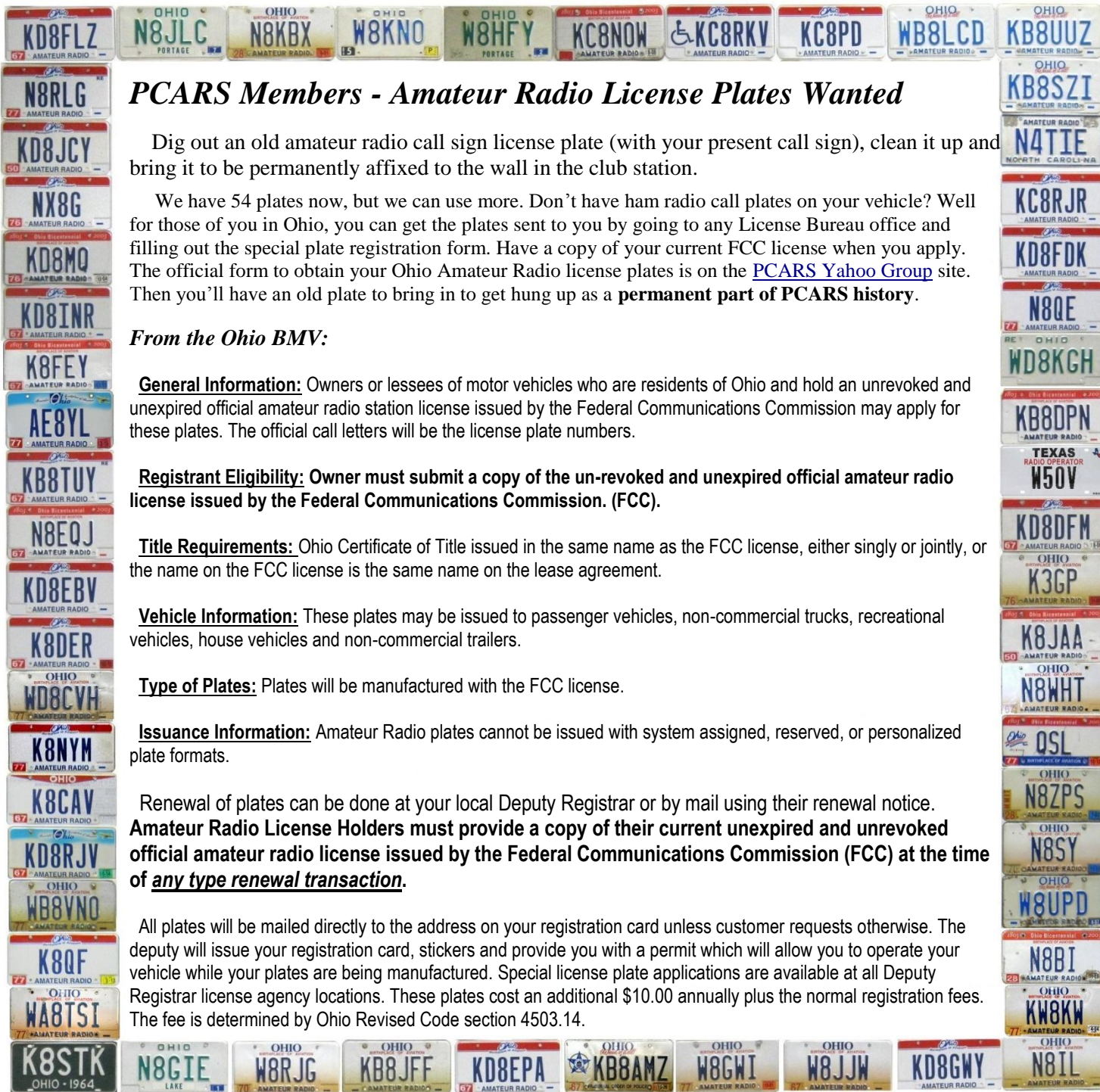
For Sale or Want Ad policy reminder: This is a PCARS members only benefit. Please don't ask to list items for a friend, relative or SK estate unless they are a member of PCARS. Requests come in from all over the USA (and beyond) to list items for sale or wanted items and we just cannot dedicate that much space to non-members. Listings are good for 3 months unless canceled or changed earlier. The date listed after the contact information tells you when the ad expires - example: [5/2/17] indicates the ad will run until May 2, 2017.

PCARS
Join Now
Discover the FUN



PCARS
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Discover the FUN





PCARS Members - Amateur 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 club station.

We have 54 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 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/>

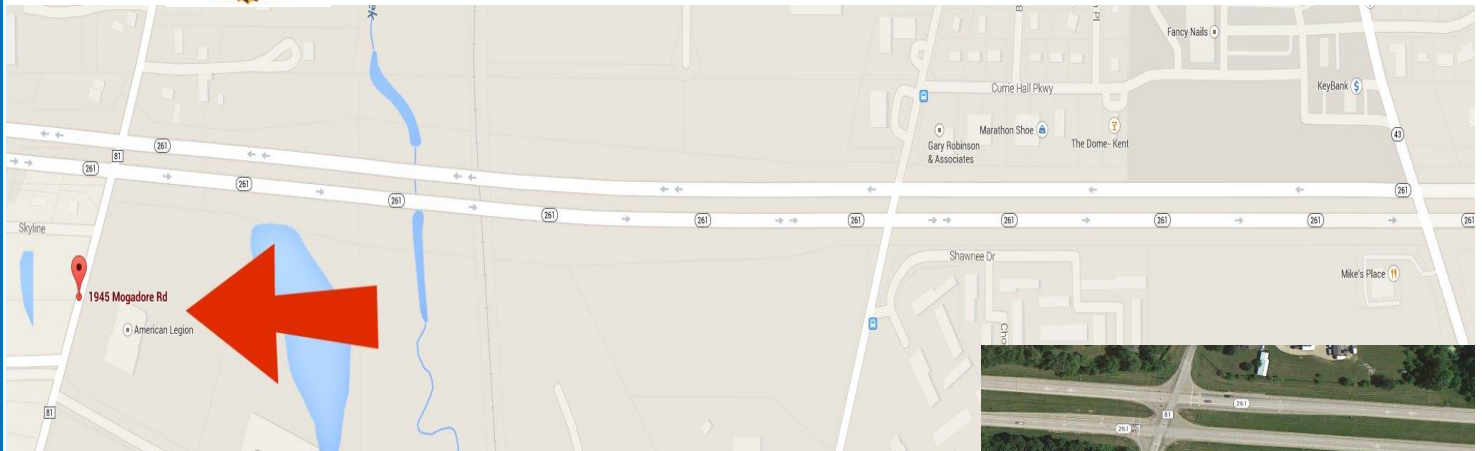


PCARS Meetings

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.

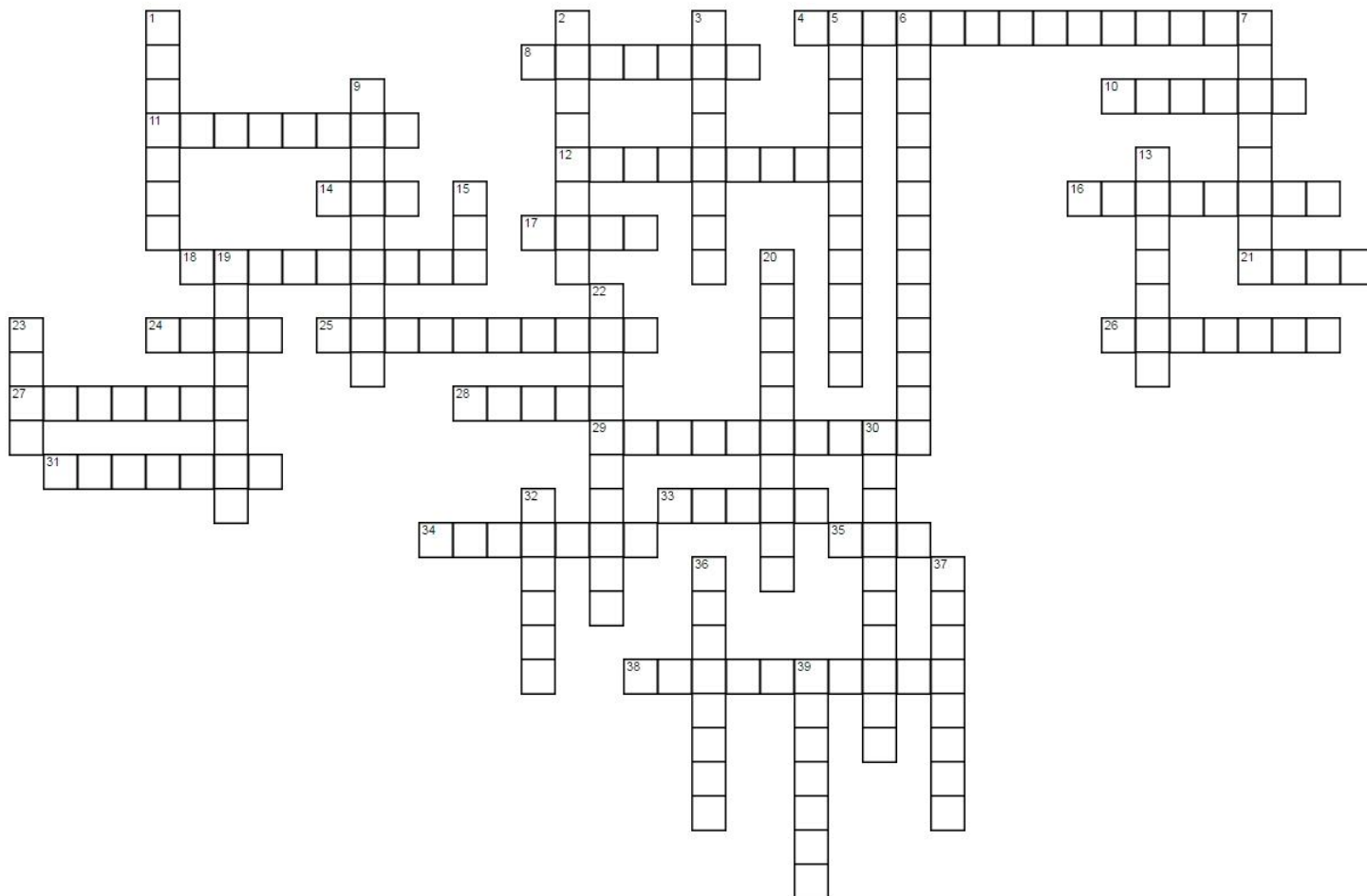


*The picture on the left shows
The American Legion Post 496
as viewed from Mogadore Road.
(looking East)*

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.

PCARS



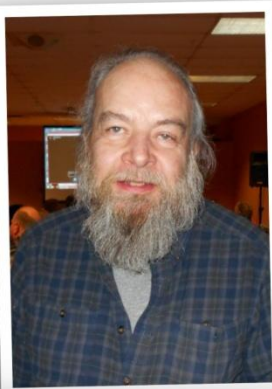
ACROSS

4	PCARS is an ARRL _____ Club (2 words)
8	When you enter the club site on the wall to your right is a metal plaque - what does it say?
10	Day of the week the PCARS meeting are held
11	Day of the week that the regular voice PCARS Net is held
12	boost your output power with one of these
14	AC8NT - Vice President
16	material most often used to build antennas
17	WB8LCD's favorite beverage
18	City where ARRL HQ is located
21	K8CAV - President
24	Major amateur radio tower manufacturer
25	QSO Party that PCARS won Gold Coins
26	City the PCARS club site is located in
27	Cable most often used in ham radio
28	What you should think about when you see a black squirrel
29	Entry level Ham License
31	When stainless steel nuts and bolts freeze up due to lack of lubrication
33	City where Hamvention 2017 will be held
34	Organization the weather service uses for reporting tornados
35	Kilo Eight _____ Fun
38	Usual orientation for a Yagi antenna

DOWN

1	Portage County _____ Radio Service
2	146.895 MHz, for example
3	_____ Radio Relay League
5	Provides the DC needed for your radio (2 words)
6	Federal _____ Commission
7	What does the E stand for in VE
9	Name of the PCARS newsletter
13	Day of the week that the SIGs are held
15	PCARS puts the _____ in Ham Radio
19	Mode used by WX1DER to get into the Thursday night PCARS Net
20	Stations going to remote areas to make QSOs
22	Work _____ Later (2 words)
23	W8KNO can check cards for this ARRL award
30	PCARS is an ARRL _____ Club
32	Number of years that FYAO has been held
36	Month that FYAO is held in
37	Biggest radio event of the Summer (2 words)
39	Street where the club site is located

Photos from the February PCARS Meeting





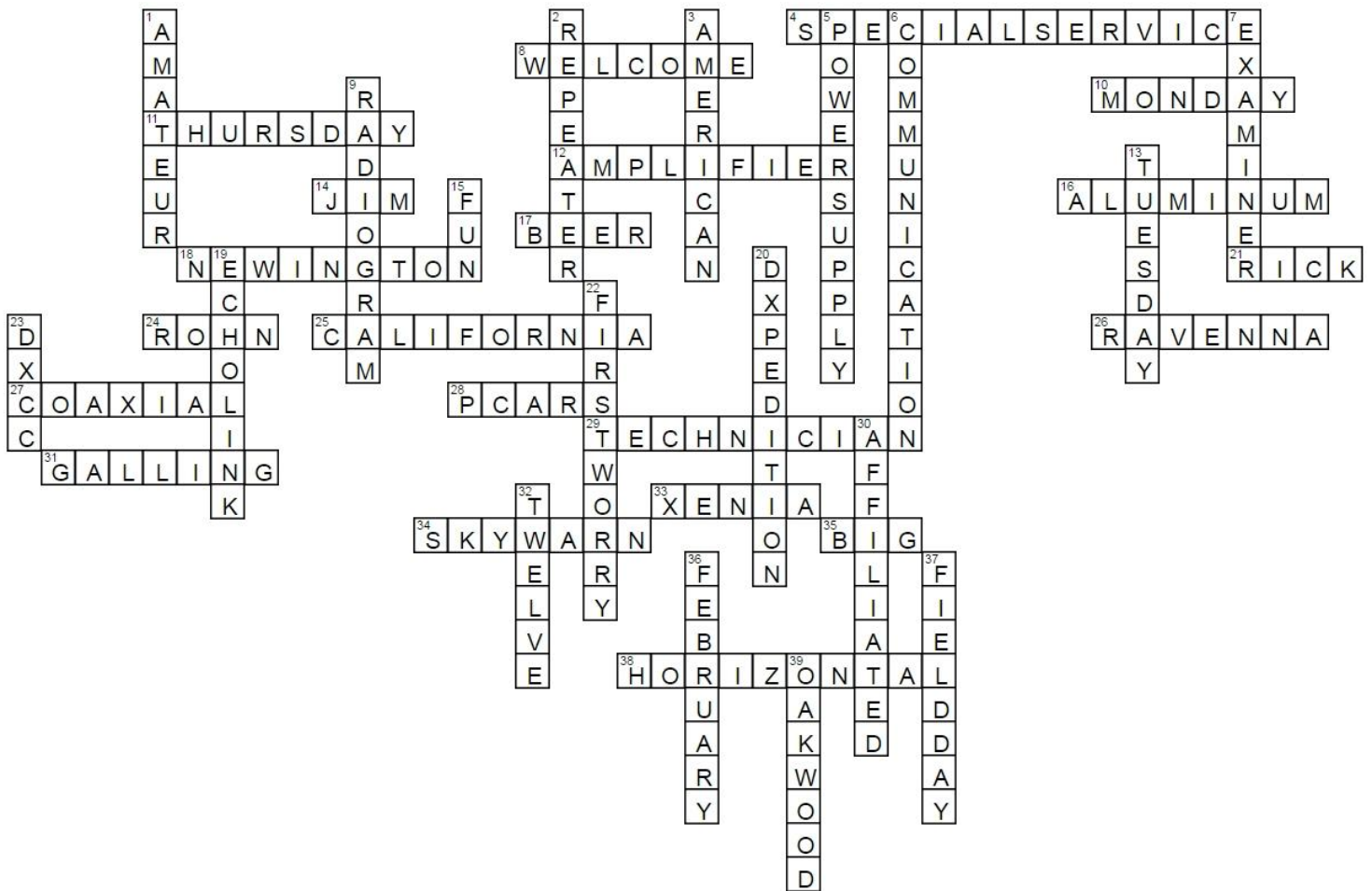
PCARS - Feb 13, 2017



PCARS - Feb 13, 2017

Crossword Answers

PCARS





PCARS K8BF

The Club that puts the FUN in Ham Radio!



PCARS

Join Now

Discover the FUN





PCARS

www.portcars.org





Important Dates This Month

Sunday 12th Mar, 2017 will be... Check Your Batteries Day

We all know that some days are silly or light-hearted, but there are others which serve an important purpose. Check Your Batteries Day is definitely highly recommended because it could actually save your life.

Created to raise awareness of the importance of testing and having working batteries in household appliances like smoke detectors and carbon monoxide detectors. These devices help to warn you of a potentially life threatening situation, giving you vital time to get yourself and your family to safety.

However, it's important they are tested (usually you can do this by pushing a button) regularly to ensure they're working correctly. Check Your Batteries Day is a reminder to do just that.



While you're in the routine of checking, it's a good idea to check other household appliances, such as remote controls, toys, clocks and other electrical items. If you don't have spare batteries on hand, consider buying some.

Tuesday 14th Mar, 2017 Pi Day

Pi, wonderful pi. It plays into so many aspects of our lives and goes on forever and ever and ever and ever and eve... You get the point. Every year there comes a certain day that shares numerical values with Pi, and on that day there is a celebration of Pi with every kind of Pie you can imagine. You see, pies are round, and Pi is circumference over diameter, a number that, while being functionally infinite, also happens to be a constant in every circle ever. Pi day celebrates the long history of this fantastic number, and the long journey science has taken (and is still on) to seek the end of a number known to be infinite in length.



History of Pi Day

The history of pi day is, without a doubt, intrinsically tied to the origins of the number itself. The need for pi is as old as the wheel itself, and many techniques have been tried in many cultures to capture this elusive number in mathematics. The reach for the whole of this number was difficult, with ancient mathematical cultures only being able to barely find out to the seventh decimal, and Indian mathematicians (some of the greatest of their time) could only manage to decipher it out to five.

Pi is truly one of the most fascinating numbers in existence, and the quest for the ultimate end of Pi has been sought for time out of mind. This seems a fool's errand, given that it seems to extend infinitely in mathematical loops beyond and nothing has ever been found to contest this, this is particularly remarkable when you consider the following: modern techniques have been used to calculate pi out to millions of digits, and at no point has the pattern ever been found to reliably repeat itself.

How to celebrate Pi Day

Ahhh an easier and more delicious question has never been posited! How do we celebrate Pi day? Why, by eating a great deal of Pie! Remember, Pies are circles, Pi describes circles, and through that we find that

everything in the universe can be described with a pi(e). Other ways to celebrate this most amazing and transcendental of days (Pi is a transcendental number, look it up) is to research this number and discover all the amazing secrets it hides. Once you really get to understand the depths and complexities of it, you'll understand why Pi day exists to celebrate a simple combination of digits.

=====

Friday 17th Mar, 2017 will be... Saint Patrick's Day

Saint Patrick's Day, colloquially St. Paddy's Day or simply Paddy's Day, is an annual feast day which celebrates Saint Patrick, the most commonly recognized of the patron saints of Ireland.

Saint Patrick's Day is celebrated worldwide by those of Irish descent and increasingly by people of other ethnicities as well, notably in Argentina, Australia, New Zealand and North America. Celebrations are generally themed around all things Irish and, by association, the color green. Both Christians and non-Christians celebrate the secular version of the holiday by wearing green, eating Irish food and/or green foods, imbibing Irish drink and attending parades, which have a particularly long history in the United States and in Canada.

=====



Friday 31st Mar, 2017 will be... World Backup Day

Have you backed up your data recently? Every day people, businesses, even games lose huge amounts of valuable data because they fail to follow this one basic procedure. World Backup Day is set aside as a reminder to back up your files, even if it's once a year! A backup is a reserve copy of all the files you'd be loathe to use. There's nothing more traumatizing than having losing your phone, or having your hard drive crash, and having hundreds of valuable and irreplaceable documents or photos suddenly gone beyond retrieval.

No matter how secure or safe you feel your data and equipment is, it's important to back up your files. 30% of people don't have any way to save their important files in the event that tragedy strikes. In our electronic based world, there are hundreds of ways to suddenly have things go terribly awry. 29% of all disasters are caused by accidents, costing valuable time and money as the resources they affected are lost forever. You may feel your computer is safe, but 1 in 10 of all computers, including household and business computers, are infected with a virus that may suddenly cause all of your data to be gone beyond retrieval.



"But my phone is always on me!" I hear you say! Wonderful! That'll make it easier for you to be one of the 113 phones stolen every minute, each day. In this modern digital world, many of us live from our phones. Whether it's for business, or just personal use, these electronic assistants often contain gigs of valuable documents, pictures, videos, and music. Do you really want to chance losing all of that when backup options are so easy and available?

"Easy? How do I backup my files and protect myself?" There ya go! Now we're asking the right questions! There are a myriad of ways you can use to backup your files, most phones are connected to some form of backup system. iPhones are tied directly into iTunes, which can back up all of your valuable data, you just need to hook that thing up to your computer and update the files daily! You can even do it as part of charging, just plug it in to your computer, set it to backup, and it'll go about the process automatically while it takes a charge.

Android phones are intrinsically tied to Google, and with the availability of Google Docs and the Google backup, it'll tie all of your data in to your profile, uploading it to a secure location while allowing you to choose which ones to share! Google Docs can also be used to store all of your valuable files online! The bonus here is that from google docs you can access your files from any computer, saving you from having to wait for your system to be back up before you get those important files back!

Another option is open that is the 'all inclusive' option. If you'd prefer to back up everything instead of just bits and pieces, there are tons of places online that will give you reviews of dozens of options for full backup services. Take some time to cruise through them and decide which one is right for you. Remember, if the only copy you have of your important files is all in one place, it only takes one accident, one small disaster for you to lose them all. So take the time to backup your files, and stop yourself from becoming one of this year's April's Fools.

=====

Thanks & 73

Tom "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 will be known as the **BIG FUN** amateur radio club with plenty of activities to report on in this newsletter all throughout 2017 and beyond.

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

K8CAV, AC8NT, KB8UUZ, W8PT, KD8SKL, N8HUC, N8GPS, KD8WCK, WB8LCD, N8PXW, WB0RUR, N8RLG, KC8PD, KB6NU, N8IL, The CIA, The ARRL and the World Wide Web.

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

Vendors !!!

Reserve your tables for the
Cuyahoga Falls Amateur Radio Club, Inc.
**63rd Annual
Hamfest
Electronics and Computer Show**

Saturday, April 8th 2017, 8:00 AM - 1:00 PM

Emidio and Sons Party Center
48 E. Bath Road at the corner of State Road
Cuyahoga Falls, Ohio 44223

\$15 each for the first two tables (includes one chair each).

\$12 for each additional table (no chairs).

Extra chairs are \$2 the day of the event subject to availability.

As always, you are welcome to bring your own.

Online Reservations:

<http://www.cfarc.org/hamfest-reserve.php>

For more information, please visit our hamfest page:

<http://www.cfarc.org/hamfest.php>

Major vendors with confirmed reservations (paid in full) will have their organization mentioned on our web flier and newly printed paper fliers.

Thank you for your time and we hope to see you there!

Mike Luoma, K8MAL [234-206-0270](tel:234-206-0270) hamfest2017@cfarc.org



Portage County Amateur Radio Service, Inc. (PCARS)

Membership Application [] New [] Renewal

YES - I WANT TO SUPPORT PCARS !!!!

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: _____ (don't need 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.

Dues are as follows: Example - Regular Member Pays on Jan 1st \$20 for entire year. If paid on June 1st, \$15 for entire year, etc.

Check One

Dues Amounts

- | | | |
|--------------------------|--------------------------------------|---|
| <input type="checkbox"/> | Regular Full Membership | Pay January 1 through May 31 = \$20.00 (full year)
Pay June 1 through August 31 = \$15.00 (last 7 months) |
| <input type="checkbox"/> | Associate Membership | Pay September 1 through November 30 = \$10.00 (last 4 months)
Pay December 1 through December 31 = \$5.00 (last month) |
| <input type="checkbox"/> | Regular Senior Full Membership (65+) | Pay January 1 through May 31 = \$16.00 (full year)
Pay June 1 through August 31 = \$12.00 (last 7 months) |
| <input type="checkbox"/> | Associate Senior Membership (65+) | Pay September 1 through November 30 = \$8.00 (last 4 months)
Pay December 1 through December 31 = \$4.00 (last month) |
| <input type="checkbox"/> | Family* Member | Pay January 1 through May 31 = \$10.00 (full year)
Pay June 1 through August 31 = \$8.00 (last 7 months) |
| | Call Sign of Regular Member: | Pay September 1 through November 30 = \$5.00 (last 4 months)
Pay December 1 through December 31 = \$3.00 (last month) |

(*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)

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

What are YOUR Ham Radio interests:

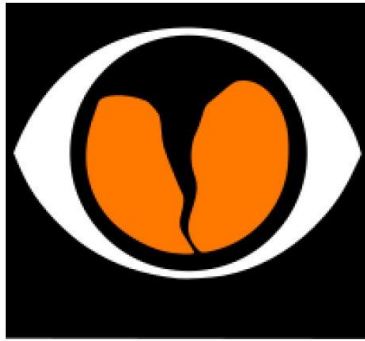
Signed: _____

Date: _____

Mail to: **Portage County Amateur Radio Service, Inc.**
c/o: Tom Sly, WB8LCD
1480 Lake Martin Dr.
Kent, OH 44240

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. 25 Jan 2017



SKYWARN™

SKYWARN®

Maplewood Career Center
7075 State Route 88
Ravenna, OH 44266
Conference Room A

March 20, 2017
6:00pm

FREE

Learn how to identify and report severe weather using cloud formations and other weather indicators. Skywarn® spotters are a vital part of the National Weather Service warning system. To become a spotter, attendance at a storm spotter class is required. Pre-registration is not required. You will be registered, issued a Skywarn® card and given spotter information at the training.

Who Should Attend?

**Fire, EMS, Law Enforcement,
Amateur Radio Operators, School
Representatives, and any individual
with a weather interest**



*Sponsored by the Portage County Board of Commissioners
and The Portage County
Office of Homeland Security & Emergency Management*

Pioneer Amateur Radio Fellowship, Inc.



Hamvention 2017



Saturday, May 20, 2017 - 5:30 AM

Don't miss out on this year's PARF Bus Trip to the world's largest topical conference and product exhibition. Save on gas, parking, and walking by riding with us! Leave the driving to us and you can come and go to the flea market with your great purchases and leave them on the bus. This year the Hamvention has been moved from Hara Arena to the nearby Greene County Fairgrounds in Xenia, Ohio.

You can save \$10* if you book before April 15th.

The cost of the **Bus & Entrance ticket** to the Hamvention:
\$72* before April 15, 2017

The cost of the **Bus Only** to the Hamvention:
\$55* after April 15, 2017

(You will need to get your own Hamvention Entrance Ticket at gate \$27,
or order by phone & have held at Will Call--possibly getting Advanced \$22 price.)

P.A.R.F. reserves the right to cancel this trip should a minimum of 22 riders not be secured by April 15th. If that happens, a full refund will be made. Otherwise, cancellation by you at any time results in a \$5 deduction of refund for handling.

We will take riders right up to departure that morning (if there are seats available) on a first come, first served basis.

Departure time is 5:30 AM SHARP, so please be on time so you don't miss the bus!

Parking will be in the back of the church.

There will be a stop for breakfast @ McDonald's and a dinner stop @ Golden Corral Buffet (out of pocket expense).

Transportation is being provided by the Crossroads Transportation Company.

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

To Order - Complete application & send with check/money order (*payable to "PARF"*) to:

Joy Spencer KA8TDF

2101 Bigelow St

Akron, OH 44314

Or call 330-745-5115

E-mail: KA8TDF@arrl.net

Please supply a return e-mail address for your receipt confirmation.

Location of Departure:**

Akron Baptist Temple, 2324 Manchester Road, Akron, Ohio 44314

Located on Rt. 93 just north of Rt. 224

***** The church is currently up for sale. We will keep you up to date should that happen and an alternative departure location is needed. (Rest assured, we will work to keep it within the local area.)***

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

Meetings: 2nd Monday of each month at 7:00 PM

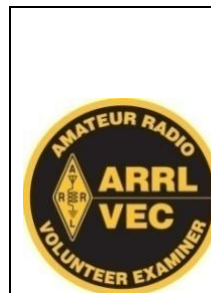
PCARS meets the second Monday of each month at the **Kent American Legion Post 496**.
1945 Mogadore Rd. - just South of Rt. 261 - enter the rear of the building for the meeting room.

All are welcome to attend ~ Stop in and say hello!

PCARS uses the **K8IV** repeater: **146.895 MHz** PL 110.9 in Rootstown or 118.8 in Sugar Bush Knolls ~ EchoLink Node: **K8SRR**

PCARS thanks **K8IV** for making the repeater available to area hams and for PCARS activities

~ 2017 Officers ~		2017 PCARS Appointments & Committees	
President - Rick Kruis - K8CAV Vice President - Jim Wilson - AC8NT Treasurer - Amy Leggiero - KD8SKL 3 Year Trustee - Robert Gurney - N8RLG 2 Year Trustee - Jim Aylward - KC8PD 1 Year Trustee - Chuck Patellis - W8PT Past President - Tom Sly - WB8LCD	ARRL Awards - DXCC WAS, VUCC, WAC	W8KNO	Joe Wehner
	ARRL Awards - WAS	KB8UUZ	Tom Parkinson
	Club Site Manager/Liaison	KC8PD	Jim Aylward
	Contest Coordinator	W8PT	Chuck Patellis
	EchoLink	K8SRR	Steve Randlett
	Field Day Chairman	W8PT	Chuck Patellis
	FYAO Chairman	W8PT	Chuck Patellis
	Historian	KB8SZI	Peggy Parkinson
	K8BF Callsign Trustee	K8FEY	Bob Hewett
	K8BF QSL Manager	K8FEY	Bob Hewett
	Membership Chairman	KC8PD	Jim Aylward
	Net Control Manager	WB8LCD	Tom Sly
	Net Night - Club Manager	WB8LCD	Tom Sly
~ Meetings & Net ~		Newsletter Editor	
2 nd Monday of each month. 7pm Thursday night Club Net at 8 pm on 146.895	OSPOTA Chairman	KB8UUZ	Tom Parkinson
	Public Information Officer	WB8LCD	Tom Sly
	Secretary	WB8LCD	Tom Sly
	Tech, Gen & Extra Class Manager	AC8NT	Jim Wilson
	Volunteer Examiner Liaison	N8RLG	Robert Gurney
	Webmaster	KD8MQ	John Myers



**PCARS
Active
Volunteer
Examiner
Team
Members**

KC8PD	Jim Aylward
KB8UUZ	Tom Parkinson
WB8LCD	Tom Sly
N8XTH	Deron Boring
N8PXW	Jim Korenz
N8QE	Bob Hajdak
W8PT	Chuck Patellis
K8IV	Ed Polack
K8QF	Russ Conklin
N8RLG	Robert Gurney
W8RID	Robert Davet
WA8CCU	Al Nagy
NR8W	Russ Williams
W8EZT	Frank Tompkins
N8OQQ	Bryan Buchwalter
AC8NT	Jim Wilson
K8MSH	Mark Haverstock
KA8TOA	Greg Ash
KB3GXB	Jennifer Andrews

THE RADIOGRAM

PCARS Incorporated
Nov. 1, 2005

First Meeting
Nov. 14, 2005



ARRL Affiliated
April 20, 2006



Special Service Club
March 22, 2010

The **RADIOGRAM** is the official **Award Winning** (ARRL Ohio Section Newsletter First Place Winner for 2012 AND 2013. Second Place in the Great Lakes Division for 2013. Second Place ARRL Ohio Section Newsletter for 2014. Third Place Winner in the Ohio Section 2015. Second Place Winner in the Ohio Section for 2016.) newsletter of the **Portage County Amateur Radio Service, Inc. (PCARS)** – copyright © 2017. 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. 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!**

This is the **Electronic E-Mail** version of the **PCARS Newsletter, The RADIOGRAM**. The advantages to receiving this way are: You get **COLOR** pictures, active links, **NO** postage needed and the newsletter is delivered right to **YOUR** e-mail box! **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. Yes I know the cover says there is a cost, don't worry you won't get sent a bill or be hounded by bill collectors. Since this now looks like a magazine, I thought - what the heck, let's put a price on it. Every month it's listed in a different currency just for fun. Send your newsletter inputs (in **.TXT** format) along with in-focus pictures (not small 20 kb photos) to the newsletter editor: kb8uuz@portcars.org



NLC

