



The **RADIOGRAM**

When All Else Fails ~ Amateur Radio Works

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

September 2015 - Volume 10 Number 9

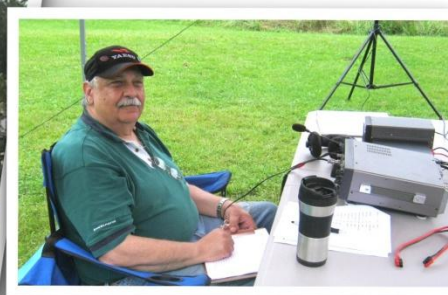
US \$4.95

In This Issue -

OHIO STATE PARKS ON THE AIR



Ohio State Parks On The Air



K1ZZ from the ARRL to visit PCARS

Radiogram Wins *Third Place* in the Ohio Section Newsletter Contest



PCARS K8BF

The Club that puts the FUN in Ham Radio!



Feature Articles for September

A Sweet Surprise	10
Antenna Analyzers You can Hack	15
Build Your Own Programming Cable	25
Chat with the International Space Station	23
From the PCARS President	8
Getting Ready for OSPOTA	5
Hamfest Report - Columbus & Great Lakes Convention	21
Hamfest Report - WARA Tailgate	26
Important Net Control Announcement	27
K1ZZ to Visit PCARS at the September Meeting	6
K3LR - Super Contest Station Visit	40
Let's Talk - from the Ohio Section Manager	29
OQP - K8BF On The Air	12
OSPOTA - 2015	4
OSPOTA Flier	48
Send Your Name and Call Sign to Mars	24
Sugar Bush Knolls Tower Project	36
The Annual Mobile Cruise-In	32
Vanity Call Sign Fee to Disappear in September	40
Weather Radio Recall	14

Mark Your Calendars

Akron Mini Maker Faire	28
Contest Calendar	5
Hamfest Schedule	16
Meetings, PCARS	35
Net Info & NCS Schedule	27
Schedule of Events	3
Special Event Station - Pope's USA Visit	39
Technician Class Starts September 16th	46

Departments

Charlie the Tuner - HF High Lites	17
EmComm	20
Ham License Plates Wanted	34
Happy Birthday	11
House Bill 1301 & Senate Bill 1685	14
Paper Chase - Route 66	38
Patches & Stickers, PCARS	11
Pictures from the PCARS Meeting	44
Special Interest Group - Linux for Hams	11
Swap-N-Shop	31
VE Test Sessions	9
Yahoo Group - PCARS	34
YouTube - PCARS	16

Finals

Editor's Comments	3
Thanks & 73	38



From the Editor

Tom "Parky", KB8UUZ
PCARS Newsletter Editor



The RADIOGRAM was awarded **Third Place in the Ohio Section Newsletter Contest for 2015**. I want to thank everyone for the kind words of encouragement and your thoughts on how our newsletter compares to the other winners.

Starting with this issue of the PCARS newsletter you'll notice a few layout changes. After almost 10 years of basically the same design, I'm hoping to give the newsletter a bit of a fresh look. We'll see how it goes. Let's all see how it evolves. Any ideas?

Please contribute something. I know a lot of you have articles you can submit (not just copies from other sources) that would be of interest to many of PCARS members. Or how about "Why did I get into Ham Radio?" or "What was my most memorable experience, so far, in Ham Radio?", "Let me show you this whiz bang thing I use in my radio room that really is nifty", etc. Think about it and I'm sure you can come up with something. Have no fear, I can edit it and trim pictures as needed. My task is to get all that good stuff in the newsletter so it lays out nicely - but I need your help in getting the material. So, put on your thinking caps and start typing away and send it to me in .TXT format (that's the easiest to convert) - *and don't forget* - pictures, too.

Schedule of Events

On the calendar for upcoming meetings and activities are:

- **September 12th - Ohio State Parks On The Air** contest - *see the flier*
- **September 14th - PCARS Meeting - 7pm** - Guest: **Dave Sumner, K1ZZ**, ARRL CEO
- **September 16th - Technician Class** starts at the Club Site - 7 pm - *see the flier*
- **September 19th - Mini Maker Faire** - Akron Public Library - noon to 4pm
- **October 12th - PCARS Meeting - 7 pm** - WB9LBI - **The Magic of Morse Code**
- **November 9th - PCARS Meeting - 7 pm** - **ELECTIONS** - WA8ZLK - **EMP**
- **November 14th - PCARS 10th Anniversary !!!**
- **December 14th - PCARS Christmas Party/Meeting** - more info to follow

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



- | | | |
|-----------------|---|--|
| First Tuesday | - | Digital Special Interest Group |
| Second Tuesday | - | QRP/CW Special Interest Group |
| Third Tuesday | - | Antenna Special Interest Group |
| Fourth Tuesday | - | DX & Contest Special Interest Group |
| Fifth Tuesday | - | Linux for Hams Special Interest Group |
| Fourth Thursday | - | Net Night at the club site - 6:30 pm |





Ohio State Parks On The Air contest - Sept. 12th



OSPOTA 2015

Hello OSPOTA fans. Summer is passing faster than usual and that means the 8th annual OSPOTA (Ohio State Parks On The Air) is coming up sooner than you think. Make your plans, test that antenna set up, get out there and have some fun during OSPOTA 2015 on September 12th from noon to 8:00 pm local time.



We try to keep up on what's happening at the Ohio State Parks and as of July 25th, Latest word from ODNR is that Lake White Ohio State Park is still closed - they have construction going on with the earthen dam and the park -might- open again in 2017. Buckeye Lake Ohio State Park is open, but ODNR is doing work on the beach areas.

Note to remember: You are visiting an Ohio State Park. You are just a visitor, so please keep the area neat and clean and check the surrounding area to pick up any trash accidentally dropped before you depart.

Also, as in the past, some park officials seem to think that since you are participating in OSPOTA, you need some sort of permit - You do not need a permit. You are just a visitor to the park that happens to be a ham operator testing out emergency communications with other hams in other state parks - again, you are a visitor to the park.



You have no special rights as to where you can set up and please don't make any demands to a Park Ranger. That's the easiest way to get tossed out of a State Park. Be polite, invite the Park Ranger(s) to see what you are doing and make sure you let him/her know that this is really like practicing emergency communications for public service. More and more governmental agencies such as Police, Public Health Departments, EMA, FEMA, Dept of Health & Human Services, Red Cross, etc. recognize how important amateur radio is for emergency communications. ***"When All Else Fails, Amateur Radio Works"***. Most of the time when you talk to the Park Rangers about this aspect - they think it's pretty cool and they leave you alone.

So - be polite - and most of all **HAVE FUN!** Take some pictures while you're out there, too.

Check the rules again (they are posted here and on the main OSPOTA web site - since late last year). Pick a Park and go for it!



Ohio State Parks On The Air contest - Sept. 12th



Getting Ready for OSPOTA

John, KB8UHN

I bought this new Eagle One portable vertical this year for OSPOTA and was trying to find a good way to roll wire radials onto spools to keep them from getting all tangled up. After coming up empty with good ideas, I happened to read about someone using carpenter's chalk line reels for spools. I found these on Ebay for \$3.50 each. They work perfect. They came with just the string and no chalk in them, so no mess to clean up. They're screwed together, so taking them apart and replacing the string with wire was easy.



These are 100 foot chalk line reels and hold 60 feet of 16 gauge insulated wire. I'm certain you can get a lot more length if you use bare wire

or a smaller gauge. But this should work for me. These particular reels have a handy eye loop on the end for hanging them up, so they could be used to make a quick dipole too.



After freezing my acorns off last February, I've been looking for an easier, quicker deployment and take down. I can have this antenna deployed in about ten minutes, and down in the same amount of time.

We'll see how the antenna performs this September 12th. So go to one of Ohio's 74 beautiful state parks, or participate from home. Either way, I need you to give me reports on how the antenna works.

Contest Calendar

September 2015	
RSGB SSB Field Day	1300Z, Sep 5 to 1300Z, Sep 6
Colorado QSO Party	1300Z, Sep 5 to 0400Z, Sep 6
Tennessee QSO Party	1800Z, Sep 6 to 0300Z, Sep 7
Arkansas QSO Party	1400Z, Sep 12 to 0200Z, Sep 13
Ohio State Parks on the Air	1600Z-2400Z, Sep 12
ARRL September VHF Contest	1800Z, Sep 12 to 0300Z, Sep 14
North American Sprint, CW	0000Z-0400Z, Sep 13
South Carolina QSO Party	1400Z, Sep 19 to 0300Z, Sep 20
Washington State Salmon Run	1600Z, Sep 19 to 0700Z, Sep 20 and 1600Z-2400Z, Sep 20
Feld Hell Sprint	1800Z-1959Z, Sep 19
BARTG Sprint 75	1700Z-2100Z, Sep 20
CQ Worldwide DX Contest, RTTY	0000Z, Sep 26 to 2400Z, Sep 27
Texas QSO Party	1400Z, Sep 26 to 0200Z, Sep 27 and 1400Z-2000Z, Sep 27

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

K1ZZ to Visit PCARS

PCARS is proud to announce that our special guest speaker for the September 14th club meeting will be Dave Sumner, K1ZZ.

David Sumner, K1ZZ, is Chief Executive Officer and Secretary of the American Radio Relay League (ARRL), the national association for Amateur Radio. He is responsible to the ARRL Board of Directors for managing the affairs of the League including its headquarters staff and official journal, QST.

First licensed as KN1ZND in 1962 at age 13, Dave has been active in most phases of Amateur Radio operating with special emphasis on CW contesting. Active from the first as an ARRL volunteer, he joined the Headquarters staff in 1968 for the summer, became a part of the permanent staff in 1972, and was named Assistant General Manager four years later. He was named Secretary and General Manager in 1982, with a change in title to Executive Vice President in 1985 and the additional title of Chief Executive Officer in 2001. The title of Executive Vice President was phased out in 2011.

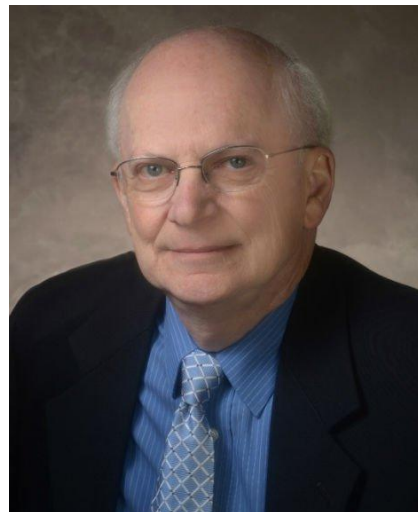


In the 1970s, Dave was deeply involved in worldwide Amateur Radio preparations for the 1979 World Administrative Radio Conference (WARC) of the International Telecommunication Union and attended the three-month conference in Geneva as a member of the International Amateur Radio Union (IARU) observer team. He also served on the IARU team at the World Radiocommunication Conferences (WRCs) in Istanbul in 2000 and in Geneva in 2003, 2007 and 2012. Dave was Secretary of the IARU and a member of its Administrative Council from 1982 to 1989 and from May 1999 to

September 2009, and has traveled to more than 60 countries in connection with his ARRL and IARU responsibilities. In 1989 he was awarded the Calcutta Key by the Radio Society of Great Britain in recognition of his contributions to Amateur Radio internationally. Apart from his professional activities, Dave served on the judging committees of the World Radiosport Team Championships in Slovenia, 2000; Finland, 2002; Brazil, 2006; Russia, 2010, and WRTC 2014 in Massachusetts, USA.

Dave holds a B.A. degree in Political Science from Michigan State University where he was active from the club station W8SH from 1967 to 1970. He also holds the Master of Business Administration degree from the University of Connecticut and is a member of the Beta Gamma Sigma business honorary society. He is trustee of the ARRL Headquarters club station, W1AW, and the IARU club station, NU1AW.

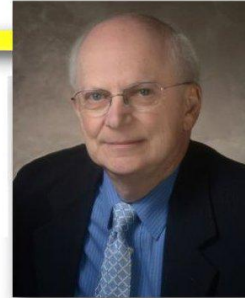
Dave resides with his wife Linda, KA1ZD, on a 15-acre "antenna farm" in rural Coventry, Connecticut, where they are active on the air. Their daughter Deryn, N1UCI, is an attorney in Washington, DC.



The Portage County Amateur Radio Service (PCARS)
extends you an invitation to attend our September meeting.



David Sumner, K1ZZ
ARRL Chief Executive Officer



Our special guest speaker will be
David Sumner, K1ZZ, the Chief Executive Officer of the ARRL

The PCARS meeting will be on Monday, September 14th at the Underwood Hall
located in The American Legion - Post 496 in Kent, Ohio.

The meeting will start at 7:00 pm.

The Kent American Legion is located at 1945 Mogadore Rd., Kent OH 44240

For additional information, please contact:

Tom Sly, WB8LCD

E-Mail: WB8LCD@portcars.org



Portage County Amateur
Radio Service, Inc. - PCARS

Putting the Big Fun in ham radio - K8BF

www.portcars.org



ARRL
The national association for
AMATEUR RADIO

From the President

Rick, K8CAV
PCARS President



It's hard to believe that it's September already! The year is flying past but PCARS still has a lot of things going on to fill out the last quarter of the year. On Saturday August 29th, Tim Duffy, K3LR is graciously hosting PCARS members to a visit of his world famous contest station just over the Ohio border in Pennsylvania. We meet at the PCARS club site and will be on the road car pooling at 10:00 AM. One of the most enjoyable operating events for PCARS is the Ohio State Parks On The Air (OSPOTA) contest on Saturday September 12th. It combines elements of Field Day with a contest and awards and challenges your NVIS knowledge and skills while showcasing Ohio's State Park system. Next up on Monday September 14th at 7:00 PM is the PCARS monthly club meeting and this month we have a very special guest, Dave Sumner, K1ZZ who is the Chief Executive Officer of the ARRL as our featured speaker. We're looking forward to a very informative and enjoyable presentation by Dave. The fall Technician classes start on Wednesday September 16th at the PCARS club Site. Jim, AC8YN has sent out a flyer to members by e-mail, so please print some out and get them to schools in your area and to friends who are interested in becoming licensed. Although we don't have a firm date set yet, the first ever PCARS balloon launch is coming up in the very near future so stay tuned for a QST e-mail from Jim, AC8NT for the details.

At the August PCARS meeting, Steve, K8SRR gave a very interesting presentation and demonstration of MESH networking and some of the things it can do. We had a non-ham guest at that meeting, a younger person who came up to me afterwards and expressed his appreciation for being invited to the meeting. He told me he is going to take our Tech class to get licensed. When I told him to mention Amateur Radio to his friends, he commented that he always thought of Amateur Radio in its traditional role of using voice or CW to talk to people, but had no idea Amateur Radio was doing such cutting edge things such as MESH networking. He said that he thought that his friends would really be into that aspect of Amateur Radio and that he would tell them about it. In recognizing that younger people are the future of our hobby, we need to make sure that we're showcasing all of the things we do in Amateur Radio, including modern technologies like MESH networking and others so that we can capture the imagination of younger people wanting to explore our hobby. Does that mean I'm advocating throwing the more traditional aspects of Amateur Radio under the bus in favor of the gee-whiz high tech stuff only? Absolutely not! I can point to examples in our club of members who are younger, high-tech oriented folks who have also latched on to those more traditional activities after first being drawn to Amateur Radio because of the high tech aspect of Amateur Radio. Let's make sure we're presenting all faces of Amateur Radio to that younger crowd to get them involved.

Many PCARS members have always been very generous with their time and pocketbooks and I'd like to recognize a couple of note this month.

At the last couple of board meetings it was recognized that we needed to upgrade at least one of the radios in the radio room to both accommodate better performance, and to accommodate sight-disabled hams in the club being able to participate in club events. James, KD8VT and Tom, WB8LCD very generously donated funds to purchase a brand new Kenwood TS-590SG transceiver and donate it to the club. This is a huge upgrade for us and on behalf of PCARS I'd like to express my most sincere THANK YOU to James and Tom.

Spring cleaning and organizing is about as unglamorous a task that you can imagine, yet it's very necessary so that the club site keeps operating efficiently. It's hard to get motivated to volunteer for such a task but seven of our members came through and I want to thank Jack, N8BI - Mike, KB8TUY - Tom, WB8LCD - Greg,

KA8TOA - Jim, AC8NT - Eddie, KD8SOP and Zeb, KD8WZS for undertaking the arduous and dirty job of the cleanup and organizing.

Licensing is the path to Amateur Radio and there are few more important functions the club performs than the classes we conduct for the Technician and General Class licenses. Jim, AC8NT volunteered earlier this year to take over as the coordinator for the club's educational program and I'd like to thank Jim for taking on this very important function.

The vibrancy of our club depends on all of you, as members getting involved with the club. We're fortunate to have many of you give your time and talents both as participants in the many events we hold and as volunteers to make those events happen. If you haven't been involved with a PCARS event as a participant or as a leader or assistant for an event, please give some thought to sharing your time with the club. Both you and the club will be all the better for it.

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.

October 3rd, November 4th (Wed evening - 7pm) December 5th

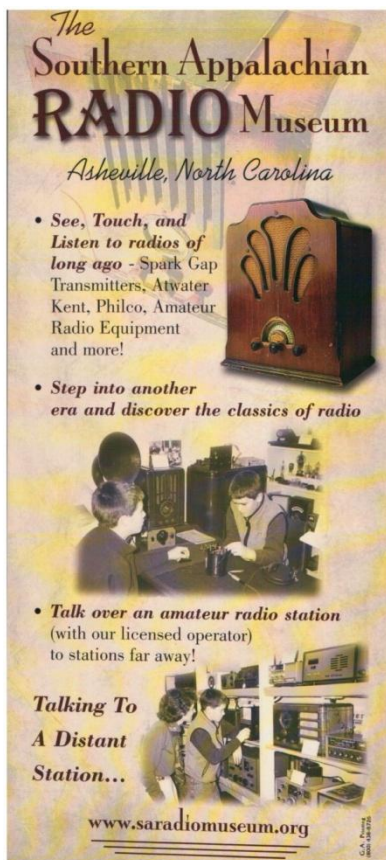


What to Bring to the Testing Session

- \$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: The original (and 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.



A Sweet Surprise



Rich, KD8FDK

Asheville, a small old city located in the Smokey Mountains of North Carolina is home to the **Southern Appalachian Radio Museum** (W4AFM). On my recent visit to the city to visit my daughter I happened across this museum and of course I had to pay it a visit. There I met the curator of the day, Myron Cherry, K4YA, a long time ham from Greeneville, TN.



The museum is located in Room 315 of the Elm Bldg. on the campus of the A-B

Technical Community College and is a small room of about 12 x 24 feet which is way too small to properly display the artifacts that the museum has acquired. In spite of that fact I still very much enjoyed looking at the old ham equipment and some home brewed equipment.

Among the collection there is such names as Hammerlund, Drake, Collins, and National Radio. There is also a Knight Kit Star Roamer just like WB8LCD's. What really caught my attention was a home made regen radio and a CW transmitter along with old microphones, telegraph keys, sounders, and general broadcast receivers of the Twenties and Thirties.



One item of special interest is the Gibson Girl, a military emergency radio used by the Navy as I am led to believe. The radio is shaped like the figure of a woman which is how it got it's name. One would hold it between his legs and turn the crank while sending emergency signals such as CW to call for help. It has a small round door on the front of it which held the long wire antenna which served as a kite string and an antenna. That's something I never seen before.



The museum is a little too far away to justify a road trip but is a must stop if you happen to be in Asheville.

Happy Birthday PCARS Members

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

W5OV	Bob	Naumann	N8KBX	Bob	Magree
WB8VYW	Mike	Hutsler	KD8BBT	Andrew	Six
KD8WHL	Nick	Stevens	N8RLG	Robert	Gurney
WD8BIW	Karen	Warner	NT8K	Bob	Whiddon
KD8PBL	Richard	Taylor	AC8NT	Jim	Wilson
KD8FME	Jim	Conlin	KD8VT	James	Andrews
KD8HGI	Frank	Sheline III	KD8UXG	Scott	Gardner
KD8ZDZ	Steve	Guldeman	KC8KYW	John	Kametz

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: Bob, N8QE or e-mail him at: N8QE@portcars.org



Linux for Hams SIG

Terry, KB8AMZ

The September 29th meeting of the Linux for Hams SIG will be given to the 2016 Field Day Planning Committee. Chuck, W8PT and Tom, WB8LCD will be leading the committee meeting.

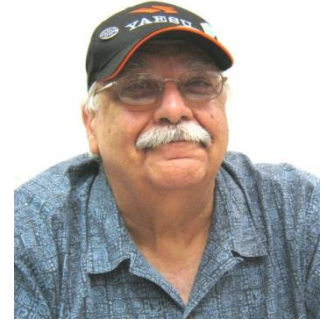
We had our first meeting at the July CW/QRP SIG with a good turnout of members, many new ideas were discussed, and assignments were given to a few members to give a report of their findings at the September meeting.

If you would like to attend the next planning committee meeting it will be at the PCARS Clubhouse Radio Room at 7:00 pm on September 29th.



Ohio QSO Party at K8BF

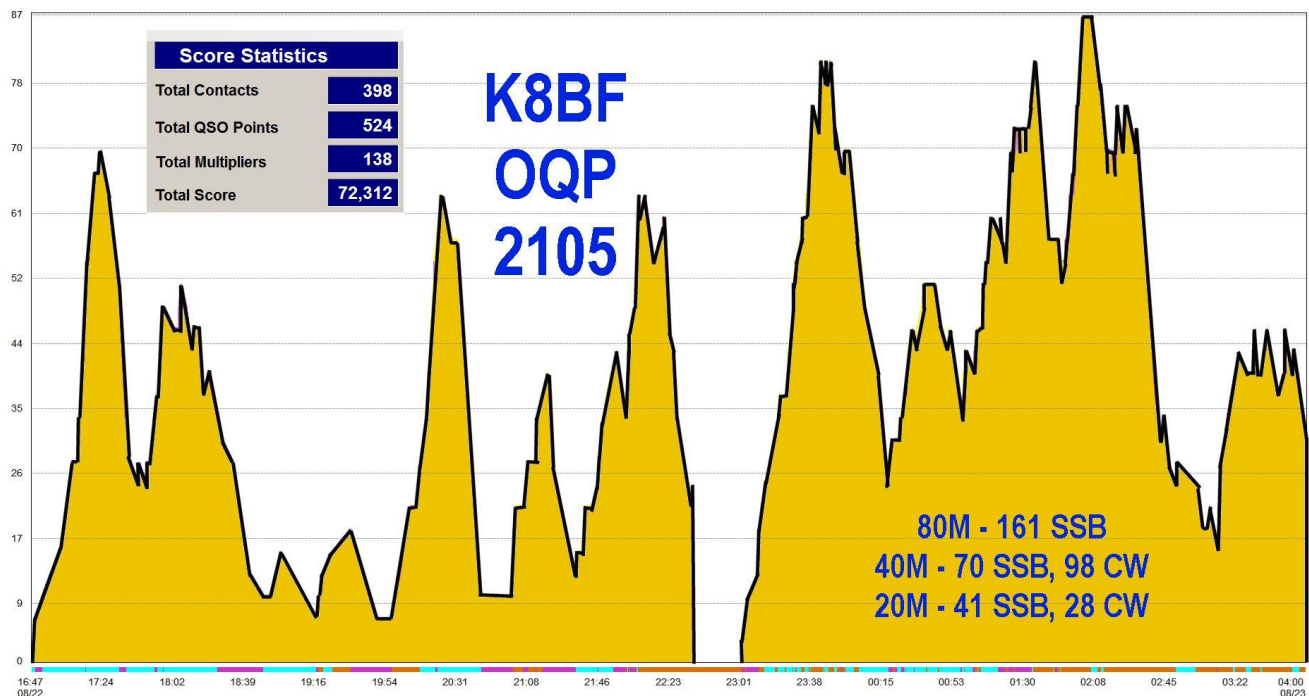
Chuck, W8PT



As many of you know by now, K8BF was, once again, put on the air in order to participate in the Ohio QSO Party that took place on Saturday, August 22. We started to gather at the club site around 9AM. By Noon, the start time for the contest, there was a small group of intrepid operators waiting to start calling CQ.

However, much to our chagrin, we found that there was an extremely strong noise level, at times reaching 20/9, that made operating a real challenge. The only station that was halfway successful during this time was the 40m station. And only because some of the signals on 40 were over 20/9.

We fought this noise for several hours until it finally started to dissipate in the late afternoon hours. And by evening, 40 and 80 meters were really humming.



Last year we had a total point score just over 44,000. **This year we turned in our log with a point total of over 72,000.** That is a huge increase and I applaud the efforts of all those who sat in the op chairs. They did a fine job. Of course next year we will have to break the 100K level. With some of the scores we have already seen being reported but single ops, our multi op efforts will have to really step up. I am confident that we can really put K8BF on the map.

At the same time that the contest was being held, Tom Sly showed up to put his culinary skills to work. He fired up the grill around 5PM and put brats and burgers on the fire. All present were treated to grilled perfection along with various salads. All in all, a great meal with good fellowship. In the end, a total of 25 individuals (members and spouses) showed up for the festivities. **BIG FUN** was had by all. We stayed the course until midnight when the contest ended.

One thing we learned during this event was that, we still need some more work in the radio room to make operations like this more efficient and comfortable.

We are now setting our sites on the California QSO party, which takes place in October. You'll be hearing about this one often in the coming weeks.

OQP - Pictures from K8BF



OQP at K8BF - 22 Aug 2015

Weather Radio Recall - Fire Hazard

Recall date: AUGUST 13, 2015 <http://www.saferproducts.gov/>



Daryl, WX1DER

Hazard: The weather radio's AC power adapter can overheat, posing a fire hazard. Units: About 12,500
Consumer Contact: Ambient Weather toll-free at 877-413-8800 Monday through Friday between 8 a.m. and 3 p.m. MT, online at www.ambientweather.com and click on Customer Service, then Recall Information for more information, or at www.ambientweather.com/recall.html.



Description: This recall involves Ambient Weather radios. The weather radios are red and black and measure about 8 inches wide by 4 inches tall by 2 inches deep. "Ambient Weather," "AM/FM/Weather Band Radio" and "NOAA Weather Radio" are printed in white lettering on the front of the radio. The radios have a black crank handle on the back, an antenna on the top, a single LED flashlight on the left side, a clip on the right side and a cable to charge a smart phone. Model number WR-334-U or WR-334A-U is printed in the owner's manual. The AC power adapter is black and has a rounded back. Model number YHD0500500U is printed on a white sticker on the adapter. The firm has received three reports of fire and smoke in the back battery

area of the weather radios.

Remedy: Consumers should immediately stop using the recalled weather radios and contact Ambient Weather for a free replacement AC power adapter.

Sold at: Online at AmbientWeather.com and Amazon.com from November 2012 through December 2013 for about \$60. **Importer(s):** Ambient Weather, of Chandler, AZ. **Manufactured in** China

House Bill 1301 and Senate Bill 1685

Amateur Radio Parity Act: A companion bill to House Bill 1301 has been introduced in the US Senate. It is Senate Bill S. 1685, introduced by Mississippi Senator Roger Wicker, with Senator Richard Blumenthal of Connecticut as the initial Cosponsor. We have full details on the ARRL Web pages related to field support of this measure. Our efforts with House Bill 1301 are continuing very well with your support, as of Tuesday June 30, we have reached 84 cosponsors. Current FCC Regulations allow homeowners in deed-restricted residences to install TV receive only (TVRO) antennas. This includes both dish antennas and conventional over the air antennas. "Amateur Radio Parity Act" HB 1301 was introduced in the U.S. House of Representatives to direct the FCC to allow Radio Amateurs to have "parity" with the current TVRO antenna regulations and install reasonable ham radio antennas. The new ARRL Web Page <http://www.arrl.org/amateur-radio-parity-act> contains the complete text of both bills.

ARRL Legislation

Show Your Support for
The Amateur Radio
Parity Act of 2015
HR 1301 - S 1685



Antenna Analyzers You Can Hack

Dan Romanchik, KB6NU

I'm a nut for antenna analyzers. I think that they are one of the most useful things a ham can own.

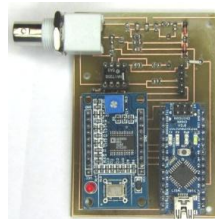
I've often wondered why there aren't more DIY antenna analyzer projects, though. Perhaps it's because designing measurement circuits isn't easy. An antenna analyzer has to have a signal source as well. Even so, an antenna analyzer doesn't need a whole lot of accuracy to be useful, so you would think that more



builders/hackers would tackle a project like this.

I do know of one antenna analyzer kit on the market. The VK5JST Antenna Analyser Kit (<http://www.ahars.com.au/about/kits/>) costs about \$110 USD. I actually purchased this kit a year or so ago, and it looks like a great unit. The unit seems well-designed, and it comes with a plastic case, unlike many projects these days, but I haven't yet gotten around to building it.

I've also recently found out about an Arduino-based antenna analyzer project (<http://hackaday.com/2015/08/06/40-antenna-analyzer-with-arduino-and-ad9850/>). It uses an AD9850 module as the signal source. The approximate cost for all the parts is about \$40, and you can experiment with the code, if you like. If you have the time and inclination, this project might be worth taking a hack at.



Another antenna analyzer project from Australia is the VK3YY antenna analyzer (or "analyser" as they spell it there). It uses an Arduino Nano. The interesting thing about the blog post in which VK3YY describes the project (<https://vk3yy.wordpress.com/2014/09/29/antenna-analyser-project/>) is that you can follow his design and experimentation process.

Yet another analyzer

While I'm talking about antenna analyzers, let me mention another one that I've just found out about: the IW2NDH Antenna Analyzer (<http://www.iw2ndh.com/>). This antenna analyzer isn't a kit, but at \$175 seems to be a good deal. This unit has a frequency coverage of 2 – 160 MHz, and can be used as an antenna analyzer, signal generator, and a scalar network analyzer.



Apparently, this started out as an Arduino project. As Maximo, EA1DDO, pointed out on the radioartisan Yahoo Group, there is source code for this project on GitHub (<https://gist.github.com/jackdev23/7876502>), and a schematic is available on the Union de Radioaficionados Espanoles (URE) website (<http://www.ure.es/media/kunena/attachments/2420/Schematic.jpg>).

When not writing about antenna analyzers, Dan, KB6NU, actually builds an antenna now and then. You can often find him on the HF bands (mostly 40m and 30m), working CW. His #1-rated amateur radio blog can be found at www.KB6NU.Com, and you can e-mail questions, comments, or complaints to cwgeek@kb6nu.com.



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



Hamfest Schedule

09/13/2015 - Findlay Hamfest - Findlay Radio Club - Location: Hancock County Fairgrounds - 1017 East Sandusky Street - Findlay, OH 45839 - Website: <http://www.findlayradioclub.org> - Talk-In: 147.15+ - Contact: Bill Kelsey, N8ET - 3521 Spring Lake Drive - Findlay, OH 45840 - Phone: 419-423-3402 - Email: n8et@woh.rr.com

09/13/2015 - Butler SwapFest - Butler County Amateur Radio Association - Location: Unionville Volunteer Fire Company - 102 Mahood Road - Butler, PA 16001 - Website: <http://w3udx.org> - Talk-In: 147.36/96 (PL 131.8) - Contact: Rick Melton, N3VKM - 214 Criley Road - Cabot, PA 16023 - Phone: 724-287-8134 - Email: N3VKM@arrl.net

09/27/2015 - Cleveland Hamfest and Computer Show - Hamfest Association of Cleveland - Location: Cuyahoga County Fairgrounds - 164 Eastland Rd - Berea, OH 44017 - Website: <http://www.hac.org> - Talk-In: 146.73 (PL 110.9) - Contact: Glenn Williams AF8C - 513 Kenilworth Rd - Bay Village, OH 44140 - Ph: 440-835-4897 - Email: af8c@arrl.net

10/18/2015 - Conneaut ARC's Ham Fest - Conneaut Amateur Radio Club (W8BHZ) - Location: Conneaut American Legion - 272 Broad St - Conneaut, OH 44030 - Web: <http://www.facebook.com/W8BHZ> - Talk-In: 147.390 (PL 131.8) - Contact: Mike Pongrass, KD8OSJ - POB 693 - Conneaut, OH 44030 - Ph: 814-440-6679 - Email: KD8OSJ@yahoo.com

10/25/2015 - Massillon ARC Hamfest - Massillon Amateur Radio Club - Location: Massillon Boy's & Girls Club - 730 Duncan Street SW - Massillon, OH 44646 - Website: <http://www.w8np.org> - Talk-In: 147.18 (PL 110.9) - Contact: Terry Russ, N8ATZ - 3420 Briardale Drive NW - Massillon, OH 44646 - Phone: 330-837-3091 - Email: truss@sssnet.com

11/01/2015 - WACOM HAMFEST 2015 - Washington Amateur Communications, Inc. - Location: Washington County Fairgrounds - 2151 North Main Street - Washington, PA 15301 - Website: <http://www.wacomarc.org> - Talk-In: 146.790, 145.250, 147.285, 147.390 (all linked together) - Contact: Bud Plants, N3TIR - 236 Chambers Ridge Road - West Alexander, PA 15376 - Phone: 724-350-6745 - Email: bud@n3tir.com



PCARS

ARRL Volunteer Examiners:
serving the Amateur Radio
community

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

February, April, June, August,
October, December

Charlie the Tuner's HF High-Lites

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

Fall is almost here. The leaves are already changing and the temperatures this week have been very chilly in the AM. Canada geese are already flocking and making plans to move south. Yup – it's September in NE Ohio and that means we really need to get things done outside before that dreaded white stuff starts to fall.

I don't know about you, but I find that the older I get the less I tolerate Winter. Oh well, we will simply have to concentrate on making our shacks more comfortable and conducive to keeping our backsides in our chairs to work winter DX. Here's what is coming up in the next couple of months.

As always, a big **THANK YOU** to the following for the forecast reports for this month and beyond. Without them and their timely information, it would be much harder to know what's happening on the bands. So thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, AB5K & the AR TelNet Clusters Network, K1XN & GoList, NJ1Q & W1AW, W2VU, K3LR, NG3K & ADXO, W3UR & The Daily DX, AA4VK, K4RUN, N4AA & QRZ DX, WW4LL, W6SZN, K8GI, K8YSE, W8GEX & 60m News, KX9X, W9ILY, DL7UXG & The DX News Letter, DL1SBF, DL2SBY, DxCoffee.com, DXNews.com, DX-World.Net, ES1CW, F1ULQ, F5NQL, F6AJA & Les Nouvelles DX, G3VMW, HP1AC, I1HYW, I1JQJ/IK1ADH & 425 DX News, I2MQP & DX Italia News, IZ8IYX, JA1TRC, OG2K, OZ6OM & 50 MHz DX News, PS7DX, PY2SP, RSGB IOTA Web Site, Sixitalia Weekly, TA2RX, VA3RJ & ICPO, VA3QSL and the VHF-DX-Portal (MMMonVHF) for the following DX information.

As always, this report could contain "Pirate/SLIM" operations or busted call signs. Please do yourself a favor and adhere to the old adage of "**Work First - Worry Later**" (WFWL).

3W2/XV2, VIETNAM. Mal, VK6LC, will once again return to Vietnam on a "DX Vacation" during the months of September and October. His schedule is as follows: XV2VTC - from Vung Tau City between Sept 24-30. 3W2HCM - from Ho Chi Minh City between Oct 16-23. Activity is to celebrate 15 years operating in Vietnam. If like last time, Mel will be mainly on 20 meters with some 17/12 meters using mostly CW with some SSB. QSL via his home call sign, only direct. He does NOT use the QSL Bureau. Check out QRZ.com for some more details and pictures under VK6LC.

7U0, ALGERIA (Special Event). Members of the Algerian Amateur Radio Union (ARU) will be active as 7U0ARU to celebrate the new creation of the Algerian Amateur Radio Union between Sept 1-30. Activity will be on all HF bands using CW, SSB and the Digital modes. QSL via SM4VPZ. An award is available, see QRZ.com for details.

9J, ZAMBIA (Special Event). Peter, 9J2HN, will be active with the special call sign 9J2JOCV from Lusaka, Zambia, between Sept 1 - Dec 31. On the HF bands. The special call sign "9J2JOCV" is for celebrating the 50th anniversary of the "Japan Overseas Cooperation Volunteer" (JOCV). If you need a paper QSL, please send your QSL & SASE (SAE + 1IRC or \$2) to JL1IHE direct only (no bureau access): Mr. Yoshitaka KAWAKU, 2-10 Yamate-cho, Hanno-city, Saitama 3570031 JAPAN. QSL through eQSL or LoTW will be issued after the whole operation period is ended. **ADDED NOTE:** Special event station 8J1JOCV is active from Kanagawa, Samukawa Town, Japan, since Jun 1 to celebrate the same thing. Activity until Mar 31 (2016). QSL via JARL Bureau or direct. QSL Manager is JR1EMO (SASE+2IRC).



A5, BHUTAN. Hans, SM6CVX, will be active as A52CVX from Bhutan between October 27-29th. Activity will be holiday style and mostly on CW. QSL via his home call sign, direct, by the Bureau or eQSL.

CY0, SABLE ISLAND. Aaron, VA1AXC, continues to be active as CY0/VA1AXC on Sable Island (NA-063) until Sept 23. Activity is SSB only and mainly on 20 meters usually around 2300z. QSL via JE1LET DIRECT ONLY.

D6, COMOROS. Ken, LA7GIA, will be active as D67GIA from Grande Comores Island (Ngazidja) [AF-007] between September 14-23rd. Activity will be on 40-10 meters using CW, SSB and RTTY. Equipment will be a TS-480SAT with an Ameritron ALS 500m into a Mosley Mini 32 ASP (2 element beam 20/15/10m), Mosley TW 22 M (2 element beam 17/12m), Hygain AV640 and wire antennas (backup). QSL via LA7GIA direct ONLY (SAE + 3 USDs). Please note, NO IRC, NO Bureau QSL. Bureau QSL will not be answered. For updates, check: <http://la7gia.com/d67gia-2/index.html>

E6, NIUE (Update). Don, G3BJ/G5W, reports on the upcoming E6GG Sept operation [edited]: All logistics arrangements are now complete for the E6GG op to Niue Sept 16-29. The first team members leave for the South Pacific in late August, and the whole team meets in Auckland 2 days before the departure for Niue. The team expects some limited operation on Sep 15, with all stations operational on the 16th. The Web site is at www.e6gg.com and includes a propagation analysis. The team will be listening exclusively for Europe during the relatively short European openings on LF, and hopes to work as many European stations as possible on all bands, where Niue is at #61 on the most wanted list. Whilst we are listening for Europe, we ask the rest of the world to stand-by, to give Europeans a chance on this very marginal LF path.

KH2, GUAM. Tak, JR1EFG, will be active from Guam as KH2/KU0Q between September 24-28th. Activity will be on 40-10 meters using CW and SSB. QSL via his home call sign (direct only).

MJ, JERSEY. Kazunori, M0CFW/JK3GAD, will be active as MJ5Z during the CQ WW DX RTTY Contest (September 26-27th) as a Single-Op/All-Band/Low-Power entry. QSL via LoTW or via ClubLog's OQRS. Look for activity before and after the contest using the call sign MJ0CFW.

NH0, MARIANA ISLANDS (Canceled). Koji, JL3RDC, was expected to be active as NH0DX from Saipan during the CQ WW DX SSB Contest (Oct 24-25). Cancelled his activity because the Saipan Rent Shack radio room has collapsed due to the typhoon.

PJ6, SABA. Operators John/K5AC, Jeff/NM1Y and Victor/WB0TEV will be active as PJ6A from Saba Island (NA-145, WFF PAFF-027, WLOTA 2043) during the CQWW DX RTTY Contest (September 26-27th). QSL via PJ6A or N4NX direct. QSLs are available via the OQRS on ClubLog for direct or Bureau cards. DO NOT QSL via the Bureau. More QSL info is available at: <http://www.pj6a.com/qsls.htm>

SV5, DODECANESE. Volker, DL1ZB, active as SV5/DL1ZB from Kos Island (EU-001) until Sept 29. Activity will be on 20-6 meters using SSB, RTTY, SSTV and PSK63. QSL via DL1ZB, by the Bureau, LoTW and eQSL.

T6/YI, IRAQ. Moustafa, F4HGL, will be in Baghdad, for six months starting at the end of June. He is currently awaiting his license, and he will be active during his free time mostly on SSB. QSL via F5OWK.

TX3X CHESTERFIELD ISLAND DXPEDITION NEWS (Press Release 6 - dated Aug 23) [edited] -- TX3X - Chesterfield Islands 2015 DXpedition (OC-176) --The equipment, ~2,400 pounds on 4 pallets is on the way to New Zealand, scheduled delivery Aug 26, and the Advance Team will soon begin their journey to Auckland. They'll meet the boat at Bayswater Marina and transfer equipment from storage to the boat. On Sept 16 the boat

sails for Noumea, New Caledonia, to collect the team and will sail for Chesterfield Island on Sept 28. We expect to land on Oct. 1st and begin setting up the operating camps. On Aug 5 the skipper reviewed and approved our dates and landing plan.

V6, MICRONESIA. Naoki, JS3LSQ, will once again be active as V63WJ from Pohnpei Island (OC-010) between September 28th and October 4th. Activity will be mainly on 15 and 10 meters using RTTY. QSL via JS3LSQ, direct (w/SAE and 1 IRC or 2 GSs) or by the Bureau.

V6, MICRONESIA. Operators Yuji/JH2BNL (V6AAA) and Minekazu/JA2NQG (V6WW) active from Pohnpei Island (OC-010) between Oct 25-29. On all bands, 160-6 meters, using CW, SSB, and RTTY with 500 watts. They will take part in the CWWW DX SSB Contest during the final several hours of the contest. QSL via their home call sign.

YB0, INDONESIA. Karsono, YB0NDT, will once again be active during the CQWW DX RTTY Contest (September 26-27th) as a Single-Op entry. QSL via YB0NDT, direct or LoTW. No Bureau.

ZD7 & ZD8, ST. HELENA and ASCENSION ISLANDS (Update). Oliver, W6NV, will activate these two islands again between October and December. He should be on St. Helena (ZD7) (AF-022) between Oct 15 and Nov 1. To celebrate the arrival of Napoleon Bonaparte (Oct 15, 1815), Oliver has requested the call sign ZD7N. Activity will be on 160-6 meters using CW and SSB. He is also expected to participate in the CQWW DX SSB Contest (Oct 24-25). After his operation on St. Helena, Oliver will then go to Ascension Island (ZD8) and be active as ZD8W between November 5th and December 2nd. He will then join others to be active on the CQWW DX CW Contest (Nov 28-29).

IOTA NEWS.....

AS-149. Vladimir, UA0LCZ, and three other operators will be active as RI0F from the Natural Park on **Moneron Island** between September 2-10th. Activity will be on 80-10 meters using mainly CW.

AS-203. (NEW IOTA) By the time you read this, operators Artem/UA9KAM, Serge/UA9KB, Igor/UA9KDF, Vlad/RA9LR, Vladimir/RA0ZJ, Victor/ RW0BG, Valery/UA0ZC and Sergey/UA0ZFW should be on their way or still waiting (0-7 days) in Petropavlovsk-Kam-chatsky for a ship to take them to **Dobrzehanskogo Island** (RR-13-18 and RDA KT-13). This is 1500 km trip which can take 1-2 weeks. They expected arrival/activity sometime in the beginning of September. The group plans to have 3 station sites and will be active on 40/30/20/17/15/12/10 meters using CW, SSB and the Digital modes. QSL Manager is RX9KM. The team is expected to stay for at least 7 days. For more details and updates, watch: <https://www.qrz.com/lookup/RT9K/0>

EU-169. (Update) Alfredo, IK7JWX, and a team of operators will go on their third Italian IOTA DXpedition. Their next operation will be to **Sazan Island** (M.I.A. MA-01, ARLHS ALB-04 + 19 + 20, ILLW L-028, WW Loc JN90PM) and they will be active as ZA0I between September 2-9th. Activity will be on all bands including 30/17/12/6m using CW, SSB, PSK and RTTY. This will also be an all time new one for the WFF award - ZAFF-010: "Karaburun-Sazan" proclaimed in 2010, is the only national marine park of Albania. QSL Manager for Italy is IK7JWX; for the world is IK2DUW. Look for updates and other details on QRZ.com.

EU-174. Oliver, DK7TX, will be heading back to Greece between September 3-16th, and will be active as SV8/DK7TX to activate 2-3 islands in this IOTA group. Possible islands are **Artemis, Ammouliani** and **Diaporos**. Activity will be holiday style mostly on 20/15/10 meters. He may also sign SV2/DK7TX from Nikiti-Chalkidiki. QSL via his home callsign, by the Bureau or eQSL.

Well that's it for this month's report. Get on the air, have some fun and work some DX. Until next time, GUD DX!!

Jim, KC8PD

**Radio Officer, Portage County OHS/EM
Communications Unit/RACES**



It's that time of year again for National Preparedness Month. Sponsored by the Federal Emergency Management Agency, the month of September is set aside for educational programs nationwide encouraging all of us, not just hams, to be prepared for natural disasters.

Many of us think that we have things covered for personal, family and business emergency preparedness. But there is always more to be learned and there are some handy resources for that.

Start out with FEMA's www.ready.gov web site. From brochures to checklists, whether for families or businesses, you will find a ton of helpful data. This includes everything from pandemics to house fires to natural disasters.

There is information about preparing all types of safety plans for individuals, households, communities, or even students on campus. You can also find recommended lists for the items you should include in your preparedness kits.

You can also find a lot of information on how to get involved in community activities and a wealth of information for businesses. For instance, you or your employer may want to take a look at the section on continuity of operations planning.



You can also check FEMA's emergency preparedness publications at <http://www.ready.gov/publications>.

The State of Ohio is also has some skin in this game and you will want to review <http://publicsafety.ohio.gov> which is the ReadyOhio web site.



And these days it almost goes without saying that there is an app for that! Find it at <https://itunes.apple.com/us/app/fema/id474807486?ls=1&mt=8>

Check those sites out and get to work on making things safer for you and your family by being better prepared. And since it's the beginning of the month, have you charged all of those backup and HT batteries lately?

As always, a reminder of upcoming public service events:

- * **Mantua Potato Stomp, 9/12**, contact Jim, KC8PD, kc8pd@portcars.org
- * **Akron Marathon – 9/26**, sign up at http://www.summitares.org/signup_training.php#signup



Hamfest Report - Columbus

Tom, WB8LCD

Saturday, August 1, was the Columbus Hamfest / Great Lakes Division Convention. It's a pretty easy drive to the Shrine hall on the northeast side of Columbus. Rick, K8CAV showed up at my house at 0:dark thirty and we loaded up with a bunch of stuff for the flea market. Other than the ticket to get in, there is no extra charge for setting up in the flea market – inside or out!



The few times I've been to this fest, I've always been impressed that most of the stuff for sale is somehow ham radio related. There were lots of good deals to be had, unless you were looking for a hat. We arrived as the sun was still low in the sky and I found a perfect place to park where the sun would be in our eyes all morning and it would be hotter than blazes the whole time we were there. Yeah, a hat would have been nice. Rick's was in his truck back at my house.



None the less, Rick was the big winner! He sold off a couple nice radios. Came home with enough cash to get the new rig he had been wanting. Me, I think I sold 2 small items for \$10 each, paid \$7 for my ticket and \$2 for a donut, so, I still came out a few bucks ahead.

Parky, KB8UUZ and Chuck, W8PT, drove down separately and set up a table inside. They weren't selling, but promoting Ohio State Parks On The Air. Hopefully their efforts there will result in some increased participation in the contest this year.

This is the fest where the Newsletter competition is announced. Our RADIOGRAM has been a contender every year. This year it was a tie for 3rd place. By my observation, ever since The RADIOGRAM appeared, the other newsletters have been getting better. Of course, The RADIOGRAM can't win every year, that would be unfair to the other players. BUT, the "award winning" RADIOGRAM has been a consistent contender. I would say it's singularly responsible for raising the bar for local club newsletters in the OH Section. I was looking through some issues from early on recently and noted that it's size has grown along with the PCARS membership and activity levels. That means it's an accurate reflection of our club and our interests. Congratulations Parky! More importantly, Thank You for all the time and effort you've put into it. We appreciate it.



Final thought: The newsletter is as good or as bad as its content. Original content is always the best and most interesting to the PCARS members. If you've seen something, participated in something, built something or just had fun with Ham Radio – write it up and send it to Parky.



PCARS
Join Now
Discover the FUN



Pictures - GI Clean Up Day at the Club Site



PCARS - Clean Up Day -August 8, 2015

Chat with the International Space Station

Tim, K3LR

From: <http://qz.com/480660/pretty-much-anyone-on-earth-with-a-radio-can-call-the-international-space-station-and-chat-with-astronauts/>

The International Space Station orbits more than 200 miles above the Earth, traveling five miles per second. Getting in touch isn't quite as simple as placing a long-distance call. But if you have a ham radio, used by radio amateurs to chat on public frequencies, it actually isn't much tougher.

Adrian Lane of Gloucestershire, England, proved the point when he contacted the station and chatted with a US astronaut for about 45 seconds. The astronauts, it just so happens, have their own ham radio, which works like any other down here on Earth. Getting through to them is mostly a matter of knowing how and when to try.



To start, you need a radio, but before you run off to order one you should know that depending on your country, there are different licenses you may need to transmit on it. In England, for example, it's fine to listen in without a license, but sending radio messages requires first passing an exam. In the US, three different license classes exist.

If you're already set up, the next step is to know

which frequencies to use. A handy guide is available through ARISS.org (<http://www.ariss.org/contact-the-iss.html>). The acronym stands for Amateur Radio on the International Space Station, and the organization is made up of a collection of space agencies and amateur radio groups. Next is timing. Your best odds of making contact, according to Gizmodo, are when the station is directly overhead. NASA allows you to easily determine when the space station will be in your location <http://spotthestation.nasa.gov/sightings/#.Vdp32v1VhuB>, or you can try this pass predictor from AMSAT <http://www.amsat.org/amsat-new/tools/predict/>

Astronauts are humans, of course, so they have schedules. ARISS points out that they're generally awake between 7:30 UTC and 19:30 UTC—that stands for Universal time—and they're most often available about one hour after waking and before sleeping. You can convert UTC to your local time zone with this tool <http://www.timebie.com/>

That's all the information you need to reach out. Of course, someone up there has to be listening, and as the New York Times points out, not all astronauts have a ham radio license. And just think, any Earthling that makes contact would technically be speaking with extraterrestrial life.



Send Your Name and Call Sign to Mars!

NASA



Mars enthusiasts can participate in NASA's next journey to Mars by adding their names — and call signs — to a silicon microchip headed to the Red Planet aboard NASA's InSight Mars lander, scheduled to launch next year.

"Our next step in the journey to Mars is another fantastic mission to the surface," said Jim Green, director of planetary science at NASA Headquarters in Washington. "By participating in this opportunity to send your name aboard InSight to the Red Planet, you're showing that you're part of that journey and the future of space exploration."

NASA issued a similar invitation in 2014 for its Orion test flight. So far nearly 365,000 "boarding passes" have been registered with the InSight mission. NASA will accept submissions until September 8.

Visit the Mars InSight (<http://mars.nasa.gov/participate/send-your-name/insight/>) "Revealing the Heart of Mars" website to get onboard.

When you enter your name, make sure you also include your call sign. See the example - I entered my name as "Tom Parkinson - KB8UUZ".

Once logged in, you will be able to print out your 'boarding pass' - pretty cool!

NEW FLYERS
Never Flown before?
Or, if you did not provide your email last time, start here:

First Name*	TOM
Last Name*	PARKINSON - KB8UUZ
Enter Country*	United States
Postal Code*	Required for US
Email	For Frequent Flyer

Enter Your Call Sign

NASA National Aeronautics and Space Administration

J2M2755748830502

BOARDING PASS: INSIGHT MISSION TO MARS

**TOM
PARKINSON - KB8UUZ**

LAUNCH SITE VANDENBERG AFB CALIFORNIA, USA EARTH	ARRIVAL SITE ELYSIUM PLANITIA, "PLAIN OF IDEAL HAPPINESS" MARS
SCHEDULED DEPARTURE MAR 04 2016	ROCKET ATLAS V 401

AWARD POINTS EARNED
297,805,305 miles
479,271,181 km

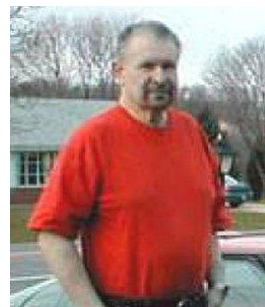
Build Your Own Programming Cable

John Mikor, N3NXU

http://www.miklor.com/COM/UV_ProgrCable.php



Frustrated with that generic programming cable? This \$2 solution might just be your ticket to sanity.



Let's See... You purchased a radio and programming cable, loaded the software, and that's as far as you've gotten. You're fighting with error messages: - Radio did not respond, - Could not open COM port, - Run Time Error and Windows (TM) 10 keeps changing your drivers.

Now you do what many owners do. Put the radio in the drawer to be worked on later. This is like buying a rollaway treadmill and putting it in the closet until the next time you want to exercise. (NOT gonna happen)

But wait, yours has the company name and logo right on the cable. - It doesn't matter. Keep reading. There are a few options available, such as an FTDI cable. It's truly Plug 'n Play, and costs about \$20. But here's a project that just might solve the issue for around \$2. All you need is a small flat blade screwdriver, a soldering pencil, and a CP2102 board.

CP2102

The CP2102 is a USB to TTL UART chip. What? Long story short... It's the same thing that's in your current cable now, except these work. CP2102 boards can be found on eBay for around \$2 and on Amazon. Here's How. Let's start with that original cable. Take a small screw driver and pry the open the case from the back where the cable enters. It should only be snapped together.



Unsolder the 3 wires connected to the board. GND is Black, TX is Red, RX is White. Solder the 3 wires to the corresponding terminals on the new board.

Note 1: Some boards may have the TxD and RxD reversed. If it doesn't work the first time, reverse the two wires. No damage has been done. **Note 2:** Some boards have pins on the back requiring small connectors. You can either remove the pins, solder to them, or use the connectors. Whatever floats your boat.



Driver

When you insert the new board into the USB port, give Windows a chance to find and load the new driver. Should take about 30 seconds. When it says Driver Found, you're done.

If the driver is labeled CH340 instead of CP210x in Device Manager, that's not a problem. Both chips are designed to do the same thing.

But I don't have a Cable

If you don't have a generic cable, you can use 2.5 and 3.5mm stereo jacks. Here are the pin outs, and what Jim's (KC9HI) cable looks like.



Cosmetics

If you are adventurous, try retrofitting the new board inside the original plastic housing. This will require a Dremel tool, X-Acto knife, Glue, and some patience, but it can be done. If the board only has 5 terminals instead of 6, it's not an issue.



You only need GND, TX and RX. Some come protected with a piece of clear heat shrink over the board so you can see the cool blinking lights. Note 3: If



you are trying to retrofit the board inside an existing shell, the red board is a bit shorter and easier to fit. For a dollar or so more, you can find the same boards in a metal case.

What's the Advantage

- First and Foremost, it works. Take the radio out of the drawer, program it and have some fun.
- Next, it only cost around \$2 to save the generic cable from the trash.
- Very Important - Bragging Rights. Now, when you go to a club meeting and someone says they can't get their cable to work, tell them they can build their own, just as you did.

I hope you had fun with this project. It's super simple and very rewarding. I've made several and never had a failure. Say goodbye to driver issues. My thanks to Jim KC9HI for his input on this project



Hamfest Report - WARA Tailgate



Joe, W8KNO



The Warren Amamateur Radio Association (WARA) had been holding a Hamfest at the Trumbull County Fair Grounds, but this year they held a Tail Gate Party at Mosquito Lake State Park. Not only did the location change but the format changed. Admission was FREE and Vendor space was FREE. To raise money, raffle tickets, 50/50 tickets and Chinese auction tickets were sold. In addition, the Club ran the concession stand.

Many vendors were set up an hour before the event was supposed to start and they had a brisk business going nearly immediately. The event reminded me of the get-togethers of the 50's and 60's. While many of the Hamfests are seeing a smaller of vendors, this event had many more than the club's recent Hamfests.

I am already planning to attend next year. Did I tell you, I won the Mobile Check-in Prize!



PCARS Thursday Net Control

Tom, WB8LCD

Thank you all for helping with this! Anytime you are unable to take the net, please give me as much advance warning as possible!

Don't forget - 4th Thursday is NET NIGHT at the club site !!



September	
3	WB8LCD
10	K8CAV
17	KC8PD
24	KD8FDK

October	
1	WB8LCD
8	N8QE
15	WB2DFC
22	KB8UUZ
29	KB8UHN

November	
5	KC8PD
12	K8CAV
19	NR8W
26	WB8LCD



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!



Important Net Control Announcement

Tom, WB8LCD

I would like to thank all of you who are checking into the Thursday Night PCARS 2 Meter Nets. As the closing of the net says "We appreciate your participation, without you, there would be no net." If you have not been checking in, why not? Your participation would make it a better net for all involved, and, it would help you get more engaged with the ham radio hobby by hearing about all the fun and interesting activities that PCARS has for you as well as many others. Ham Radio is your hobby! Get involved, and there's no better, or easier place to get started than on the weekly nets.

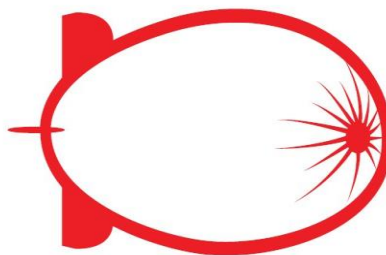
One of the "features" of the PCARS weekly 2 meter net is that you don't hear the same Net Control Station (NCS) every week running the net. I want to thank my regulars who are there every few weeks for their "turn" at the NCS Microphone. It's a rather small list, and you all know who they are. YOU could help out by taking the NCS responsibility, even if just once or twice through the course of the year. I'll be working on the 2016 NCS roster soon, so if you'd like to give it a try, send me an email and let me know you would like to try it and if you have any date preference.

We always talk about how Amateur Radio is there as a communications system of last resort in times of emergency. If something bad happens, are you ready to serve? That might mean that you have to start up and run the net. Maybe having a little practice would have been a good thing. I would hate to think that my hesitation, because of inexperience, would have a cost in either life or property. We all need to be ready to step up in time of crisis. Having been a net control operator, and knowing how to run a net would be a good experience to have. And who knows, you just might have fun doing it, and there might be something that everyone else can learn from your style and experience that would make them a better ham! I hope you'll give it a try.

Akron Maker Faire

Jim, AC8NT

Akron Mini Maker Faire®



What is a Maker? A Maker is someone who is always learning practical skills and applying those skills to their personal situations. Makers express a strong commitment to sharing (tools, technology, expertise, etc.) and having fun. Makers come in all ages, sizes, skills and abilities. Makers are techies, crafters, artists, musicians, tinkerers, inventors, homesteaders and more. Makers restore vintage cars and hack computer programs; they brew their own beer, bake their own bread, and write their own code; they make movies, music, mayhem, and more. They weld, they knit, and they build with Legos.

What is a Maker Faire? A Maker Faire brings together the people who love to create and show what they have made with other Makers and with the people who like to experience what is new. The Akron Mini Maker Faire is a chance to create, learn, discover and play, presented by the Akron-Summit County Public Library. Exhibits run the gamut from 3D printing to spinning wheels, arduino controllers and rubber band inventions. All ages can participate in the Akron Mini Maker Faire.

When will this happen? There are TWO ways to enjoy the Akron Mini Maker Faire, and each has its own important dates.

The Call for Makers, when Makers can apply online to be actual exhibitors, will run July 10-August 22. Visit makerfaireakron.com for a link to the online form during those dates.

The Akron Mini Maker Faire will be held on Saturday, September 19, noon-4 pm. This is when all the Makers will display all their projects for everyone who wants to attend the free Akron Mini Maker Faire.

Where does the Akron Mini Maker Faire take place? Main Library, at 60 S. High Street in downtown Akron.

How can I become a Maker? Everyone can be a Maker. The Akron-Summit County Public Library offers instructional programs, books, videos, and more to help unleash the Maker within you.

PCARS has a space next to DX Engineering at the Akron Maker Faire. It is at the Akron Public Library main branch, September 19, 2015 from noon - 4 PM.

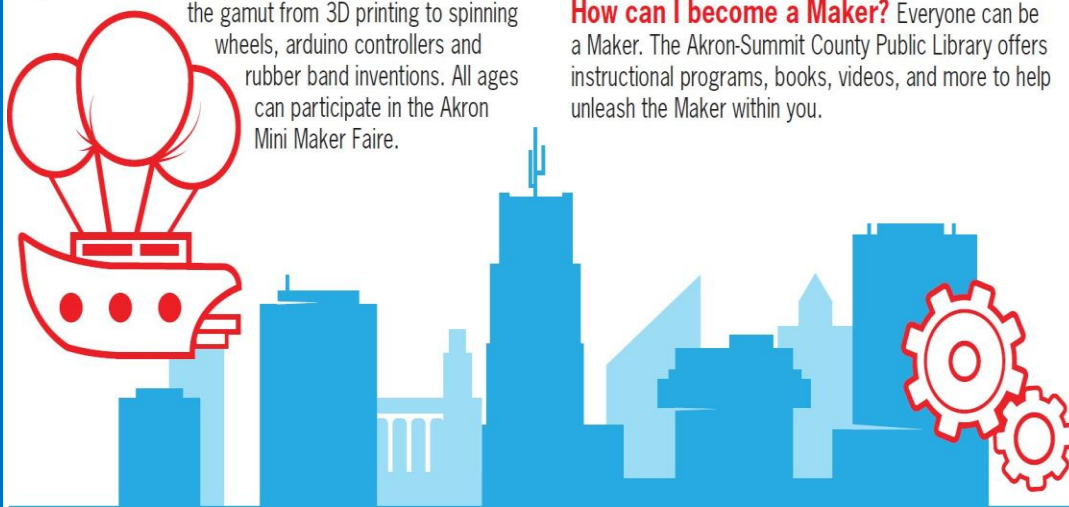
We will need to setup starting at 10 AM.

Rick and I will be looking for people to support our table and help with the Soldering event.

The display is open from noon until 4 PM with tear down from 4 to 5 PM.

I hope this will be as fun as the one we had at Kent State.

It is a great place to show people what ham radio is all about.



Find out more: Visit our webpage, www.makerfaireakron.com. Call or visit your nearest branch. Or contact the Science & Technology Division, 330-643-9075 or stdiv@akronlibrary.org.

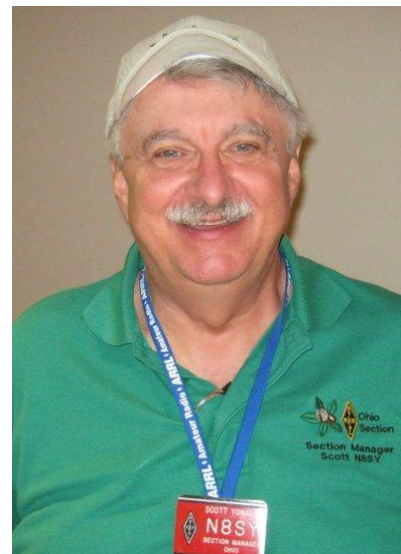
Akron-Summit County Public Library
330-643-9075
Science & Technology Division
60 S. High Street, Akron, OH 44326

Let's Talk

Scott, N8SY
ARRL Ohio Section Manager

Wow, can you believe it, summer is almost over already! Some schools have already started, and that means Friday Night Football and all sorts of school activities are resuming. This has been one of the busiest summers that I can ever remember. I've traveled all over the state visiting with all of you at your hamfests, club meetings, picnics and breakfast's. It's been fantastic! I've enjoyed every minute of it!

Being the editor of this journal I get to read every article before it gets sent out.. By now I'm sure you are aware that Jim Yoder, W8ERW is stepping down. Jim is moving to the big state of Texas where he'll be taking up residency. I'm sure that everyone would agree when I say "Jim, we wish you the very best of everything and we will miss you for sure! Texas is getting a really super guy!! Thanks for your friendship and service to the Ohio Section over these many, many years."



Columbus Hamfest / Division Convention wrap-up.. What can I say, it was a "GREAT DAY." The attendance was great (way over 500), the forums were great, and attended extremely well. The vendors were great, lots of neat things to buy and swap. The flea market outside was great. Heck, even the weather was great. It was the absolutely perfect hamfest/convention! We even had over 40 people stay way after the hamfest was wrapping up and go through the Wouff Hong. By the way, even that was great. The Wouff Hong was the very last performance to be given on that stage, as that the building will be coming down very shortly to make way for more shopping. Everyone that I have talked to at the fest and afterward has said the same thing, it was great!! Don't you just love it when a plan comes together like that!! I do want to thank the Director and Vice Director of the Great Lakes, as well as the guys from the Aladdin Shrine Amateur Radio Club for bringing this all together like they did.

Newsletter Contest Results

What can be said that hasn't already about the quality of newsletters in the state of Ohio!! Joe Phillips, K8QOE would be extremely proud of all the editors that work so very hard to get each edition of their newsletters out. It truly is a testament to Joe and the work he did as PIC and SM over his many years in wanting/demanding that the quality of our newsletters improve every year. So, without further Aude, here are the results straight from John Ross, KD8IDJ - our PIC / Newsletter Contest Manager..

"WOW! What a night. I just came from one of the liveliest discussions/debates that journalists have had since Watergate!!!

All of the talk was about the Ohio Section 2015 Newsletters. It was incredible, insightful, and unpredictable.

At the end of the night, almost simultaneously, the judges used the word...EVOLVE! They were surprised that, in just a year, our newsletters were changing, evolving and adapting to both their audiences and to technology. They all thought that after last year the judging would be easier...but our folks made it harder...in a good way by raising the bar and showing why Amateur Radio is what it is...the greatest hobby in the world!

The newsletters reflect what hams do every day...evolve with the technology, experiment with new ideas and concepts, and push the limits of communications to new heights. It's a great explanation point for our member's efforts and a reflection of their passion and dedication.

So, here are the 2015 ARRL Ohio Section Newsletter Contest winners:

1st Place...DELARA NEWS. Great graphics, easy to navigate, draws you in and easy to read.

2nd Place...The TM&K. Informative, unique, "smooth" graphics and easy to find special sections. One of the judges commented that if he were looking to learn more about amateur radio, the TM&K would be a great start.

3rd Place...a three way tie!!! The MVARA Voice Coil, the Mount Vernon Radio Club and **the PCARS Radiogram**. All slick publications, well organized, great layouts and easy to read articles and information.

Honorable Mention...The CARA Communicator. Well thought out, well laid out and good use of BOLD headlines to separate stories and articles.

After tonight, it's easy to see why the Ohio Section has the best and most talented crop of editors, writers and newsletters. There was no doubt in the judge's minds that Ohio newsletters win hands down against any other section! I knew what to expect. I read every newsletter and it was hard to hide my enthusiasm and joy watching the judges actually get excited about this contest!!!

That's it for tonight. It's been a blast and an honor to be a part of this process." Thanks John..

Now for my part in all of this. I was asked to manage the Great Lakes Division Newsletter contest. My judges had even a harder time of picking a winner since they were judging the "Best of the Best." But, they did choose one, and I'm proud to announce "DELARA News" from Ohio was the winner. Stan Broadway, N8BHL is their editor. Congratulations Stan and the Delaware Club for the outstanding job that you all do each month!

As many of you have noted in your newsletters, I'm making a very conscience effort to get to as many club functions and meetings as I can all around the state. As you know, the Ohio Section is the largest Section in the country. It's even bigger than a Division or two. So, with that in mind, it's only fair to say that Ohio also deserves to have a full time Section Manager. So, don't be surprised when I just "pop-in" at your meeting or function.

I have four Boy Scouts that have been studying very hard over this summer and will be taking their Technician Class license exams very soon. I figure as hard as they all are studying and asking questions of me, and a number of other folks proctoring them, they will ALL pass with flying colors. Keep your fingers crossed for them. They will be taking their exams at the end of this month.

Now, if you've never visited a Boy Scout Troupe meeting, I would encourage you to do so. It's a lot of fun and wow.. are these kids ever bright! I am working on scheduling more visits with the Cub Scouts and Boy Scouts, and YES, even the Girl Scouts this next coming fall/winter. There's a lot of potential there that needs tapped for sure.

Switching gears a bit.. I want to talk to all of you about the Amateur Radio Parity Act of 2015 -- H.R.1301 in the US House of Representative and S 1685 in the US Senate -- It would direct the FCC to extend its rules relating to reasonable accommodation of Amateur Service communications to private land use restrictions. Now I do want to stress this, even if this passes, it doesn't guarantee that you'll be able to construct an antenna farm on top of your 20 story apartment building. What it will do however, is at least give you a voice to the HOA's for something everyone could live with!

The Amateur Radio Parity Act would require the FCC to amend its Part 97 Amateur Service rules to apply the three-part test of the PRB-1 federal pre-emption policy to include homeowners association regulations and deed restrictions, often referred to as "covenants, conditions, and restrictions" (CC&Rs). At present, PRB-1

only applies to state and local zoning laws and ordinances. The FCC has been reluctant to extend the same legal protections to include private land-use agreements without direction from Congress.

Everyone.. whether ARRL members or not, I want to urge you to write to your members of both the House and the Senate, asking them to sign on to the bill as a co-sponsor. Please, route your letters for your member of Congress to:

ARRL - Attn HR 1301 grassroots campaign - 225 Main St - Newington CT 06111

Remember - a big bag of letters from the constituents is always more impressive than ones trickling in day after day.

There's a new link on the left side of the main page of the Ohio Section Website "Follow The Section Manager" Come on, follow me as I go around the state visiting with all of you folks. I post pictures of where I am and have a lot of great folks commenting and liking my posts. Hey, I even have Kay Cragie, the President of the ARRL following along with me. It's a lot of fun and you'll get to see all the places I go and the folks I meet along the way. Not on Facebook? It's easy to join in and the best part of it is, it's FREE!!

Swap-N-Shop

FOR SALE: Ameritron AL-1500 full legal limit-plus 160M-10M amplifier. Complete with manual and original shipping boxes. Excellent condition non-smoker, like-new tube still capable of 2000+ watts so it loafs at 1500 watts. Asking \$2000 – pick up, or I will deliver to your northeast Ohio QTH. Reason for sale – I have too many amplifiers!

Contact: Al, K8EUR by phone at 440-345-5217 or email at K8EUR@portcars.org [11/02/15]

FOR SALE: Alliance HD-73 Heavy Duty Rotator Package Used, in service for 10 years then stored. Dual speed, maximum of 10.7 sq/ft wind load, 6 conductor wire required. One working Rotator, One not working Rotator (for parts or rebuild—motor tries to turn), Two working Control Boxes in excellent condition. Original manuals. Package only. \$75.

FOR SALE: Alinco DM-330MV Switching Power Supply Output 5-15 VDC @ 32A (max) 30A (continuous), Volt/Amp meter, terminals and cigarette outlet. Compact 6.9W x 2.6H x 6.5 D. Excellent condition in original box with data sheet. \$85.

Contact: Bill, K8KW by email at KW8KW@sbcglobal.net [10/02/15]

FOR SALE: Kenwood TS-711, 2 Meter all mode, \$400 **FOR SALE: Kenwood TS-811**, 440 all mode, \$400

FOR SALE: Icom IC-271H, 2 Meter All mode \$300 **FOR SALE: Yaesu FT-411**, 2 Meter Hand Held, \$5

FOR SALE: Heathkit HM-102, SWR/Power meter, \$20 **FREE: Motorola MH-10**

FOR SALE: Yaesu FT-208R, 2 Meter Hand Held \$5 **FOR SALE: Astatic D-105 Mic**, \$10 ea, Qty of 2

FOR SALE: DigiMax, D-500 Frequency Counter, \$10

FOR SALE: Kantronics Packet Communicator 3, \$20

FOR SALE: Electro Voice Model 638 Microphone, \$20

If interested make offer. Also I have several towers for sale, contact me for information

Contact: Allan, AB8AA by e-mail at: AB8AA@portcars.org [10/02/15]

FOR SALE: Cushcraft A3S with 40M Add-On-Kit - On the ground. Gently used. May need some work on traps. Make a creative offer !

Contact: Tom, WB8LCD by e-mail at WB8LCD@portcars.org [09/02/15]

FOR SALE: Icom IC-746 PRO - with power cable and microphone - \$800.00

Contact Richard, KA8OAT by phone at 330-898-6248 or e-mail at KA8OAT@portcars.org [09/02/15]

FOR SALE: 40 ft. Antenna Tower - Used, needs cleaning and painting. \$0.00 plus tax. Good Deal.
Kenwood TS140S - Works well, external speaker included. \$250.00

Contact: Rich, KD8FDK by e-mail at KD8FDK@portcars.org [09/02/15]

FOR SALE: Siemens SpreadStream 4100 DSL modem - Great for Echolink - have 2 - \$10.00 each
Linksys Wireless-G 2.4Ghz router - Great for Echolink - 54Mbps - Model WRT54G - \$14.00

WANTED: iPhone 5s. Current phone too old to work with dx spot apps or echolink.

Contact: Bucky, N8OQQ by e-mail at N8OQQ@portcars.org [09/02/15]

FOR SALE: MFJ-269B Antenna Analyzer Covers HF/VHF/UHF. Comes with manual **and** \$16 MFJ plug-in AC wall adapter. Cost new \$369 - Will sell for \$210

Astron SS-30M Power Supply Has Amp & Volt meters. 30 Amps at 13.8 Vdc Peak. Cost new \$149 - Will sell for \$99.

Contact: Parky, KB8UUZ by e-mail at: KB8UUZ@portcars.org [12/02/15]

Mobile Cruise-In

Erica, AE8YL

The PCARS 6th Annual **Mobile Cruise In** is in the bag for 2015. We couldn't have asked for better weather and the turnout was great.



This year's prize for best installation went to Tim Duffy, K3LR. What an impressive installation Tim has. Edwin Foster had the oldest vehicle with a permanently installed station with his 1998 Ford Escort Wagon (Rick doesn't have a radio in his jeep, we may need to tease him about that).



As you know we had a "Yet to be announced" category this year. It



was a VHF/HF QRP contest with no repeaters. Rick Kruis K8CAV won our QRP contest.

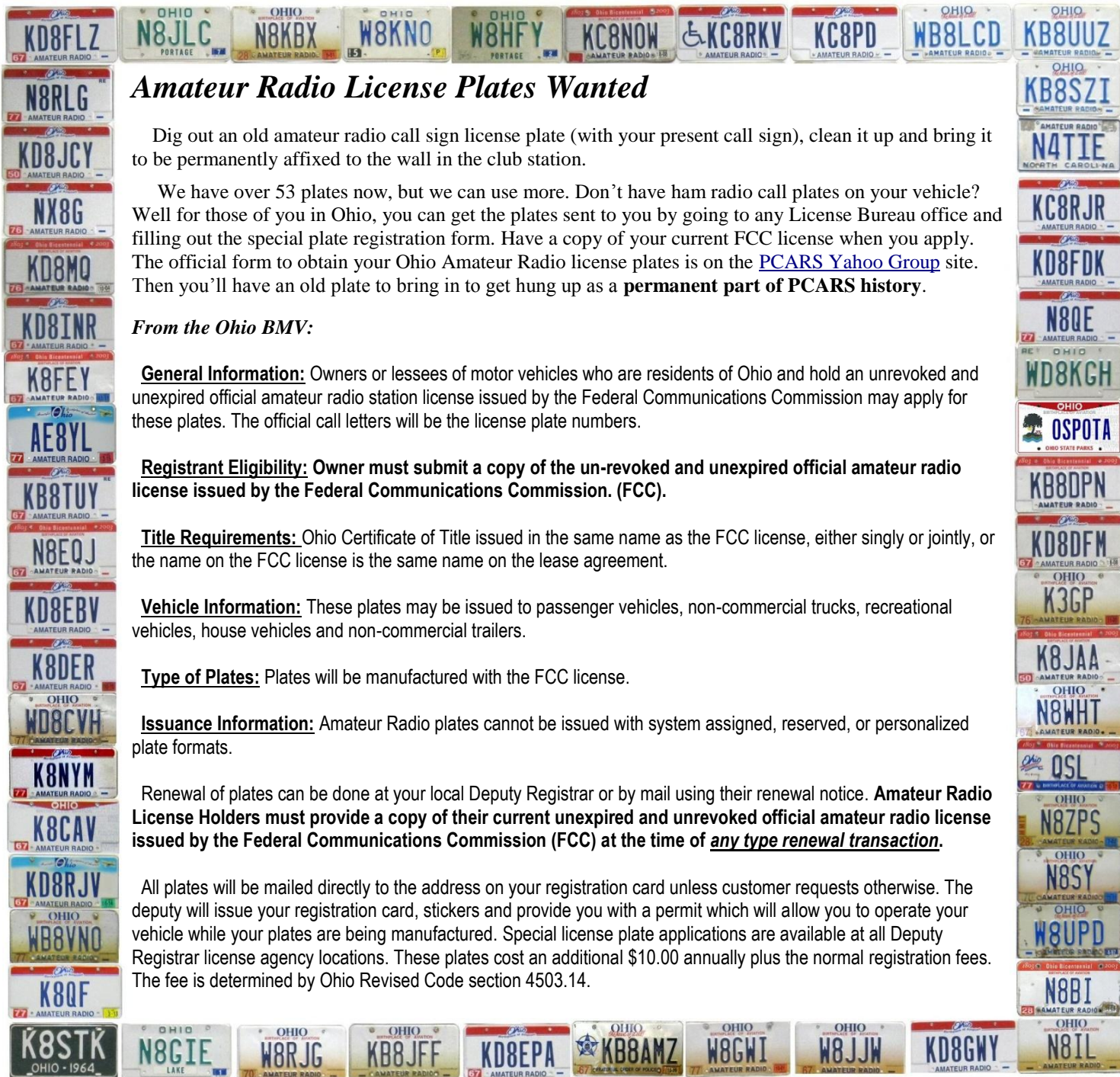
A big thanks as always to the Ravenna A&W! The final sign in tally was over 40 people. Thanks to everyone who came out and made the Cruise in **BIG FUN**.



Pictures from the PCARS 6th Annual Mobile Cruise In



PCARS Mobile Cruise In at the A&W - 27 Aug 2015



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 over 53 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/>

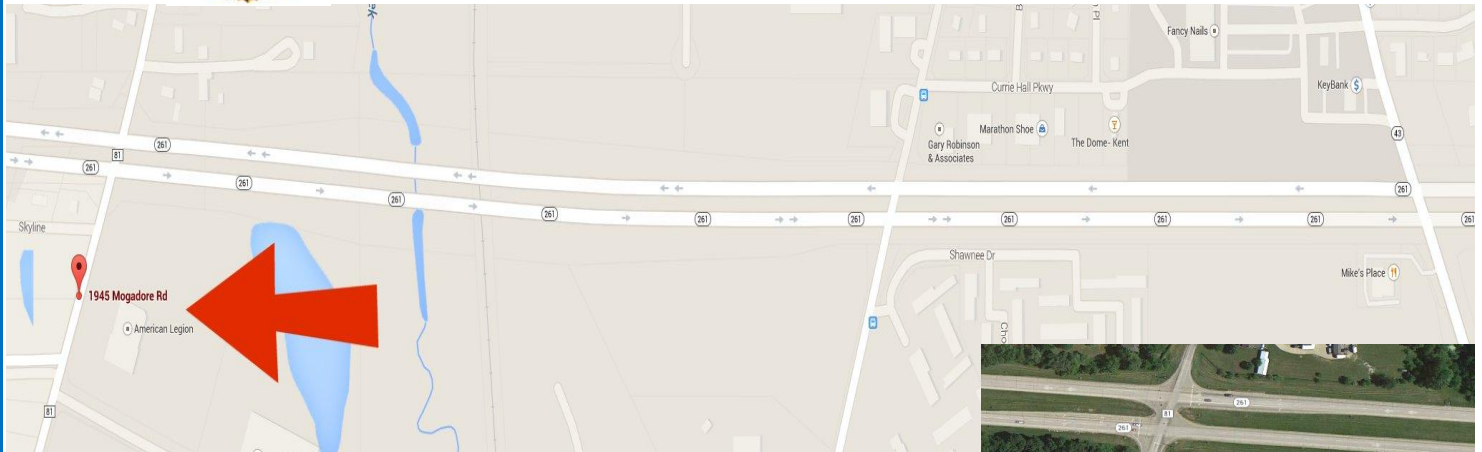


PCARS Meetings

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.

Sugar Bush Knolls Tower Project



Tom, WB8LCD

In late 2008 I was fortunate to purchase several sections of Rohn 25 tower at the Warren hamfest, for a very good price. It wintered in my garage and I spent the first several months of 2009 cleaning and refurbishing in into just about as good of condition it could possibly be put in. It was erected with 3 antennas (and lots of PCARS fanfare) in the fall of 2009. In over 40 years as a ham, this was the first tower mounted antenna system I'd ever had! It was fantastic. I put up a second (maybe 3rd) hand Cushcraft A-3 Yagi, a NOS Finney Stinger, and a new Hustler 2 meter vertical.



Five years later, February 2015 at the MFJ Days at DX Engineering I mentioned to Ed, K8IV that I was going to replace the Yagi with a new antenna. Ed says "I know what you should do" and proceeds to talk me into reworking the whole system around a US Towers HDX-555 crank up / tilt over tower. When it comes to climbing towers, I'm pretty good up to about 15-18 feet! Then it gets really scary for me. I'll do what I have to, but I won't necessarily like it. With this new setup, I don't have to worry about climbing. Five years ago, it was a process of digging up bargains and keeping it cheap. In fact, I think I might have mentioned that I had as much in beer costs to get the job done as I had in the hardware.



This time I'm fortunate enough to be able to put up just about everything new – hoping that I won't have to fix or repair anything for a long time. As I'm writing this I now have the tower mounted on the base and I'm just getting ready to assemble the antennas and cabling necessary to get in on the air. I also paid to have the hole dug for the tower base. My original tower was on a base 4'x4'x5' deep which I



dug by hand, took me over a week working every evening on it. The new tower base is 5'x5'x7.5' deep. I actually had to have the hole dug twice, as the first time it caved in and was not usable. Inside the hole is a pretty substantial re-bar cage and about 8.5 yards of concrete. Thanks to Rich, KD8FDK for helping with the concrete. Once poured, the concrete needed to cure for 28 days.



Ed, K8IV and I each bought a tower and had them shipped together to my brother's shop in Kent where they had the necessary equipment to unload them. (Each tower weighs in at about 870 lbs). We picked them up from there on Ed's landscape trailer. He backed into the shop and the used the overhead crane to gently put them on the trailer. Once we got to my house, Ed and I unloaded the first tower using an



automotive floor jack, a two-wheel dolly and a whole bunch of conduit to roll on with the help of long 2x4's to use as levers. It sat in place within about 2-3" of where it needed to be while the concrete cured. Saturday, August 22nd, I got up early, started getting it into position and sent Ed a text that I thought I might be able to get it up that day. Ed was at my house within about 30 minutes and we did get the tower in the air! The following

Monday Ed had his tower base concrete poured, so he'll be running about a month behind me, but we've both had a bunch of delays that couldn't be helped.



These are a few photos of the process so far. As I said, I'm fortunate to be able to put in something like this, and I'm grateful for the fantastic PCARS friends who have helped me along the way. In addition to Rich and Ed, James, KD8VT came over and gave me guidance on what is needed for proper grounding. I'll let you know how it plays once I get all the antennas mounted. And - I'll be happy to be able to work the PCARS net from the shack again instead of sitting out in the car on the driveway.



PCARS
Join Now
Discover the FUN



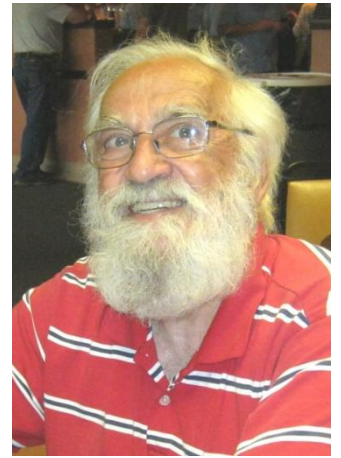
PCARS
www.portcars.org



Paper Chase - Route 66

Joe, W8KNO

Since I started writing this article, every September I have written about "Route 66 On The Air". This year the event will take place between 0000Z September 12th and 2359Z September 20th. The event is be sponsored by the Citrus Belt Amateur Radio Club. There are 21 clubs across the nation participating in this event using the call signs of W6A - W6U. They are: W6A Santa Monica, CA, W6B Los Angeles, CA, W6C San Bernardino, CA, W6D Victorville, CA, W6E Barstow, CA, W6F Kingman, AZ, W6G Flagstaff, AZ, W6H Albuquerque, NM, W6I Amarillo, TX, W6J Elk City, OK, W6K Oklahoma City, OK, W6L Tulsa, OK, W6M Riverton, KS, W6N Joplin, MO, W6O Lebanon, MO, W6P St. Louis, MO, W6Q Chicago, IL, W6R Springfield, MO, W6S Rover 1, W6T Rover 2, W6U Pontiac, IL.



It's the 16th year for this annual event. Come celebrate the history of the "Mother Road" the great highway that helped build America. You will find the stations on 80 through 6. Check out their web site for details.

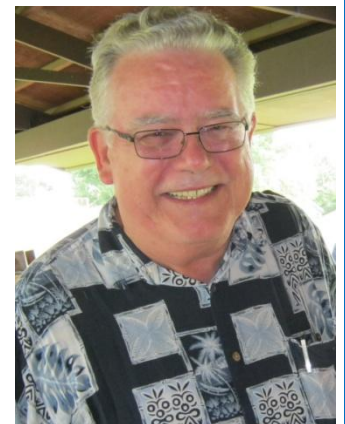
To obtain a Certificate, send an application, which can be found at http://w6jbt.org/?page_id=26, and \$4 to:
Citrus Belt Amateur Radio Club - PO Box 3788 - San Bernardino, CA 92413.

U.S. Highway 66 was established in 1926 and was the first major improvement to link the west coast with the nations heart land. Through stories, songs and TV shows, the highway came to symbolize the spirit of the freedom of the open road, inspiring many to see America.

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 again be known as the **BIG FUN** amateur radio club with plenty of activities to report on in this newsletter all throughout 2015.



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

K8CAV, KB8UUZ, N8RLG, KB8UHN, KD8FDK, KB8AMZ, W8PT, WX1DER, KB6NU, KC8PD, WB8LCD, K3LR, N3NXU, W8KNO, AC8NT, N8SY, AE8YL, NASA, the ARRL and the World-Wide Web.

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



Amateur Radio Special Event - Pope's September USA Visit

Tim, K3LR

From the The Daily DX mailing list



Pope Francis visits the United States September 22 - 27 and amateur radio will be part of the celebration. Throughout the 6 day event (September 23 0000Z - September 28 0000Z) 6 special event amateur radio stations will be on the air to commemorate the event.

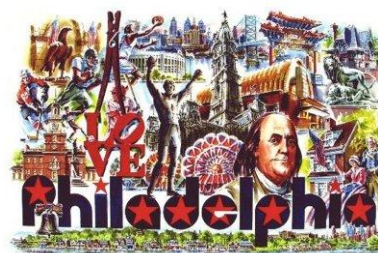
Call signs from the Washington, DC area will be K3P and N4P. From New York and New Jersey the call will be .

W3FRC/WMF will be on the air from southeastern Pennsylvania and W3P will be on the air in Philadelphia. WM3PEN, also of Philadelphia, will join in Thursday evening at 8 PM EST (Friday 0000 GMT).

Four unique QSL cards will be available along with a certificate to mark this special and historic event. A website is being established for QSL and certificate information. Early information and links can be found on the WM3PEN qrz.com website.

The Washington, DC operations are being coordinated by the Jim Nitzberg, WX3B of the Potomac Valley Radio Club. The southeastern Pennsylvania and New Jersey operations are under the direction of Ron Sigismonti, N3RS of the Frankford Radio Club. The New York activity is being coordinated by John Melfi, W2HCB of the Great South Bay Amateur Radio Club . W3P efforts on the air are being coordinated by Joe Leone, KA3LKM. WM3PEN operations are being coordinated by Bob Josuweit, WA3PZO, and the Holmesburg Amateur Radio Club.

We are privileged to be able to represent our region of the USA via Amateur Radio. Every three years there is a World Meeting of Families. In 2012 amateur radio operators in Italy had the call II2POPE on the air. This year amateur radio operators in 5 states will be on the air to commemorate the event. This year with the World Meeting of Families in Philadelphia and the second time a Pope has visited Philadelphia, Ron Sigismonti, says having several special event stations on the air by members of a club that originated in Philadelphia, then expanded to encompass the entire region out to 175 miles of Philadelphia; another club whose members will be on the air in the same section of Philadelphia that the Pope is visiting; and another group of Philadelphia operators who are excited about the World Meeting of Families being held in the City will really make this a special event.



Additionally, operations from the Greater Washington, D.C. metropolitan area, metropolitan New York City, and parts of New Jersey will encompass the entire region visited by Pope Francis in the United States. It will allow those who can't be in the various cities that he is visiting to participate in this event by talking to those who are. In essence this will be a world family meeting of amateur radio operators.

The Pope arrives at Joint Base Andrews on September 22 and begins his visit in Washington, D.C. with a meeting with President Obama on Wednesday, September 23. He delivers a speech to a joint session of Congress on Thursday, September 24. On Friday he attends a meeting of the United Nations General Assembly in New York and participates in a multi-religious service at the 9/11 Memorial and Museum at the World Trade

Center. On Saturday he gives a speech at Independence Hall in Philadelphia and concludes his visit to the U.S. with an outdoor mass in front of the Philadelphia Museum of Art on Sunday, September 27.

QSL info can be found here for W3P (see qrz.com entry for W3P). QSL info for WM3PEN: Send SASE or \$1 to WM3PEN (see qrz.com entry for WM3PEN). QSL info for W3FRC/WMF, K2P, K3P and N4P: Please send SASE or \$1 to Nick Clevenger, KK4ODQ at 3910 Gibbs Street, Alexandria, VA 22309. International cards please enclose \$2 if you are able. For a Certificate: Please send \$5.00 plus a return address label (if you can) to Nick Clevenger, KK4ODQ at 3910 Gibbs Street, Alexandria, VA 22309. Please indicate on your request the call signs you made contact with.

Vanity Call Sign Fee to Disappear in September

From the ARRL

The Amateur Radio vanity call sign regulatory fee is set to disappear this month. According to the best-available information from FCC sources, the first day that applicants will be able to file a vanity application without having to pay a fee is Thursday, September 3. In deciding earlier this year to drop the regulatory fee components for Amateur Radio vanity call signs and General Mobile Radio Service (GMRS) applications, the FCC said it was doing so to save money and personnel resources. The Commission asserted that it costs more of both to process the regulatory fees and issue refunds than the amount of the regulatory fee payment.

"Our costs have increased over time, and now that the costs exceed the amount of the regulatory fee, the increased relative administrative cost supports eliminating this regulatory fee category," the FCC said in its Report and Order, which appeared on July 21 in The Federal Register. "Once [it's] eliminated, these licensees will no longer be financially burdened with such payments, and the Commission will no longer incur these administrative costs that exceed the fee payments."

The FCC raised the Amateur Service vanity call sign regulatory fee from \$16.10 to its current \$21.40 for the 10-year license term in 2014. The \$5.30 increase was the largest such fee hike in many years. In a typical fiscal year, the FCC collected on the order of \$250,000 in vanity call sign regulatory fees.

The FCC said the revenue it would otherwise collect from such regulatory fees "will be proportionally assessed on other wireless fee categories." Congress has mandated that the FCC collect nearly \$340 million in regulatory fees from all services in fiscal year 2015.



K3LR Contest Station Hosts PCARS

Parky, KB8UUZ

PCARS was invited to visit the K3LR contest super station on Saturday August 29th. Car pools made their way eastward until we all arrived at Tim Duffy's QTH in West Middlesex, PA. Tim gave all of us an outstanding guided tour of the 11 acre antenna farm that is heard around the world. Tim explained what each of the antennas were and how they interact during contesting. We then entered the radio room to see where all the action goes on. What a tour! What really is impressive, in the very well equipped radio room, are the multitude of plaques from contests that were won by the K3LR team. It was truly amazing. Tim, K3LR, a long time friend and supporter of PCARS, then treated everyone to lunch with pizza and wings brought in to the newly built 'barn'. Pictures can't really show how spectacular the station is (inside and outside). The only complaint was from a few that had sore necks from looking up at all those antennas! Wow... Everyone that attended had a wonderful time and we all appreciate Tim, K3LR for giving us the opportunity to see the super contest station up close.

Pictures from the K3LR Contest Station Tour



**K3LR Tour
29 August 2015**



K3LR

29 Aug 2015





K3LR Tour 29 August 2015



Pictures from the August PCARS Meeting



PCARS - August 10, 2015



PCARS - August 10, 2015

~ Amateur Radio Instruction Class ~

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

is sponsoring an Amateur Radio **Technician** course

that will enable *You* to obtain

Your FCC **Technician** license as an

AMATEUR RADIO OPERATOR



When:

Wednesday evening 7:00 p.m. – 9:00 p.m.
September 16, 2015 through November 4, 2015
Official Amateur Radio License testing will be held
at the end of the course

Where:

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

Registration: First night of class

Cost:

\$25.00 Registration fee - which also provides
the attendee a One-Year Membership in PCARS
(No Registration Fee for PCARS Members)
\$30 Text – “Ham Radio License Manual”
(text may be purchased first night of class)

Information:

Contact Jim Wilson, AC8NT
e-mail at: AC8NT@portcars.org
phone at: **330-342-8149**



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

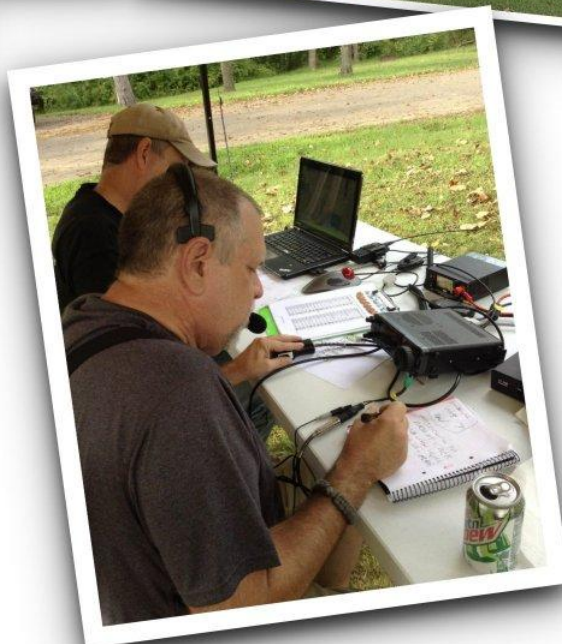
- **Contact other ham radio operators in the area and around the world**
- **Serve your community – ham radio operators are the critical communication link during disasters and emergencies**
- **Participate in a fascinating and rewarding hobby**

For more information about PCARS, go to www.portcars.org , or contact

Jim Wilson - AC8NT, at AC8NT@portcars.org, or by phone at **330-342-8149**



Ohio State Parks On The Air



Ohio State Parks On The Air contest - Sept. 12th



The Portage County Amateur Radio Service, Inc. (PCARS) announces the 8th annual

Ohio State Parks On The Air



Ohio State Parks On The Air contest

Saturday, September 12, 2015, from 1600 UTC to 2400 UTC

There are **74** Ohio State Parks
Make a day of it and join us in the **FUN!**

Visit a beautiful Ohio State Park
and have some
Amateur Radio Fun at the same time!

Can't make it to an Ohio State Park?
You can still be in the contest !!

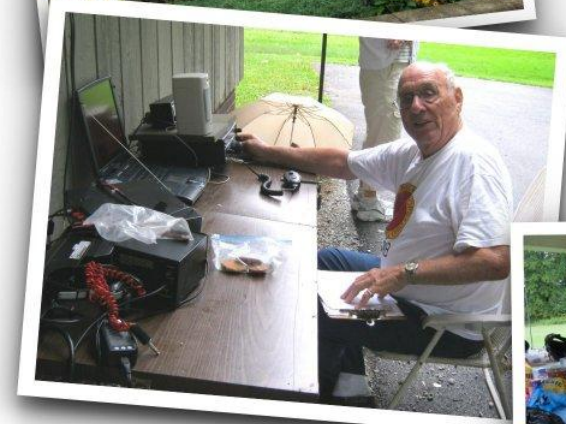


Rules? Entry Forms? Log Sheets? Ohio State Park Information?

Check out **all** the details at: [**www.OSPOTA.org**](http://www.OSPOTA.org)



Ohio State Parks On The Air

A decorative border featuring a row of colorful autumn leaves in shades of orange, red, and yellow, interspersed with green pinecones and small rocks.


Ohio State Parks On The Air contest - Sept. 12th



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 ~ Drop in and say hello!

PCARS uses the **K8IV Repeater: 146.895 MHz PL 110.9 ~ Rootstown, Oh ~ EchoLink Node: K8SRR**

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

~ 2015 Officers ~		2015 PCARS Appointments & Committees	
President - Rick Kruis - K8CAV Vice President - Tony Romito - WA8AR Treasurer - Bob Hajdak - N8QE 3 Year Trustee - Chuck Patellis - W8PT 2 Year Trustee - James Andrews - KD8VT 1 Year Trustee - Erica Pelz - AE8YL 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 Manager	WB8LCD Tom Sly
		Net Night - Club Manager	WB8LCD Tom Sly
~ Meetings & Net ~ 2 nd Monday of each month. 7pm Thursday night Club Net at 8 pm on 146.895		Newsletter Editor	KB8UUZ Tom Parkinson
		OSPOTA Chairman	KB8UUZ Tom Parkinson
		P.I.O.	WA8AR Tony Romito
		Secretary	K8MSH Mark Haverstock
		Tech & Gen Class Manager	AC8NT Jim Wilson
		V.E. Liaison	N8RLG Robert Gurney
		Webmaster	KD8MQ John Myers

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) newsletter of the **Portage County Amateur Radio Service, Inc. (PCARS)** – copyright © 2015. 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 US \$4.95, 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. Send your newsletter inputs (in .TXT format) along with in-focus pictures (not small 10kb ones...) to the newsletter editor: kb8uuz@portcars.org



"When All Else Fails - Amateur Radio Works"