



The **RADIOGRAM**

When All Else Fails ~ Amateur Radio Works

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

December 2016 - Volume 11 Number 12

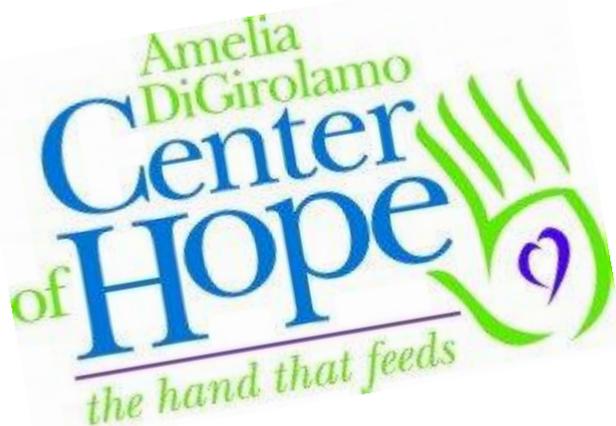
313.14 7

In This Issue - 

Field Day 2016 Results



PCARS ELECTION RESULTS



**Center of Hope
Donation Drive
Fantastic
Success !**



PCARS K8BF

The Club that puts the FUN in Ham Radio!





Feature Articles	
From the PCARS President	3
From the PCARS Vice President	4
2017 PCARS Board Officers Elected	5
Center of Hope - Holiday Donations	7
PCARS Christmas Dinner - 2016	8
Field Day 2016 Results	10
Skywarn Recognition Day	11
Is Your Ham License Expired?	12
Replay for Kids	12
Akron Mini-Maker Faire	15
Dues are Due	21
Dead Electrical Dudes - Edwin Armstrong	22
China's Planned Amateur Radio Satellites	24
Parky Bank	24
First Radio Broadcast	25
Tech Tip - Using WSPR	26
75 Meter Lids Vow to Tack Back Title	28
Holiday Eating Tips	29



Mark Your Calendars	
Schedule of Events	6
VE Test Sessions	9
Contest Calendar	10
Hamfest Calendar	20
Net Info & NCS Schedule	20
Meetings, PCARS	32
Important Days This Month	37



Regular Departments	
Patches & Stickers, PCARS	8
EmComm	16
Charlie the Tuner's HF High-Lites	17
Linux for Hams SIG	19
Digital SIG	19
YouTube - PCARS	20
Happy Birthday	21
DX and Contest SIG	23
Swap-N-Shop	30
Member Ham License Plates Wanted	31
Yahoo Group - PCARS	31
Pictures from the Last PCARS Meeting	33

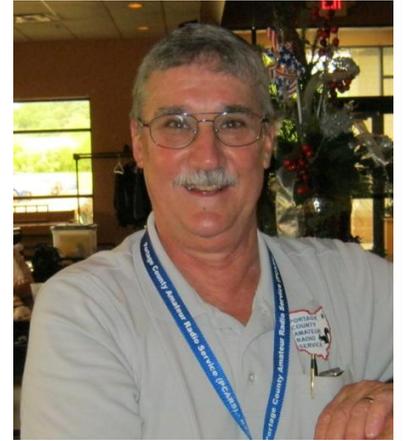


Finals	
Thanks & 73	40
Membership Application - New or Re-New	41
Technician Class Flier	42
Freeze Your Acorns Off flier	43
Club Information and Fine Print	44



From the President

Rick, K8CAV
PCARS President



PCARS is closing the chapter on 2016, and what a year it's been! We started out by looking back at ten years of our club's existence with a great presentation by Parky KB8UUZ which led into an on-the-air special event in April. It's truly remarkable how much we've grown in that ten years, and how bright our future looks going forward. 2016 had lots of traditional events and some new as well. The very first PCARS operating event, FYAO is still going strong, and provides much diversity due to unpredictable February weather. PCARS continued its Field Day excellence this year but at a new venue in the Freedom Township park. The club's radio station had some significant upgrades and continues to provide a first-class club contesting venue for our members. Construction projects abound and we continue to have interesting and informative presentations at our monthly meetings. PCARS members, along with volunteers outside of our club are supporting our community by volunteering our time and communications skills to support those community events. The generosity of PCARS members provided yet again a significant contribution to the Center of Hope for those in our community who are in need. PCARS members provide all of the volunteers for the Communications Unit of the Portage County HS/EMA and are being utilized to a greater degree than ever before. PCARS continues to present the face of Amateur Radio to youth and their parents at the local Maker Faire venues to encourage new and younger Amateur Radio operators and to make STEM more visible to youth. Special Interest Group meetings held every Tuesday throughout the year have provided members with a place to become more informed and get help with problems or issues in specific areas. Most importantly, PCARS provided an organization, a structure for each of us to share both the enjoyment of our hobby, and each other's company.



Looking forward into 2017, we're obviously going to continue doing most of the things we've already been doing that make PCARS the enjoyable experience it is. Field Day at our new venue should be the best we've had in our history and we could, dare I say it, come closer than ever to besting that Class 4A club-who-shall-remain-unnamed in Ohio. As you'll read elsewhere in the newsletter, the contesting group is moving into the VHF-UHF area and we may also try our hand at some digital contesting this year. Echolink hardware is being upgraded to provide us with a more reliable system. The club's electronics lab, in the works now for a bit under two years will be finished and provide a place for members to build, test, and repair their circuits and radios. We currently have four special interest groups, with a fifth once every three months but one of the things we can consider, if there is enough interest by members, is expanding the interest

areas by alternating months with current groups. Public Service and Emergency Communications always need more volunteers and it would be great to build on that in 2017.

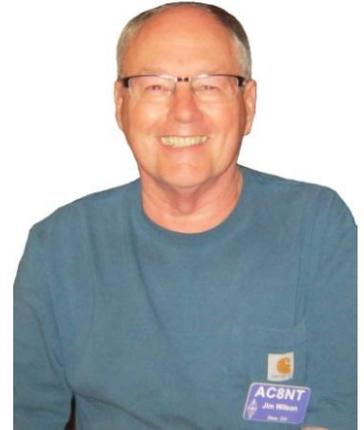
As you can see, PCARS has done a lot for its members, and has a lot on the plate for its members going forward. For any organization to be successful, there are two crucial requirements: good leadership and member participation. From the club officers and trustees, to event chairpersons, special interest group moderators and others, PCARS has been fortunate to have people step up to provide that leadership. Member participation in PCARS events has also been good. All of that is great but to move forward we need to have more of the members in our club participate in what we do. Haven't made a lot of monthly meetings? Then plan on attending just one more meeting than you did last year. Been to Field Day but never participated? Then volunteer just one two-hour operating or logging session at one of the stations. Never participated in an

Amateur Radio Contest? Then come out to just one of the club contests and operate a couple of hours. Feel that you have a bit more to offer but haven't done anything? Run for a PCARS office or volunteer as a chairperson or moderator. The list goes on, but the major point is **BECOME INVOLVED IN PCARS**, as a participant, as a leader. PCARS will definitely benefit, but so will you!

My most sincere hopes and wishes to each and every one of you and your families and loved ones for a happy and fulfilling new year.

From the Vice President

Jim, AC8NT
PCARS Vice President



I can't believe another year has flown past. It has been a busy year for this club. An outstanding Field Day, many events and builds and great monthly meetings. We hope to continuously improve our club and need your help to do this. Please let us know of any ideas you have for meeting topics or builds! We are planning builds that include a WSPR build in January and a balun build in February. That leaves lots of opportunities for builds next year. We also have meetings to plan, so any topics you think might be interesting, let us know.

From the standpoint of the club site. We will have the laboratory completed by year end. Thanks to my complete retirement at the end of the year, I will have more time this month to complete the laboratory setup. I will need some help, so prepare to receive a QST when the need comes up. We will also need some help repairing the lighting in bays two and three. We have no lights in bay three and we need to fix the lighting in bay two before all of the lights fail. I hope to tackle this project early in December. Again, help will be needed.

We are going to make some changes to upgrade the 50/50 drawings next year to include better prizes. This should make attending our meetings more interesting and potentially profitable to winners. We can't spend a fortune, but we will be getting more creative in our prizes.

We will have a Tech class starting in January running for 8 weeks. A QST will be going out soon with the details. If you know of anyone interesting in getting their ticket let them know a class is coming up. Also, we have a lot of members that also are model flyers. If you have friends interested in FPV, we would be happy to help them get their Tech ticket.

I hope all of you have sent your list of "toys" to Santa. We are fortunate to have DX Engineering close to make last minute purchases possible. Mrs. Santa (Linda for short) already has my list. I wish you and yours the best of holidays and a great New Year.

A banner for PCARS K8BF. On the left is a logo for "PORTAGE COUNTY AMATEUR RADIO SERVICE" featuring a map of Portage County and a squirrel. In the center, the text "PCARS K8BF" is written in large, bold, gold letters. Below that, the slogan "The Club that puts the FUN in Ham Radio!" is written in a smaller, gold, italicized font. On the right is a circular logo for "ARRL SPECIAL SERVICE CLUB" with a diamond shape in the center containing the letters "A", "R", "R", "L".

2017 PCARS Board Officers Elected

During the November PCARS meeting, the annual election of board officers was held.

The offices of President, Vice President Treasurer and 3 Year Trustee were up for election.

Rick, K8CAV was re-elected as President.

Jim, AC8NT was re-elected as Vice President,

Amy, KD8SKL was re-elected as Treasurer.

Robert, N8RLG was elected as the new Three-Year Trustee.

Jim, KC8PD moves to the 2-Year Trustee position and **Chuck, W8PT** moves to the 1-Year Trustee position.



Tom, WB8LCD remains as the Immediate Past President.

Rick K8CAV



President

Jim AC8NT



Vice President

Amy KD8SKL



Treasurer

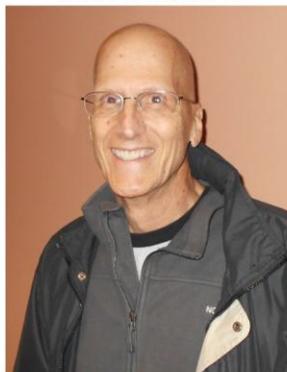
PCARS 2017 Elected Officers

Robert N8RLG



3-Year Trustee

Jim KC8PD



2-Year Trustee

Chuck W8PT



1-Year Trustee

CONGRATULATIONS to the 2017 PCARS Officers



Schedule of Events

On the calendar for upcoming meetings and activities are:

- December - Trip to Tiny Circuits in Akron - more info to follow
- December 3rd - VE Testing at the club site in Ravenna - 10:00 am - walk-ins welcome
- December 10th - Get on The Air Day at the club site in Ravenna - 10 am
- December 12th - Club Christmas Party - Buffet Dinner at the Kent American Legion
- January 14th - Replay for Kids - Toy Repair Day at the club site in Ravenna
- January 18th - Technician Class starts at the club site in Ravenna - 7:00 pm
- January 21st - Building a Digital Mode Transmitter & Receiver for WSPR at the Club Site
- February 11th - Freeze Your Acorns Off day - see flier in this newsletter

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



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



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



Yearlong Event

National Parks on the Air

Take part in this 2016 operating event, celebrating the US National Park Service Centennial.

▶ [Get on the Air!](#)

National Parks
ON THE AIR

2016

Center of Hope - Holiday Donations

Rick, K8CAV

I've talked a lot about the heart and soul of PCARS which are you, the members but nothing shows that as much as by thoughtfulness during our November meeting when we donate the club's portion of its 50-50 raffle to the Center of Hope, and take donations from the members for them.

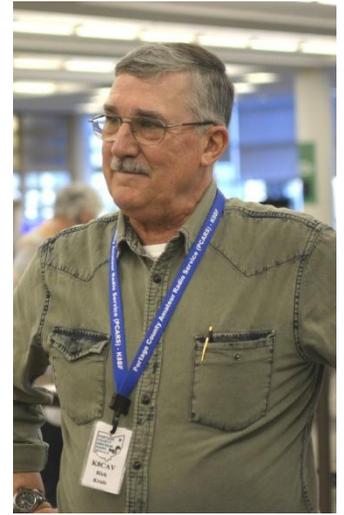
This year PCARS raised **Four Thousand Dollars** for the Center of Hope.

Jim AC8NT, Parky KB8UUZ and I were on hand to present Ann Marie of the Center of Hope with our donation to them.

Because you all care and were very generous, there are a lot of people and families whose holiday this year will be just a bit brighter.



Rick, K8CAV - Ann Marie - Jim, AC8NT



Mark Frisone of Family and Community Services and Ann Marie of the Center of Hope asked me to pass along their most sincere **Thank You** to all of you.

I can't express enough how thankful I am to be a part of a group of people such as you who care so much about the community they belong to. My very best wishes to all of you in PCARS and your families for a joyful and fulfilling holiday season.



PCARS Christmas Dinner 2016

Tom, WB8LCD



Our **2016 PCARS Christmas Dinner meeting** will be held on **Monday, December 12th, 2016**. (Our regular meeting night) The dinner will take place at the American Legion Hall in Kent (Our regular meeting place) and the dinner will be catered by the Little City Grill of Kent (Same as last year). Dinner will be served promptly at 7:00 PM, so please try to arrive on time, or maybe even a little early!

The cost of the dinner will be \$19.00 per plate and will include a dinner salad, roll and butter, potato and your choice of chicken or prime rib. Beverages will be ala carte from the canteen, and I'm asking everyone to bring a small plate of Christmas cookies to share for our dessert.

Important: I'll need your reservation and payment no later than Wednesday, December 7th so I can make the final order with Little City Grill. You can mail your payment to me at: Tom Sly, 1480 Lake Martin Dr., Kent, OH 44240, please make your check payable to PCARS. If you prefer to pay with cash, please give me a call to make arrangements to meet prior to the 7th. I'll also need to know the entrée choice for each dinner reservation made.

After dinner we will have the PCARS gift exchange! Please bring a ten dollar gift and mark it for a HAM or NON-HAM. (Non-ham gifts should be gender neutral) If you are bringing children, please bring a special gift for them, and mark your child's name on the gift so we can make sure it gets to him/her.

I truly hope that you will attend along with your spouse or "significant other". This is designed to be a "family friendly" meeting and give us all a chance to share in the fellowship of the Christmas Season.



PCARS Patches & Stickers



New PCARS logo patches (iron on) & stickers (stick on) are now

available!! Put the patch on your hat, your shirt, your jacket and show off that PCARS logo!! The patch is about 3". The embroidery on the white patch is in Red, Black and Blue. Cost for a patch is only \$2.00 each and can be obtained at any PCARS

meeting. There are 2 types of

stickers available - a 4" x 6" oval and a 3" x 10" bumper

sticker. Stickers are \$1 each. Show your pride in

PCARS - Wear a patch, use the stickers! See the club

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



PCARS VE Test Sessions

Robert, N8RLG
PCARS VE Team Liaison



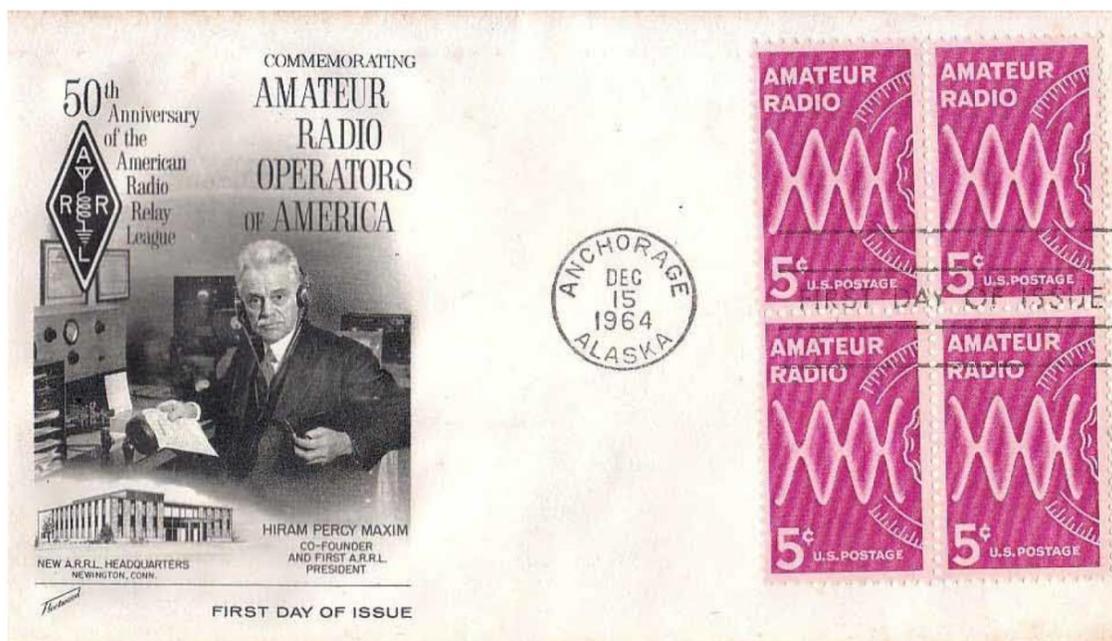
PCARS VE sessions are scheduled for 10:00 am on the first Saturday of every even numbered month at the PCARS club site in Ravenna.

December 3rd

2017: February 4th - April 1st - June 3rd - August 5th - October 7th - December 2nd
Plus: March 8th - 7 pm at the end of the Technician Class - June 24th 4 pm at the Field Day site

What to Bring to the Testing Session

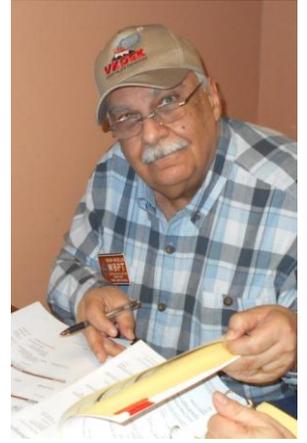
- \$15 is the current test fee. We prefer the exact amount in cash or a check made out to: *ARRL-VEC*
- A government photo ID (**driver's license or state ID card preferred**).
- Your Social Security Number or FCC Federal Registration Number. We are required to submit either your Social Security Number (SSN) or your FCC Federal Registration Number (FRN) with your application. If you are upgrading, your FRN is on your current Amateur Radio license.
- A pen (black ink) and pencil (we can loan you either or both)
- **If you already have an Amateur Radio license: One copy of any current (*unexpired*) amateur radio operator license issued to you.**
- If you've already passed a test: The original (**and one copy**) of any document that you will use to prove you've already passed a test element. These documents may include:
 - An unexpired Certificate of Successful Completion of Exam (**CSCE**) indicating the credit(s) earned indicating the credit(s) earned.
 - Original and copy of a pre-March 21, 1987 Technician license (this provides credit for the Element 3 [General] exam) - you must be currently licensed to get this credit.
- Expired License? Original and copy of your expired Amateur Radio License - you must take and pass Element 2 to re-instate your license.



Field Day 2016 Results

Chuck, W8PT

Those who attended our Field Day 2016 event and especially those who participated know that we had a slightly rocky start to the 24 hr event. But even with a somewhat slow start, it turned out that the PCARS Field Day crew made a very respectable showing.



Field Day 2016



Our operating category was 4A (or 4 Alpha as the exchange was given to other stations). We recorded 72 participants and attendees. **We scored 10,632 pts making 3,393 contacts.** Given this score, here is how K8BF fared:

There were 2,696 total entries presented to the ARRL. K8BF came in 33rd overall. Of all the 4A entries, which there were 132, we came in 5th place.

In the Great Lakes Division there were 250 entries and we came in 2nd. And of all the 4A entries in the Great Lakes Division, we again came in 2nd.

Of all the Ohio entries, which there were 122, K8BF placed 2nd.

In regards to total participants/attendees of all 2,696 entries, we came in 49th with our total of 72. And in the Great Lakes Division with 250 entries, we came in 2nd with our total of 72 participants.



So in the end, K8BF did very, very well. As the 2016 Chairman for our participation, I am very proud of the effort made by all the PCARS participants. And we are already in the planning stage for our 2017 event. All the Field Day Staff positions have already been filled. But that doesn't mean that we will not need more members to help. If you want to be a part of what I hope will be our record breaking first place finish in 2017, please let me or Tom Sly, WB8LCD know.

ARRL posted the Field Day 2016 results - http://www.arrl.org/results-database?event_id=80253

Contest Calendar

December 2016	
ARRL 160-Meter Contest	2200Z, Dec 2 to 1600Z, Dec 4
ARRL 10-Meter Contest	0000Z, Dec 10 to 2359Z, Dec 11
RAC Winter Contest	0000Z-2359Z, Dec 17
Stew Perry Topband Challenge	1500Z, Dec 17 to 1500Z, Dec 18

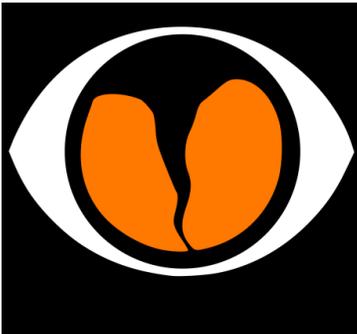
Google the Contest Name - Read the Rules & Have Fun. YES - There are MANY More Contests out there - Check the Internet

SKYWARN™ Recognition Day



From the ARRL ARES® Newsletter

The annual SKYWARN™ Recognition Day (SRD) will be held this year on **Saturday, December 3, 2016**. This is the day when Amateur Radio operators visit National Weather Service (NWS) offices and contact other operators around the world. The purpose of the event is to recognize the vital public service contributions that Amateur Radio operators make during National Weather Service severe weather warning operations. It also strengthens the bond between Amateur Radio operators and the local National Weather Service. The event is co-sponsored by ARRL and the National Weather Service. Please remember that this is not a contest, so no scoring will be computed.



SKYWARN

Object: For all radio amateur stations to exchange QSO information with as many National Weather Service stations as possible on 80 through 10 meters, including 6 and 2 meters bands and the 70 centimeter band. Contacts via repeaters are permitted.

Date: National Weather Service stations will operate December 3, 2016, from 0000 - 2400 UTC.

Exchange: Call sign, signal report, QTH, and a one or two-word description of the weather occurring at your site.

Modes: National Weather Service stations will work various modes including SSB, FM, AM, RTTY, CW and PSK31. While working digital modes, special event stations will append "NWS" to their call sign (e.g. NØA/NWS).

Station Control Operator: It is suggested that during SRD operations, a non-National Weather Service volunteer who is a licensed radio amateur serve as a control operator for the station that is set up at a NWS office.

New this year: There will be a new log submission process introduced this year, and WIAW at ARRL Headquarters is scheduled to be on the air for SKYWARN Recognition Day. More details will be released later. More information about this event may be found [here](http://www.wrh.noaa.gov/mtr/hamradio/) (<http://www.wrh.noaa.gov/mtr/hamradio/>).



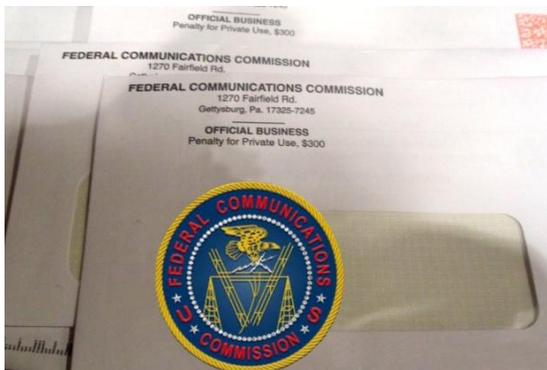
Please note: The Cleveland Office will only be participating Saturday, December 3, 10 AM to 7 PM. - If you would like to come operate at the NWS Cleveland office, please contact Mat, KC8NZJ- info@ccskywarn.org



Is Your Ham License Expired?

Daryl, WXIDER

On one net, I asked "Without looking at your ham radio license, do you know its expiration date??" 95% of the respondents said "NO". At a license exam session I did awhile back, one examinee, who thought he had a General Class license was SHOCKED to find out that it had actually been expired over 2 years, and as a result, it was WORTHLESS. He had to start completely over, exam wise.



Obviously, operating without a license can get a Notice Of Violation or worse from the FCC. For that matter, the same applies to ones Drivers License, etc.

I personally don't think it's that much to ask to know the expiration of one's licenses... ham radio, drivers licenses, or otherwise. Not knowing it could cause real problems.

Additionally - is your address correct on your license? If the FCC sends you a letter to the address listed on your license and it gets returned, they will cancel your license.

RePlay For Kids

Tom, WB8LCD



Mark your calendars for Saturday, January 14, 2017, from 10:00am til noon!

PCARS members are invited to participate in a "Toy Repair Workshop" located at the PCARS World Headquarters on Oakwood St. in Ravenna. RePlay for Kids is a 501(c)(3), tax-exempt, non-profit organization out of Medina, OH. Their mission is to repair and/or adapt toys to make them usable for kids with disabilities.



RePlay for Kids provides everything we need to complete the task (TBD) that will be assigned to us – even the tools at each workstation. (you can bring along any of your own tools that you think might be useful) Our goal is to repair/adapt as many toys as possible within a two hour period. These toys are then made available to agencies that provide services to disabled children, as well as directly to the children of families who would not be able to afford to purchase these themselves.

This is another great opportunity for PCARS to serve our community by providing a needed service to those who have the need. I know that there is a wealth of talent among PCARS members in the ability to do this kind of work. I hope you'll all come out and support this event! More details will follow, you can see more at the RePlay website: www.replayforkids.org . If you have any questions, please contact Rick, KD8WCK or Tom, WB8LCD.

RePlay for Kids



... because **every** child
needs to play

2015 SUMMARY

Helping Kids
With Disabilities
Play and Learn
Since 1999

January 2016

www.replayforkids.org

RePlay for Kids

At **RePlay for Kids**, our mission is to increase the availability of toys and assistive devices for children with disabilities. We fulfill our mission by repairing



Adapted toys are easier to play with for children with disabilities.

devices and adapting a wide range of battery-operated toys, therefore increasing not only the number but also the

variety of toys and devices that are available for children with disabilities.

No other organization in Northeast Ohio provides similar services.

Several service organizations in Northeast Ohio purchase specially adapted toys and other assistive devices for use by children with disabilities but, due to the limited market, adapted toys are significantly more expensive than their mainstream counterparts. Most organizations providing services for children with disabilities have limited resources and often cannot afford to replace broken toys or assistive devices. These organizations lack

the personnel with technical knowledge or available time required to modify and repair such devices.

RePlay for Kids provides free repair and modification services to these organizations, thereby increasing the number of functioning toys and assistive devices on hand for children with disabilities. At **RePlay for Kids**, we pursue our mission of increasing the availability of toys and assistive devices for children with disabilities by repairing existing devices, adapting mainstream toys, designing new devices and educating families and clinicians.



Volunteers repair toys that will be distributed to the agencies served by RePlay for Kids.



Toys adapted by RePlay for Kids, ready to be donated.

Toy Workshops

RePlay for Kids has been hosting informal toy workshops since 1994. In 1999, **RePlay for Kids** was formally established as a nonprofit corporation to further increase the productivity of this toy repair

and modification effort. We currently host toy workshops a few times a month, during which volunteers spend a couple hours repairing and modifying toys. Since we utilize small, portable toolkits, our workshops can be set up in a

variety of locations. Workshops have been held at sites such as NASA, Ernst & Young, Nestle, Fifth Third Bank, Key Bank, Deloitte, Timken, GE, Keithley Instruments, Case Western Reserve Univ., Univ. of Akron and Cleveland State Univ.



A child with cerebral palsy plays with an adapted toy dog.

Toy Repair Workshops

In these workshops, volunteers come and repair as many toys and assistive devices as possible in a 2 hour period. Workshop activities often involve simple repairs such as a broken wire or corroded battery terminal. Repaired items are checked for safe operation prior to being returned to the agencies.

Toy Adaptation Workshops

In these workshops, volunteers adapt mainstream, battery-operated toys by placing a switch cable in parallel with the original switch, allowing the toy to be operated by a variety of alternative switches that could be plugged into the cable. Volunteers do not need a technical background to learn how to adapt the toys.

Over the past two years, there have been 189 toy repair and adaptation workshops.

www.replayforkids.org

page 1



Educational seminars teach individuals and organizations how to adapt toys.



Partner Agencies

- Boards of Developmental Disabilities in Cuyahoga, Summit, Medina, Stark, Lake, Geauga, Lorain and Wayne Counties
- United Cerebral Palsy of Cleveland
- Hattie Larlham Foundation
- United Disability Services of Akron
- Rainbow Babies & Childrens Hospital
- Cleveland Clinic Children's Hospital
- Akron Children's Hospital
- MetroHealth Medical Center
- Akron and Cleveland School Districts
- Society for Handicapped Citizens of Medina
- Aristocrat Berea
- Matthew's Lending Library

Progress

Since 1999, volunteers for **RePlay for Kids** have repaired over 2,427 toys and assistive devices and produced over 6,447 adapted toys. In order to purchase replacements for the more than 8,874 toys and devices that were repaired or adapted over the past sixteen

years, the agencies would have spent over \$529,000. The past nine years, we have increased the number of toys and devices that have been repaired or adapted at workshops, from 368 in 2007 to 1,636 in 2014.

2015

The 1,636 toys repaired or adapted this past year have a

total value of over \$105,800. This includes 1200 newly adapted toys that were donated to the agencies for the holiday season. In 2015, we continued our **RePlay @Home** program, in which adapted toys are given to low-income families. We also held high school workshops to show students how they can use technology to help kids.

Past 9 years: 411 workshops

7,687 toys repaired or adapted, over \$472,000 saved

These are a few comments from some of the agencies that we have assisted:

"The toys that were donated are not toys that one would typically find in an adapted equipment catalog. The toys are age and gender appropriate and they are typical to the toys with which other children often play. This makes them very motivating and special to our students."

Assistant Director of Education, Medina County Board of Developmental Disabilities

"The joy and excitement on the faces of the children has been immeasurable. The toys are also very reinforcing in establishing cause-effect relationships for children with disabilities. Some of the children with special needs have limited opportunities for "play" with toys that they can manipulate. Your donations have made their play time more meaningful and interactive for them."

Speech-Language Pathologist, Euclid City Schools

Funding

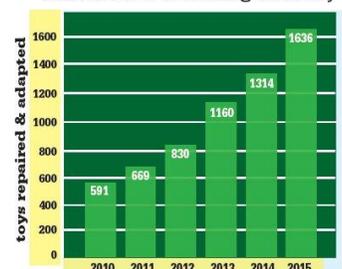
RePlay for Kids is a 501(c)(3) tax-exempt, nonprofit organization funded by grants from the Musson Foundation, Sisler McFawn Foundation, Medina County Women's Endowment Fund, Medina

County Community Fund, Romich Foundation, Stark Community Foundation, Akron Community Foundation Millenium Fund, Community Foundation of Lorain County, Nordson Corporation Foundation, Nord Family

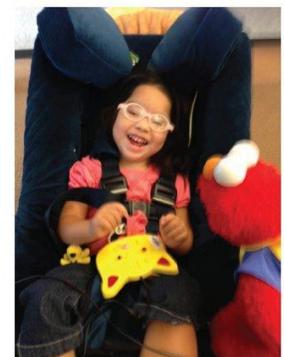
Foundation, CareSource Foundation, Cy Pres Honor Project, Willard Stephenson Foundation, and individual donations. If you are interested in supporting our activities, you can donate on our web site, or send a donation to:

RePlay for Kids 600 W. Sturbridge Dr., Medina, OH 44256.

Phone: 330-721-8281 Toll Free: 866-9-REPLAY (866-973-7529) email: info@replayforkids.org



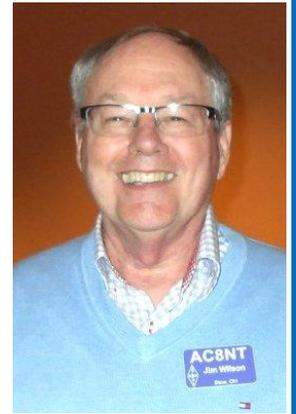
RePlay for Kids repaired or adapted most of the toys received from our partner agencies, which translated into savings of over \$105,800 last year for these agencies.



Akron Mini Maker Faire



Jim, AC8NT



Had a great time Saturday, November 12th at the Akron Mini Maker Faire held at the main branch of the Akron Public Library. This will be our second year displaying the ham radio hobby at this fair. We had a lot of interest and it should be no surprise that interest came from all ages and backgrounds. We demonstrated digital radio, mesh networking and some hands on antenna builds. Handed out a lot of one-pagers and cards covering our club and it's many activities.



We need to meet more young people that are interested in electronics and these events are key to making those contacts. We also meet the leaders of other "Maker" groups that would like our help in introducing electronics and ham radio specifically to their makers. We have been

asked by the Akron Public Library and others to setup talks next year to their groups on ham radio. I also met a group of drone pilots that would like to setup a Tech class course. They need their license to use FPV systems on their drones. First Person Viewing (FPV) allows them to see from the viewpoint



of their aircraft using high resolution video transmissions.



Both the Kent State and Akron Maker Faires have been great opportunities for us to grow the hobby and potentially our club membership. Next year I hope to add other events to our public awareness activities including possibly the two top level science fairs in Kent and Akron.

A banner for PCARS K8BF. On the left is a logo for "PORTAGE COUNTY AMATEUR RADIO SERVICE" featuring a squirrel. In the center, the text "PCARS K8BF" is written in large, bold, gold letters. Below this, the slogan "The Club that puts the FUN in Ham Radio!" is written in a smaller, gold font. On the right is a circular logo for "ARRL SPECIAL SERVICE CLUB" with a diamond shape in the center containing the letters "A", "R", "R", "L".

Jim, KC8PD

Radio Officer, Portage County
Communications Unit/RACES



Winter will soon be here and this is an ideal time to make sure that your backup and emergency power resources are ready for use.

If you have a generator it should be started up and run at least once a month, not just in the winter but year round. Don't just start the engine and let it sit there. Put a substantial load on it to ensure that the generator is functioning properly and keep it running for twenty minutes to a half hour.

If it is a fixed installation genset that is supposed to fire up on its own when the line current disappears, follow the manufacturer's instructions on simulating a loss of line a.c. Make sure that the starter battery is fully charged and if it is close to the end of its usable service replace it. If this is a gasoline fueled generator, add fuel stabilizer to the generator's fuel supply as well as to your backup gas cans if you are not using that gas during the winter for snow blowers, etc., and the supply is being renewed.

Do you have a safe, secure and properly ventilated location to operate the generator? Never run one inside your living quarters and don't use one in a closed garage or similar structure. Make sure there are no fire hazards such as stored materials or fuel supplies in the area of the generator.

If you are using extension cords to connect appliances to the generator, check to make sure that they are the appropriate gauge to handle peak currents and of adequate length to get power to where you need it. Don't compromise your safety by using cut rate extension cords. If they have been around for a few years make sure there no cuts or nicks in them. If the generator connects to your breaker box with a transfer switch, check it to make sure that it is functioning properly.

If you use twelve volt storage batteries for backup, keep an eye on the electrolyte level for lead acid batteries which should be installed in secure vented containers. A defective or shorted battery can explode and cause serious injury.

If you are using gel cells or AGM batteries, make sure to follow the manufacturer's specifications for charging voltage. If you are using a float charger, check its output voltage to be sure it is adequate. You can also use your shack's power supply to maintain the charge on the batteries. Take a look at the West Mountain PWRgate for a handy device to both maintain the float charge and give you an immediate switch to battery power if the commercial power fails.

Do you have an adequate supply of AA's for radios and other gear and C cells for flashlights? Check the expiration dates on all batteries and rotate your stock to ensure that you have fresh, usable storage batteries. Use up the oldest batteries and safely discard discharged or outdated cells properly. If you use rechargeables, once a month run them through a charging cycle to keep them at peak voltage. Periodically it may be a good idea to fully discharge them before recharging. As always, follow the manufacturer's recommendations.

Don't wait until it's too late and you are standing in your garage with a dead flashlight, a generator that won't start, and an HT that won't work. **Be safe by being prepared.**

Charlie the Tuner's HF High-Lites

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



Here's your DX report for December.

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, NG3K & ADXO, W3UR & The Daily DX, N4AA & QRZ DX, W4DN, K8GI, K8YSE, W8GEX & 60m DX News, W9ILY, N0FCD, CO3JK, DL1SBF, DL7UXG & The DX News Letter, DxCoffee.com, DXNews.com, DX-World.Net, ES1CW, F5NQL, F6AJA & Les Nouvelles DX, I1JQJ/IK1ADH & 425 DX News, I2MQP & DX Italia News, IZ5HQB, OZ6OM & 50 MHz DX News, RSGB IOTA Web Site, Sixitalia Weekly, VA3RJ & ICPO, VHF-DX-Portal(MMMonVHF) and VU2DSI for the following DX information.

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

3B9HA - RODRIGUEZ ISLAND - Olof, GØCKV will be going to Rodriguez again. He will be operating "holiday style" November 24 to December 12. He says he will focus on the Low bands and CW. He also plans to be on for the CQWW CW contest. QSL via MØOXO or use LoTW.

4X, ISRAEL (Special Event). Look for the following Christmas special event stations to be active from different locations during the Holyland Christianity On The Air (HOCOTA) between December 23-25th:

4X2XMAS - in Yardenit (Holy Land SQ. N07KN)

4X3XMAS - in Church of Beatiudes (Holy Land SQ. N05KN)

4X7XMAS - in Kursi National Park (Holy Land SQ. O06KN, WFFF 4XFF-0024)

4X9XMAS - in Tabgha (Holy Land Sq. N05KN)

QSL via LoTW or eQSL. A special award is available at: <http://www.qrz.co.il/4xradio.php?pid=123>

4X07, ISRAEL. The UNESCO World Heritage Committee has declared the caves of Beit Guvrin to be a World Heritage Site. The caves are on the list of confirmed WFF Israel National Parks Award - 4XFF-007. There is a very long and interesting history on this site. <http://www.bibleplaces.com/bethguvrin> It will be the first time operation from this location. The scheduled dates for the operation are 0700z Friday, December 23rd, and Saturday, December 24th, until noon time. Operators mentioned are from the Holyland DX Group: Shalom/4Z4BS, Mark/4Z4KX, Ruben/4Z5FI, Yulik/4X6HP, Ros/4Z5LA, Vlad/4Z5IW, Arthur/4X4DZ and Jan/4X1VF. They will be running two stations CW and SSB on the WFF frequencies using the call sign, 4X07W (Holy land Square G19JS). QSL cards will handled by Ros, 4Z5LA.

5R, MADAGASCAR. Eric, F6ICX, will once again be active as 5R8IC from Saint Marie Island (AF-090, WLOTA LH-0491) between November 6th and February 4th, 2017. Activity will be holiday style on 40-10 meters, mainly CW, but some SSB, RTTY, and PSK63, using a FT450 with 100 watts into various GPs or Inverted-Ls and a Hexbeam for 20-10 meters. There will be no online log during his activity. QSL via his home call sign (QRZ.com). Logs will be uploaded to ClubLog and LoTW.

5Z, KENYA. Nick, LZ4NM, will be active as 5Z4/LZ4NM from Nairobi through January 23rd, 2017. Activity will be on 40-10 meters using CW and SSB. QSL direct to: Amateur Radio Society of Kenya, Box 45681, Nairobi, 00100, Kenya.

6W, SENEGAL. Look for Michel, F6AFH, to be active as 6W7SS from La Somone in Senegal between early of January up to April 2017. No other details were provided.

7Y, ALGERIA (LH Ops). Ops from the Algerian Amateur Radio Union (ARU) active from five lighthouses in the next coming months. They will be using special call signs whose suffixes form the word "LIGHTHOUSE" as follows: 7Y9LI from Cap Ivi, 7Y9GH from Cap Tenes, 7Y9TH from Ras Afia, 7Y9OU from Cap Fer Marsa and 7Y9SE from Cap Sigli. QSL for all call signs are via SM4VPZ. Also, an electronic certificates and plaque are available. Details on the rules and trophy can be read here: <http://www.qrz.com/db/7X5ARU>
7Y9SE December 7-15th Cap Sigil Lighthouse/ALG-016 Bejaia/JM26JV

8J1/8J60, ANTARCTICA. Yath, JG2MLI, active as 8J1RL from the Japanese Antarctica Showa (Syowa) Research Station on Queen Maud Land (AN-015, WAP-JPN-03) between Jan 1st, and Jan 20th. He will also use the special call sign 8J60JARE to celebrate/commemorative the 60th anniversary of the Japanese Antarctic Research Expeditions (JARE) and the Antarctica station. Activity will be on 40-10 m using CW, SSB, RTTY, PSK, JT9 and JT65. QSL via his home call sign, LoTW or eQSL. For more details: <http://cq8j1rl.exblog.jp>

9H, MALTA. Andrew, G8GNI, is active as 9H3AP until December 9th. Activity will be holiday style mainly on 40 and 20 meters using the Digital modes. Equipment setup is an IC-706MKIIG running 100 watts into an inverted V. QSL via G8GNI, direct or by the QSL Bureau. He will upload his log to LoTW and ClubLog.

9Q, DEM. REP. OF THE CONGO (Reminder). Christian, IS0BWM, will be active using the special event call sign 9Q0HQ/3 in Kengé from the Democratic Republic of the Congo between Nov 20th and Dec 25th. He has received written permission from the national amateur radio club (ARAC). Activity will be on various HF bands using SSB. QSL via IS0BWM direct only (see QRZ.com). Log will be posted on ClubLog.

9Y4, TRINIDAD AND TOBAGO. Natan, K4NHW, is now active as 9Y4/K4NHW from Trinidad Island (SA-011) until December 14th. Activity will be on 40 and 20 meters using SSB. He may also activate Tobago Island (SA-009) if he has a chance. QSL via his home call sign, direct, by the Bureau or LoTW.

DP1, ANTARCTICA. It has been reported that Felix, DL5XL, active as DP1POL from the German Neumayer Station III (AN-016, WWFF DLFF-022, WW Loc. IB59UH) between Nov and Feb. Activity will be on all HF bands using mainly CW and possibly some SSB and Digital modes. QSL via DL1ZBO or LoTW. ADDED Felix does have a FaceBook page at: <https://www.facebook.com/dl5xl?fref=ts> ADDED NOTE (de DL5XL): There will also be a ham radio operator on the next wintering team at Neumayer Station III. Daniel, DL1SU, works as an electronics engineer at the base. He plans to use the club call sign DP0GVN from December 2016 to February 2018. QSL cards for DP0GVN will be handled by Dominik, DL5EBE, direct or via the Bureau.

JD1, MINAMI TORISHIMA. Take, JG8NQJ, active as JG8NQJ/JD1 from Marcus Island in the Minami Torishima (OC-073, JCG 10007) group for the next couple of months (December 15th- March 15th, 2017). He is usually there to work on the island's weather station. Activity will be limited to his spare time. He will be mainly on 17 meters but also on 20/15/12/10/6 meters CW. QSL via JA8CJY or by the Bureau via JG8NQJ.

VATICAN LOGS NOW ON CLUBLOG. "DX-World.net" reports [edited], "Francesco, IK0FVC, is pleased to announce that starting from Saturday, November 19th, the HV0A (for QSOs after 2008 February 2nd), HV4NAC (for QSOs after 2008 January 26th), HV50VR and HV6SP logs will be available on ClubLog. As usual for LoTW, the logs will be updated as soon as possible after the end of each activation."

TU, CÔTE D'IVOIRE. Operators Bertrand/DF3FS, Norbert/DJ7JC and Heye/DJ9RR will be active as TU5MH from Côte d'Ivoire (Ivory Coast) between January 22nd and February 2nd. Activity will be on 80-10 meters using CW, SSB and RTTY. QSL via DJ5BWD, ClubLog's OQRS or LoTW.

I know a lot of you will be very busy during the Christmas holidays, but please find some time to get on the air and work some DX. Spread some of this season's blessings to other parts of the world. Until next time GUD DX. 73

Linux for Hams Special Interest Group



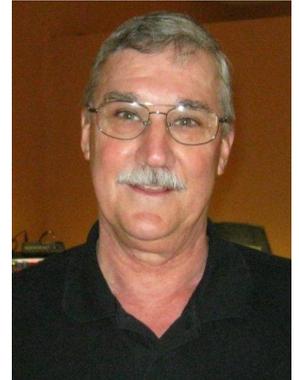
Terry, KB8AMZ



January 31, 2017 will be the first Linux for Hams SIG in the new year. Parky has pointed me to another group like ours located in Southeast Arizona and the newsletter editor for that club is a Linux guy, Ron Herring, W7HD. Ron and I have been in touch via email and Ron has some interesting bits that I will be pass out at the November 2016 and January 2017 Linux for Hams SIG. My co-partner Mike Ryan, KB8TUY and I thank those members that have attended and participated in the L4HSIG

Digital Special Interest Group

Rick, K8CAV



PCARS will be holding its Digital Special Interest Group meeting on Tuesday December 6th at the club site in Ravenna starting at 7:00 pm.

This month we'll be talking about using prosigns and procedures used in Digital-Only nets, and will attempt to check into one of the regularly scheduled nets on 80 meters. As always, we'll also have time available to help with any digital questions or problems you may have.

73, Rick K8CAV



Hamfest Calendar

01/29/2017 - TUSCO Amateur Radio Club - Location: Wallick Auction Barn - 965 North Wooster Avenue Strasburg, OH 44680 - Website: <http://tuscoarc.org> - Talk-In: 146.730 (PL 71.9) - Public Contact: Janice Green, KB8YDK - 32210 Norris Rd - Tippecanoe, OH 44699 - Phone: 740-922-4454 - Email: k8wfn@tusco.net

02/19/2107 - Mansfield Mid Winter Hamfest - Location: Richland County Fairgrounds - 750 North Home Rd - Mansfield, OH 44901 - Website: <http://W8WE.ORG> - Talk-In: 146.94 (PL 71.9) - Public Contact: Danny Bailey, W8DLB - 70 Euclid St. - Shiloh, OH 44878 - Phone: 419-896-2165 - Email: W8DLB113@gmail.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_gwCLfTw-FPuBcYtA



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 !!



December	
1	K8CAV
8	N8QE
15	K8IV
22	NR8W
29	WB8LCD

January	
5	WB8LCD
12	K8CAV
19	KB8UUZ
26	NR8W

The PCARS net is **BIG Fun** - tell your friends to check in via RF or EchoLink! If you have not been a Net Control Operator for PCARS and would like to give it a try, please contact me at: WB8LCD@portcars.org Everyone who is a club member is welcome to have a turn!

February	
2	KE8BWA
9	K8IV
16	KB8UHN
23	AC8NT



Happy Birthday PCARS Members



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

KC8PD	Jim	Aylward	N8XTH	Deron	Boring
KD8EPE	John	Hart	K8IV	Ed	Polack
KD8ICP	Tim	Gehri	KC8RJR	Errol	Jordan
KB8AMZ	Terry	Morris		Ian	Sheline
	Ellen	Kurta	KD8SKL	Amy	Leggiero
KA8TOA	Greg	Ash	WA8GCF	David	DeSimio
KB8UHN	John	Tomasik	KD8GYI	Pete	Hardin



Dues are Due

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

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

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



New! Pay your Dues With Paypal!

Here's something new. You can now pay your dues via Paypal. Just click the button below.

PCARS Dues Options

- Full Membership (1yr) \$20.88 USD
- Full Membership (1yr) \$20.88 USD
- Senior Full Membership (1yr) \$16.76 USD
- Family Members (1yr) \$10.59 USD

Buy Now



At the end of this newsletter is a dues form if you have any changes (new address, phone, call sign, etc.) Or, if you are a NEW member, please use the form so we have all your correct information on file.

PCARS
Join Now
Discover the FUN



Dead Electrical Dudes



Philip, KA4KOE

This Month's Stiff: Major Edwin Howard Armstrong
Entered Mortal Coil: 18 December 1890
Assumed Room Temperature: 31 January 1954

Major Armstrong: Inventor, Ham, Patriot

We radio amateurs (and the rest of the world, for that matter), owe a great debt of gratitude to this month's Dead Electrical Dude, Major Edwin Howard Armstrong. Howard's inventions form the basis for all modern radio communications devices. Indeed, the list of Howard's accomplishments is impressive. Unfortunately, Howard spent the latter part of his life in endless patent battles. In many people's opinion, including this writer's, these battles ultimately drove Howard to commit suicide. An in-depth discussion of the myriad legal wranglings is beyond the scope of this discussion. However, we will touch briefly on the landmarks of this pioneer's career and his troubles:

1913: Armstrong modified Deforest's triode amplifier tube circuit by feeding the output into the input, resulting in amplification of a radio signal thousands of times. If driven still further, the circuit acted as an oscillator. Armstrong termed this method of amplification as *regeneration*. Deforest sued in court and ultimately won via a faulty ruling after 20 years. However, the scientific community generally regards Armstrong as the true inventor of regeneration.

1917: Armstrong joined the Army's Signal Corps in World War I as a Captain, ultimately being promoted to the rank of Major. Armstrong developed the *superheterodyne radio circuit* as a solution to the problem of intercepting German tactical communications on the battlefield. Armstrong applied for a patent of the revolutionary superheterodyne circuit in 1919. All modern radio receivers utilize some version of this circuit.

1933: Armstrong applied for and was granted four patents on circuits that established wideband high fidelity *frequency modulation*, or FM. RCA and other manufacturers began using many of Armstrong's circuits after World War II without permission, resulting in an unbroken string of patent infringement litigation.

1954: Armstrong, in the pit of despair after being left by his wife following a violent argument, commits suicide by walking out of a 13th story window.

1967: Marion Armstrong, after many years of litigation, wins a legal settlement against Motorola. This was the last lawsuit. Marion and her lawyers won every suit that was pending after Edwin's death.

It is interesting to note that Armstrong was quite a fixture at RCA prior to the start of his patent troubles. Armstrong once climbed a radio tower on the corporate headquarters building and did handstands on the large globe on top in order to impress Marion; he loved heights and was temporarily banned from the property by the head of RCA, David Sarnoff. Sarnoff was annoyed at what he termed "damn fool" stunts. Sarnoff befriended Armstrong, and had earlier introduced the inventor to his secretary, Marion, whom Armstrong would later marry. Little did Armstrong know that Sarnoff would in later years figuratively stick a knife in his back for the sake of corporate profits and convenience.

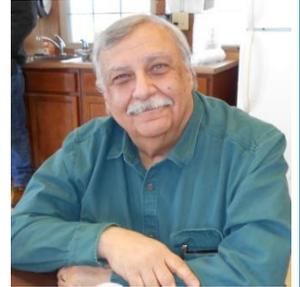
Reprinted with permission from Philip Neidlinger, KA4KOE

References: *Empire of the Air: The Men Who Made Radio*. If you can get a copy of this book, do so, as it is fascinating reading.

Postscript: The intent of this series of articles is to present biographical information in a humorous manner. However, Armstrong was such a tragic figure that no attempt was made in this article to be funny in any way. Sorry boys and girls, my heart just wasn't in it.



DX Contest Special Interest Group



Chuck, W8PT

The DX/Contest SIG recently met and part of our discussion focused on using the club station more often. We have operated in many of the state QSO parties but we wanted to see if we could do better and get more members involved.

We went through the 2017 Contest calendar and picked out at least one operating opportunity for each month through October. The list follows and you can see that there are a couple of VHF contests listed. That means that in order to participate in these we will have to have a couple of VHF antennas. I have started a discussion of the feasibility of stacking a 6 meter and a 2 meter Yagi above our tri-bander.

In the meantime, take a look at the list and please consider taking part this coming year in one or more of the contests listed. Oh yes, there are a couple events where your participation will be almost expected. I'm sure you will recognize which ones.

Jan 21 - 22	North American QSO Party (SSB)
Feb 11	FREEZE YOUR ACORNS OFF
Mar 12 - 13	Idaho & Wisconsin QSO Parties
Apr 15 - 16	Michigan QSO Party
May 6	ANTENNA DAY (Field Day Warm Up)
Jun 24 - 25	FIELD DAY
Jul 15 - 16	CQ World Wide VHF Contest
Aug 26 -27	Ohio QSO Party
Sep 9 - 10	ARRL September VHF Contest
Oct 7 - 8	California QSO Party

We have also discussed getting the Ameritron amplifier hooked up to one of the rigs. This will certainly help in some of the contests listed above. Of course, FYAO, and Field Day are not run from our club site. But we have put together the rest of the list to get more PCARS members exposed to contesting.

In line with this, we want to work with those who are arranging to have Get On The Air days at the club site. We want to see if we can help those who want to participate but have not done so in the past and may have some hesitation in regards to operating in a contest. We'd like to help in making the transition from casual operating to some contest operating as painless as possible. So to this end, we will be planning to use some of the state QSO parties as training sessions for those who want to dip their toes into the realm of sport radio.

We will not be holding a meeting in December since it would held two days after Christmas. But starting in January, we are hoping to see more members coming to our meetings to learn about contesting as well as DXing.

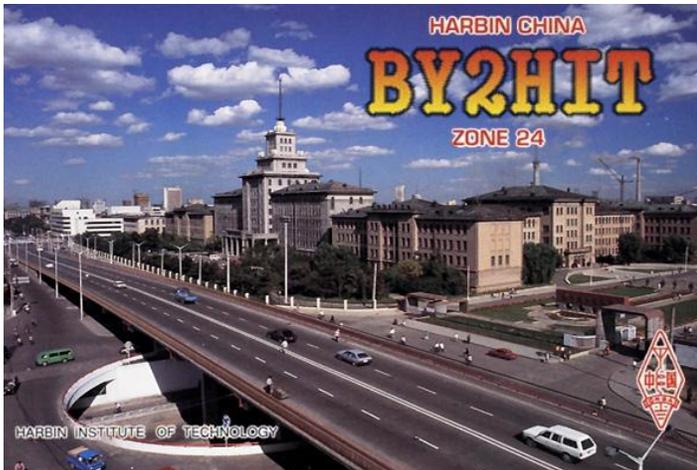


China's Planned Amateur Radio Satellites

Interesting Tweet from the ARRL

China's Harbin Institute of Technology is developing a pair of lunar-orbiting satellites - DSLWP-A1 and A2. According to Mingchuan Wei, BG2BHC, DSLWP is "a lunar formation-flying mission for low-frequency radio astronomy, amateur radio and education," consisting of two microsattellites. Launch is planned in June 2018, to place the pair into a $200 \times 9,000$ kilometer (approximately $124 \times 5,580$ mile) lunar orbit.

The Amateur Radio payload on DSLWP-A1 will provide telecommand uplink and telemetry and a digital image downlink. Open telecommand is also designed to allow radio amateurs to send commands to take and download images.



The satellites are $50 \times 50 \times 40$ centimeters, with a mass of about 45 kilograms and are 3-axis stabilized, with two linear polarization antennas. The team has proposed downlinks for DSLWP-A1 on 435.425 MHz and 436.425 MHz; downlinks for DSLWP-A2 would be 435.400 MHz and 436.400 MHz, using GMSK with concatenated codes or JT65B. Harbin Institute of Technology also developed the Lilac series of CubeSats.



Parky Bank

At the last PCARS meeting, John, KD8MQ brought in something he found during his wanderings around Ohio. When he saw it, it jumped out at him and he just had to get it. He gave it to Rick, K8CAV and said to present it as an award for my efforts with the newsletter (he had to make up something....).



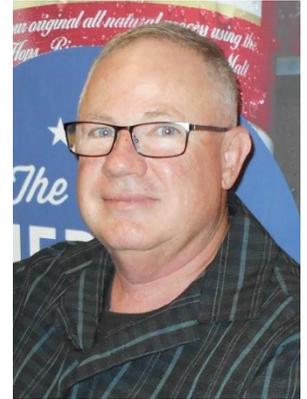
Anyway, Rick presented the "Parky Bank" to me (the real Parky).

Some of the information on the box: It seems that back in 2001 in Newark, Ohio they were celebrating their bicentennial. In 1958 the most modern bank facility in Ohio was opened in downtown Newark - the Park National Bank. Thousands of local people toured the bank to see all that was new and to pick up a shiny new "Parky" piggy bank. As part of the celebration during Newark's bicentennial, a reproduction of the "Parky" bank was made again to be a part of the history of Licking County, Ohio.

What a treat! A Piggy (Ham) Bank with my nickname! Okay - no jokes here - some people are saying it does resemble me....

First Radio Broadcast

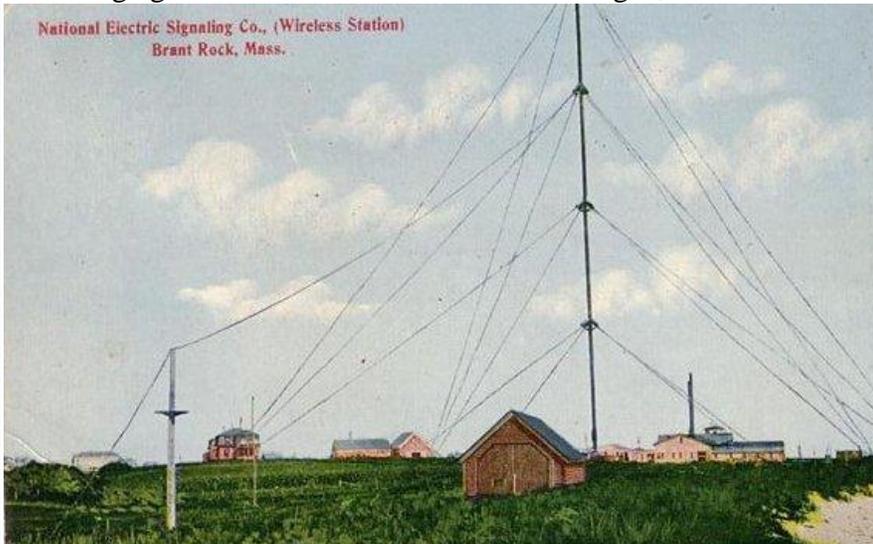
Tom, WB8LCD



The first radio broadcast ever in the world's history was made by Reginald Fessenden on Christmas Eve 1906 when he beamed a "Christmas concert" to the astonished crews of the ships of the United Fruit Company out in the Atlantic Ocean and the Caribbean Sea.

Beamed out from the 400-foot towers of the transmitting shack at Brant Rock, Massachusetts on the Atlantic coast, this AM program commenced exactly at 9 o'clock, with "CQ CQ CQ", meaning "general call to all stations within range", sent out in dots and dashes. Then, over the microphone,

Reginald himself gave a brief speech as to the program to follow. This was immediately followed by one of the operators switching on the Edison phonograph and a solo voice singing Handel's "Largo".

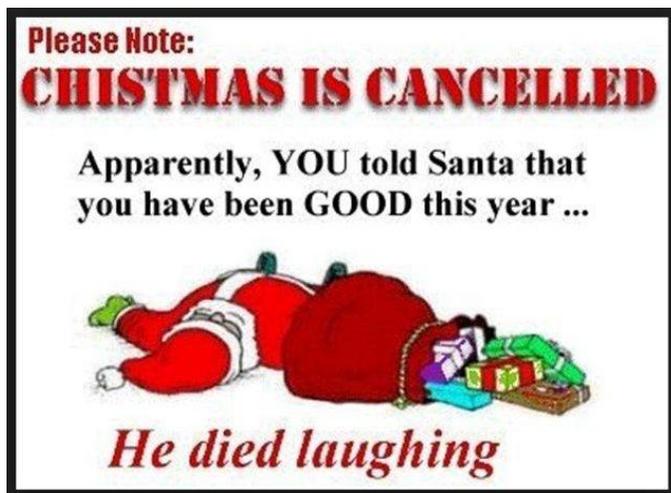


in the highest and on earth peace to men of good will", but, like Mr. Stein, they suffered stage fright.

The first case of "mike fright" I was registered when Mr. Stein, an assistant, backed away unable to utter a word! However, Fessenden grabbed his violin and "fiddled" through "O Holy Night", singing as well as playing. Helen, his wife and his secretary Miss Bent, endeavored to read parts of the Bible text, "Glory to God

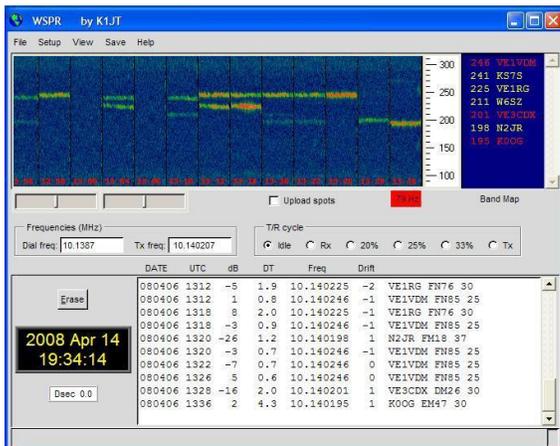
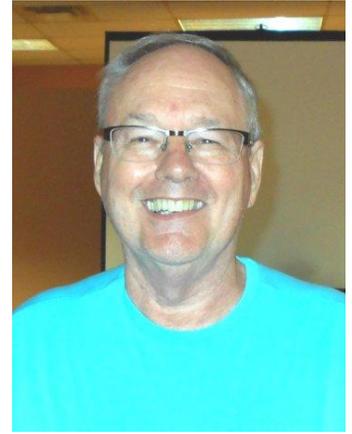
Concluding the program, Fessenden wished his listeners "A Merry Christmas".

The success of this first broadcast was verified by operators, not only from those on the ships of the United Fruit Company but also from vessels all over the south and north Atlantic, amazed at the magic and miracle of this first wireless radio broadcast.



Tech Tip - Using WSPR

Jim, AC8NT

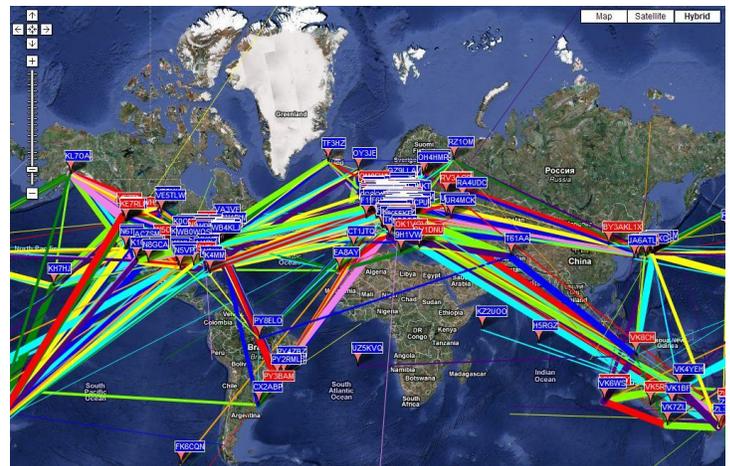


I have been involved with WSPR (Weak Signal Protocol Radio) for the last year or so. It has helped me get some amazing contacts including New Zealand and Australia with only the stealth antennas at my condo. I use WSPR to know when a band (usually 20 meters) has opened up to the use of digital techniques including JT65. Once I receive a WSPR transmission from a DX station, I attempt a QSO with the station using a JT65 transmission. About 60% of the time this results with a completed QSO. It has been a lot of fun using this new tool.

WSPR is a “beacon like” manned transmission transmitting the call sign, power level and location of the transmitter using a modified JT65 format. Unlike actual beacons located around the world WSPR uses much smaller transmitted power (mostly under 5 w and often 50 mw). There are also many more (thousands) WSPR transmitters than beacons allowing propagation to be assessed to practically anywhere on earth. The receiving WSPR software is connected to the internet allowing received transmissions to be displayed on maps for easy analysis. These “contacts” are displayed real time on a global map located at WSPRnet.org. There is also an app for IOS devices that displays these maps.

WSPR can be used by any HF operator equipped with a digitally capable station. All you will need is to download the WSPR software. However, it is a good idea to have a standalone WSPR transmitter. Such a transmitter can be built from kits or even using a Raspberry Pi computer. The cost of such a rig can be under \$50 and take only a few hours to build. These rigs can often be used on multiple bands and frequencies.

If you are interested, PCARS will be having a build day January 21 where we will be building the QRPLabs Ultimate 3S transmitter. This project will cost \$35 and results in a standalone (no computer required) WSPR transmitter for one band. We will also be demonstrating a transmitter using the TAPR shield for the Raspberry Pi computer. If you are interested, please contact me at AC8NT@portcars.org. I will need to know no later than December 29th if you are interested. This allows us enough time to make sure all the kits arrive in time.



Some useful internet links are listed below:

- Wsprnet.org - Spots are posted here and very good discussion threads
- Qrp-labs.com - Excellent kits and newsletters on WSPR radio
- Qrparci.org - Very good club and excellent QRP publication
- Tapr.org - Excellent information and “shield” for Pi

ELF PRODUCTIONS PRESENT

SANTA

COMING SOON TO A TOWN NEAR YOU

FULL PROGRAMME WITH PRESENTS & GIFTS FOR EVERYONE

(AKA) ALSO KNOWN AS

* FATHER CHRISTMAS *

* ST NICHOLAS * SANTA CLAUS

ONE NIGHT ONLY

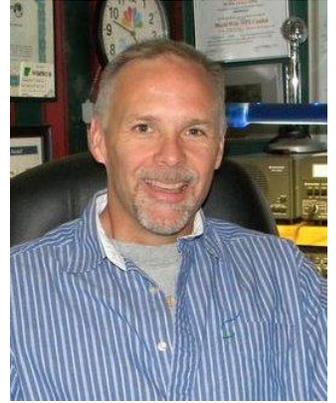
DEC 25th

COOKIES AND MILK COLLECTED BY THE FIREPLACE



75 Meter Lids Vow to Take Back Title

Gerald, WB0RUR
HamHijinks.com



BURBANK, Ariz. –The group of n'er-do-well hams who call the 75 meter band home (and fill the airwaves with disgusting sounds, comments and vulgar language) have vowed to take back the title of “Most Vile Ham Radio Operators” after relinquishing the honor to relatively new upstarts.

These 75 Meter LIDS asked us to hide their identity. “We really have let our standards slip,” says an anonymous ham – a patron of the 75 meter frequencies for years. “Used to be, a few [redacted] and a couple of [redacted] and you were golden. But not so much anymore. Nowadays, you really need to be able to insult race and political positions, [redacted]. And woe be to the [redacted] ham who doesn't have a quick library of sound effects to draw upon at the push of a button.”



Over the past 5 years, aggressive recruiting of prolific obscenity-prone hams to 14.313 MHz and – more recently – to 7.200 MHz have cut the 75 meter band membership in half.

“It won't come easy. We'll have to [redacted] rebuild our base. Plans are for several hamfest workshops across the country. These sessions will include curse word workbooks and [redacted] laminated quick reference guides that hams may keep on their [redacted] operating desks.”

The group admits they may never overcome the 14.313 MHz daytime propagation advantages, but feel they should be able to win strongly in the evening hours as long as those [redacted] foreign broadcast stations don't interfere.



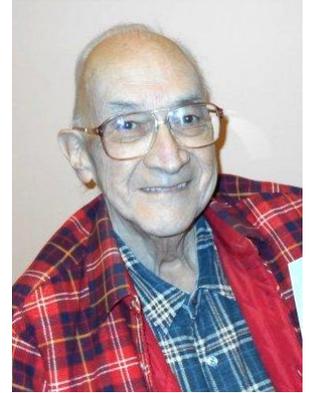


PCARS K8BF
The Club that puts the FUN in Ham Radio!



Holiday Eating Tips

Dick, KB8JFF



1. Avoid carrot sticks. Anyone who puts carrots on a holiday buffet table knows nothing of the Holiday spirit. In fact, if you see carrots, leave immediately.. Go next door, where they're serving rum balls.
2. Drink as much eggnog as you can. And quickly. It's rare.. You cannot find it any other time of year but now. So drink up! Who cares that it has 10,000 calories in every sip? It's not as if you're going to turn into an eggnog-alcoholic or something. It's a treat.. Enjoy it. Have one for me. Have two. It's later than you think. It's Christmas!
3. If something comes with gravy, use it. That's the whole point of gravy. Gravy does not stand alone. Pour it on. Make a volcano out of your mashed potatoes. Fill it with gravy. Eat the volcano. Repeat.
4. As for mashed potatoes, always ask if they're made with skim milk or whole milk. If it's skim, pass. Why bother? It's like buying a sports car with an automatic transmission.
5. Do not have a snack before going to a party in an effort to control your eating. The whole point of going to a Holiday party is to eat other people's food for free. Lots of it. Hello?
6. Under no circumstances should you exercise between now and New Year's. You can do that in January when you have nothing else to do. This is the time for long naps, which you'll need after circling the buffet table while carrying a 10-pound plate of food and that vat of eggnog.
7. If you come across something really good at a buffet table, like frosted Christmas cookies in the shape and size of Santa, position yourself near them and don't budge. Have as many as you can before becoming the center of attention. They're like a beautiful pair of shoes. If you leave them behind, you're never going to see them again.
8. Same for pies. Apple, Pumpkin, Mincemeat. Have a slice of each. Or if you don't like mincemeat, have two apples and one pumpkin. Always have 3. When else do you get to have more than one dessert? Labor Day?
9. Did someone mention fruitcake? Granted, it's loaded with the mandatory celebratory calories, but avoid it at all cost. I mean, have some standards.
10. One final tip: If you don't feel terrible when you leave the party or get up from the table, you haven't been paying attention. Re-read tips; start over, but hurry, January is just around the corner. Remember this motto to live by:



"Life should NOT be a journey to the grave with the intention of arriving safely in an attractive and well preserved body, but rather to skid in sideways, chocolate and wine in one hand, body thoroughly used up, totally worn out and screaming : WOO HOO what a ride!"

Have a great holiday season!! Merry Christmas and Happy New Year !!!

Swap-N-Shop

FOR SALE: Cameleon Magnetic Loop - F-Loop Antenna - 2.5 to 29.7 MHz. \$300

WANTED: 500 Hz CW Filter for Icom 703New

Contact: Dave, WV8P at WV8P@roadrunner.com [2/02/17]

FOR SALE: Signalink - New In Box with cable for ICOM Never used \$80.00. **ICOM SM-20** Desk mike \$125.00. **BY-2** Iambic Keyer paddle with chrome base \$80.00 Lets talk.

Contact: Richard, KA8OAT phone: 330 898 6248 [1/02/17]

FOR SALE: Energy Concepts 30820D 20 Mhz Analog Oscilloscope I recently tossed a bid in on what I thought was one 30820D oscilloscope. I had to pick it up in Northern Virginia. It was a lovely drive down and a very scenic drive back. I thought I was fortunate to get one, but imagine my surprise when they handed me five of them. I have three for sale. They are \$75.00 each and come with manuals and probes.

Contact: Robert, N8RLG by email to: N8RLG@portcars.org [1/2/17]

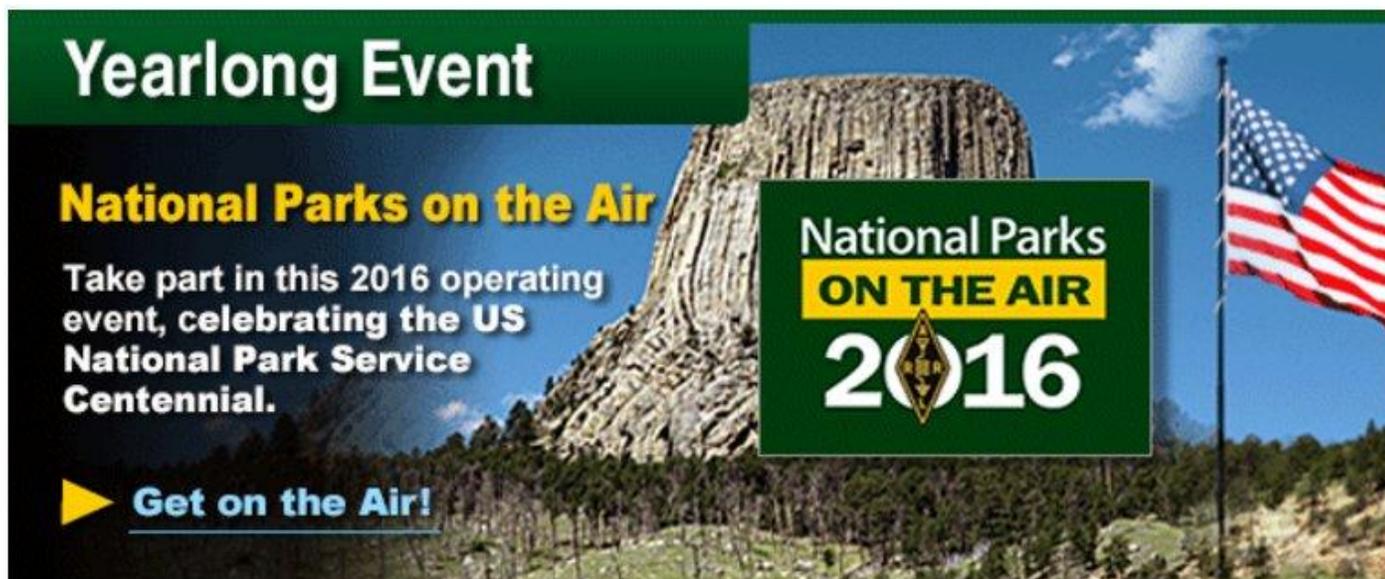
FOR SALE: Base Antennas & Mosley Classic 36 6-element Tri-Bander There are 2 Commercial Base Station antennas manufactured by **Antenna-Specialists Model: ASP-680** factory tuned for the 2-meter band both just came out of service with mounting clamps and N-connectors on the pigtailed. **2 ROHN tower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

Yaesu FT-60-\$100 **100 Bird VHF slugs** - \$50 each. **Antenna Specialist 100 watt mobile amp** - \$100

Contact: Jeff, WA8SAJ by phone at 440-951-6406 [3/02/17]

FOR SALE: Cushcraft 3- element Mono-band 10 meter Yagi: New \$ 289.95, will sell for \$ 125.00.
M2 - 6M5XHP, 6 Meter Yagi 5-element 18 ft boom: New \$ 419.95, will sell for \$ 125.00

Contact: Ed, K8IV by e-mail at K8IV@portcars.org [2/02/17]



Yearlong Event

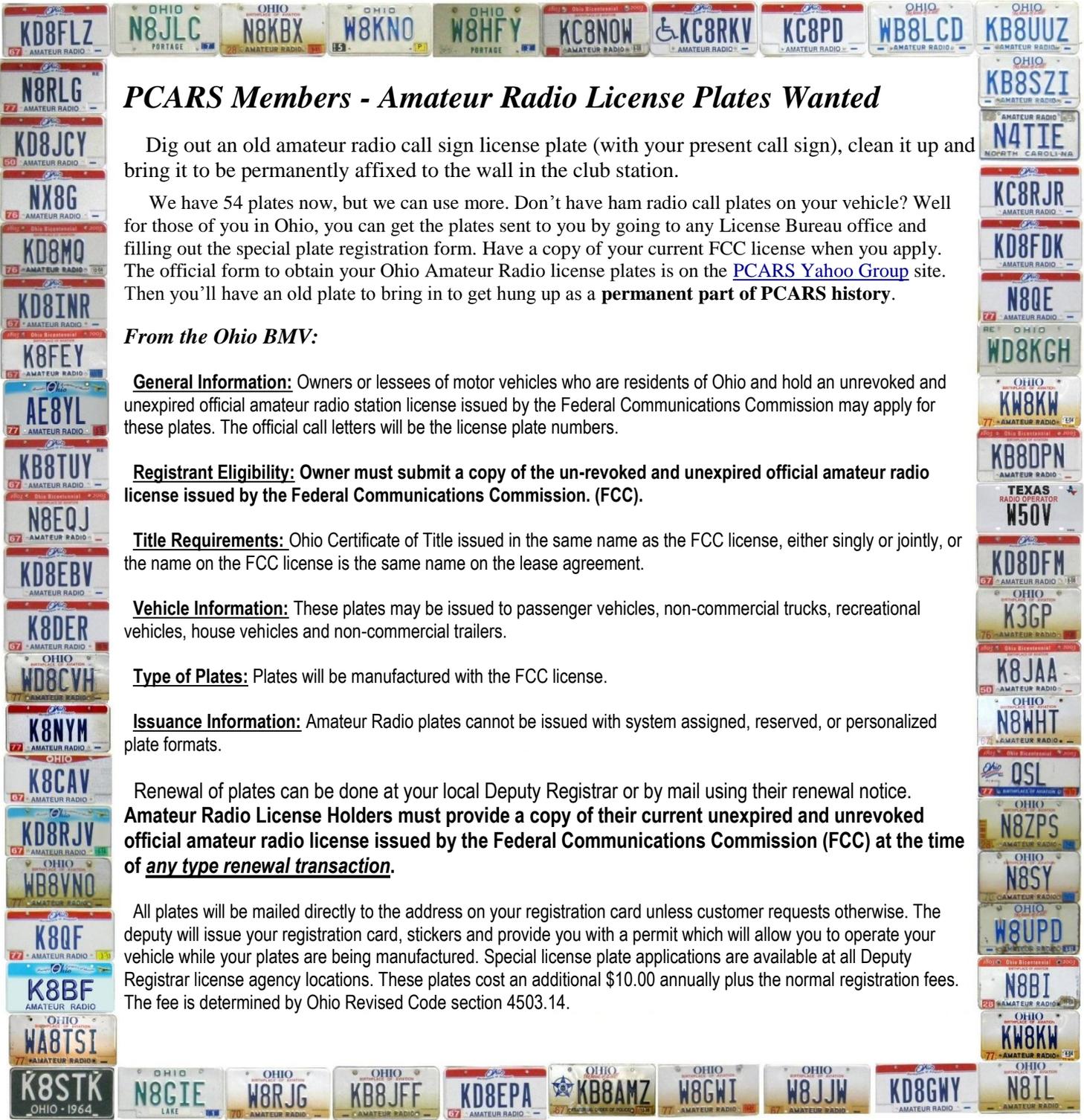
National Parks on the Air

Take part in this 2016 operating event, celebrating the US National Park Service Centennial.

National Parks ON THE AIR 2016

Get on the Air!

The advertisement features a scenic background of a national park with a prominent rock formation (Balcones Escarpment) and an American flag. The text is overlaid on a dark green and black background.



PCARS Members - Amateur Radio License Plates Wanted

Dig out an old amateur radio call sign license plate (with your present call sign), clean it up and bring it to be permanently affixed to the wall in the club station.

We have 54 plates now, but we can use more. Don't have ham radio call plates on your vehicle? Well for those of you in Ohio, you can get the plates sent to you by going to any License Bureau office and filling out the special plate registration form. Have a copy of your current FCC license when you apply. The official form to obtain your Ohio Amateur Radio license plates is on the [PCARS Yahoo Group](#) site. Then you'll have an old plate to bring in to get hung up as a **permanent part of PCARS history**.

From the Ohio BMV:

General Information: Owners or lessees of motor vehicles who are residents of Ohio and hold an unrevoked and unexpired official amateur radio station license issued by the Federal Communications Commission may apply for these plates. The official call letters will be the license plate numbers.

Registrant Eligibility: Owner must submit a copy of the un-revoked and unexpired official amateur radio license issued by the Federal Communications Commission. (FCC).

Title Requirements: Ohio Certificate of Title issued in the same name as the FCC license, either singly or jointly, or the name on the FCC license is the same name on the lease agreement.

Vehicle Information: These plates may be issued to passenger vehicles, non-commercial trucks, recreational vehicles, house vehicles and non-commercial trailers.

Type of Plates: Plates will be manufactured with the FCC license.

Issuance Information: Amateur Radio plates cannot be issued with system assigned, reserved, or personalized plate formats.

Renewal of plates can be done at your local Deputy Registrar or by mail using their renewal notice. **Amateur Radio License Holders must provide a copy of their current unexpired and unrevoked official amateur radio license issued by the Federal Communications Commission (FCC) at the time of any type renewal transaction.**

All plates will be mailed directly to the address on your registration card unless customer requests otherwise. The deputy will issue your registration card, stickers and provide you with a permit which will allow you to operate your vehicle while your plates are being manufactured. Special license plate applications are available at all Deputy Registrar license agency locations. These plates cost an additional \$10.00 annually plus the normal registration fees. The fee is determined by Ohio Revised Code section 4503.14.

PCARS Yahoo Group

Members are reminded that PCARS has a Yahoo Group dedicated to PCARS information. It's a great site to sign up for and get on the mailing list. Check out the PCARS Yahoo Group at:

<http://groups.yahoo.com/group/PCARS/>

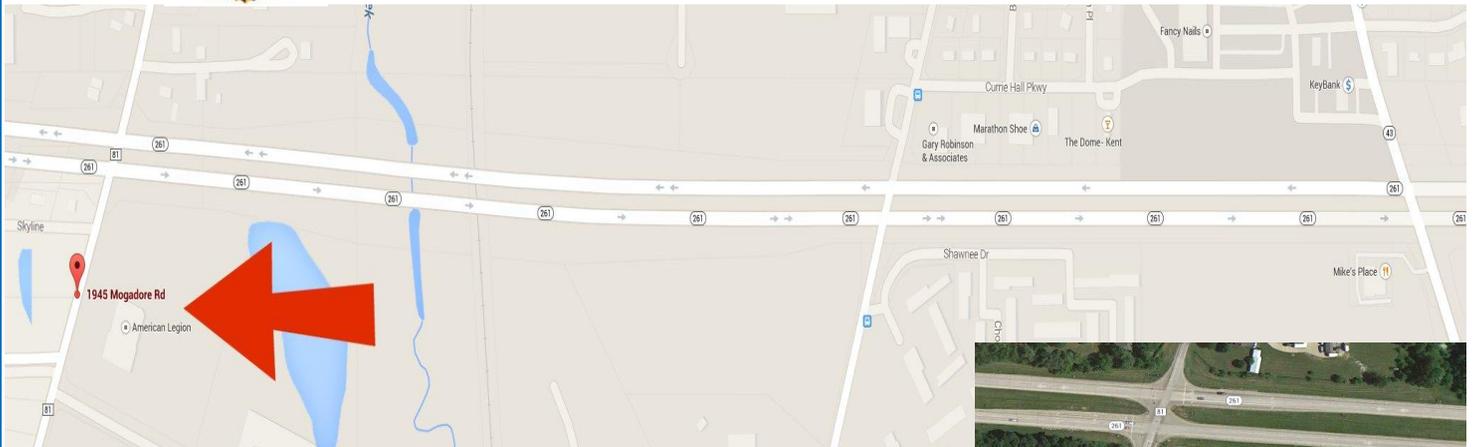


PCARS Meetings

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



*The meetings are held at The American Legion, Post 496
1945 Mogadore Road - in Kent. (Just South of Route 261)*



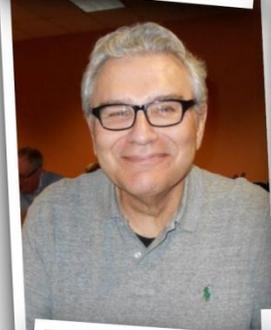
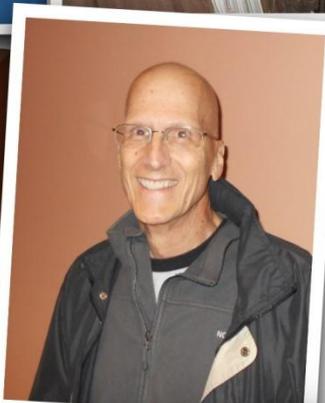
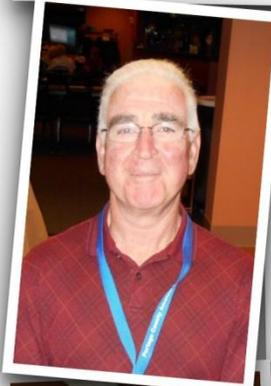
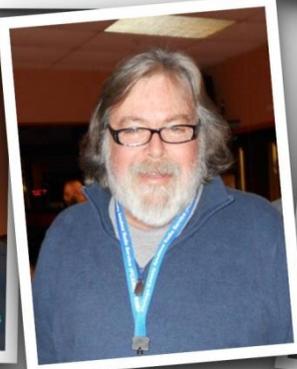
The American Legion Post 496 is located on the southeast corner of State Route 261 and Mogadore Rd. The driveway is on the south side of the building and as you enter you will pass through a parking lot on the south side of the building. Please do not park in this lot but instead continue on to the parking lot on the east side of the building which is the near the rear entrance into the Post 'Canteen'. As you enter the post from this entrance you'll see a bar to the left and a dining area to the right. The meeting area we'll be in is on the right, to the rear of the dining area.



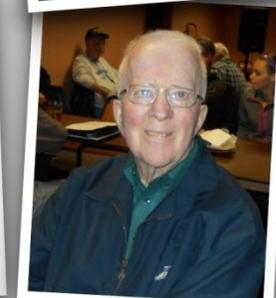
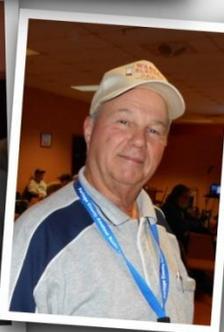
*The picture on the left shows
The American Legion Post 496
as viewed from Mogadore Road.
(looking East)*

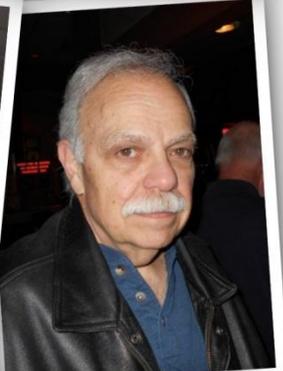
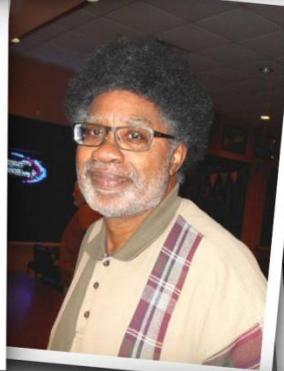
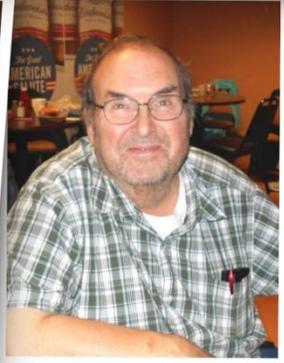
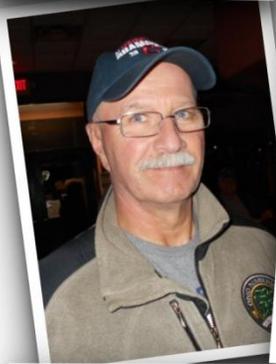
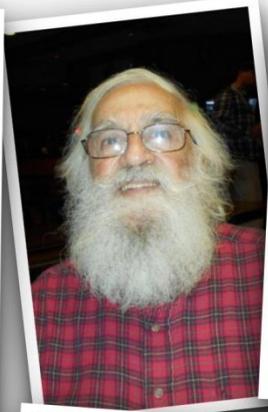
The menu consists of your basic burger / dog / chicken sandwiches, wings, fries, onion rings, and salads. There is also an appetizer selection as well. Adult beverages are available and costs are in line with what you would expect at most bar-restaurant facilities.

If you are a member of the The American Legion, The American Legion Auxiliary, or the Sons of The American Legion, bring your ID card as you get a substantial discount on adult beverage pricing.



PCARS
14 Nov 2016





PCARS 14 Nov 2016



Merry Christmas from All of Us to All of You

WB8LCD	K8IV	N8RLG	KB8UHN	KD8SKL	AC8QG	N1CJW
KC8PD	KD8EPG	KD8ICP	W8CDL	KC8BTN	W6VM	KE8BWA
KB8UUZ	KC8LJY	KD8DFL	KD8MQ	KD8SIZ	KD8ZDZ	Denise
KB8VJL	KD8EPA	K8JE	AB8SX	WA8OHK	WV8P	K8SWJ
W8KNO	KB8JFF	NT8K	K8NYM	KD8SJB	KD8YXH	KD8WGX
KB8DPN	K8FEY	K8AAB	KD8MLE	W8CYN	N8BI	KE8CLO
KB8SZI	KD8EPE	W8JJW	KW8KW	KD8SOP	N8QZ	KD8WBC
KD8EPF	WB2DFC	K3GP	N8ONI	Arlene	N8SY	W8BBQ
N8KBX	KD8FLZ	KD8JCY	KD8CGH	AE8YL	KD8ZXD	KE8CLN
WB8VYW	N8XTH	KD8JRE	WA8GCF	KD8WZS	KD8ZXB	W8GWI
W8PT	K8QF	KD8IUA	KA8TOA	K8MSH	KD8ZSH	K8HYM
N6TL	N8ATV	WA8CCU	WA8OKR	KC8TZU	AC8RH	KE8EGG
KC8RJR	N8GIE	W8SV	N8IL	KB8CLH	KD8YPN	KE8EFG
N4PKW	KC8KYW	K8FS	WD8RAY	KA8OAT	K8RFS	AC8WX
KB8TUY	KD8GHB	KC8YYS	W8RID	KD8VCK	N6JRL	Ian
N4IT	KB8AMZ	KD8VT	AF1K	KD8UXJ	K8EUR	Nathan
WB9LBI	KD8FME	N8HUC	KD8ERY	KD8UXF	KC8RKD	Saml
WB8OVQ	WX1DER	KB3OQV	KD8QEI	AC8NT	KE8BFA	Steve
WD8BIW	N8QE	KB3GXB	KD8DQT	KB8VJO	KE8BMP	Leanne
N8FTP	K8CAV	NR8W	KD8QEQ	W8JFQ	K8KSU	KD8GYI
W8RJG	K8SRR	K8DER	WA4WGA	KD8WCK	WA8TSI	KE8ELR
AB8IE	WA8AR	AB8AA	WD8PME	KD8BBT	W5OV	KB8SK
N8WLE	K8GI	K8JAA	KD8RHW	AC8PR	K3LR	KD8ZLU
N8PXW	KD8HGI	G0BPS	KD8RJV	K5RDL	K1ZZ	KE8EFW
WD8DAU	KD8CGF	KD8LIR	W8EZT	K8BBE	WA8SAJ	AC8XO



Important Dates This Month

Fri 2nd Dec, 2016 - Bartender Appreciation Day

Most occupations have a day dedicated to them and the job of tending a bar is no exception. Bartender Appreciation Day aims to make customers think about the great service their favorite bartenders give while pouring pints and mixing cocktails as well as their great people skills of talking, listening, joking and being a shoulder to cry on and a person to confide in. Over the centuries, a bartender's job has somehow evolved from just pouring your pint or shot into being a therapist of sorts, to the point that these days, that's what bartenders are best known for: being the person you can tell all about your life's troubles while sipping an ice-cold beer. Who could think of a better kind of therapy?



The History of Bartender Appreciation Day: Bartender Appreciation Day originated in America and is linked to the drinks brand, Sailor Jerry. They aim to spread recognition of the day around the world and recently organized a petition to give to the British government that asks them to make Bartender Appreciation Day a recognized holiday in the UK and a day off for all bartenders. Their main argument are that bartenders do much more than just mix drinks, offering a kind of quiet support to troubled, frustrated customers and making them feel like someone really does care about what they're going through. The brand also organizes voting competitions to find the nation's best bartender and makes bar visits on the day to distribute free pizza, clothing and taxi rides home for bartenders.

=====

Wed 7th Dec, 2016 - Pearl Harbor Remembrance Day

“Yesterday, December 7, 1941 - a date which will live in infamy - the United States of America was suddenly and deliberately attacked by naval and air forces of the Empire of Japan.”

– President Franklin D. Roosevelt

There is a beautiful lagoon in the Hawaiian Islands that is named for the lustrous jewel that is formed when a piece of sand irritates a clam into coating it to protect itself. This harbor also houses the headquarters of the United States Pacific Fleet, and has been an important part of the American Naval placement in the Pacific Ocean since 1887. Little did anyone know at that time that an attack on this harbor would bring the entire might of the American Military into a war it was desperately seeking to avoid. Pearl Harbor Remembrance Day honors the men and women who died in the Japanese attack on this beautiful harbor one December day in 1941.



History of Pearl Harbor Remembrance Day: The History of Pearl Harbor Remembrance Day is the history of the attack itself, an attack which took place on December 7th, 1941. The attack was devastating, killing over 2,400 citizens of the United States from the time it began at 7:48am Hawaiian time and ended just 90 minutes

later, making the attack incredibly devastating. Multiple ships were lost during the attack, though things could have been much worse. Intelligence gathered after the attack indicated that there was intended to be a third-wave of attacks to hit the island, complete with an invasion fleet intended to take the island and prevent it from being used as an American base of operation. The purpose behind this surprise attack? America was well positioned in the Pacific to interfere with Japanese fleet maneuvering, and it was hoped that by launching this assault they would cripple the US Pacific Presence and be able to control the ocean unhindered.



How to celebrate Pearl Harbor Remembrance Day: Celebrating Pearl Harbor Remembrance Day is your opportunity to show your support for those veterans who are still alive from the Pearl Harbor bombing, and pay your respect to those who give themselves in service to our country and its security every day. All over the US there are ceremonies to honor these men and women along with the rest of the surviving WWII veteran's, of which there were 855,070 in 2016. Servicemen all over the world deserve the respect of their countrymen, and the war affected us all, so even if you aren't American, pay your respects to those who serve.

=====

Fri 16th Dec, 2016 - Ugly Christmas Sweater Day

Lurking in the murky depths of many people's wardrobes is a colorful, brash and (in most cases) highly embarrassing novelty Christmas jumper which, were it not for Ugly Christmas Sweater Day, would probably never see the light of day. When for Ugly Christmas Sweater Day comes along, it's time to stop being ashamed of the contents of your (likely gifted) wardrobe and start busting out the ugly. There is such a thing as 'so awful you can't really hate it' (the nether-regions of Netflix has multiple movies that fit this criteria), and Ugly Christmas Sweaters fit the bill in your wardrobe.



History of Ugly Christmas Sweater Day: Launched in 2011, this annual celebration, which is growing in popularity every year among adults and children, is not simply an excuse to parade humiliatingly-unfashionable seasonal knitwear featuring Rudolph, Christmas puddings and Frosty the Snowman; it is a light-hearted and enjoyable fundraising event with a serious aim in aid of Save the Children. Since then it has been used as an important event to help drive charity funds for organizations that help children around the world deal with illnesses that shouldn't be anything more than a minor inconvenience. The firm belief that children shouldn't die from easily treated diseases is what brings this holiday to the fore. It's often speculated that we subject ourselves to a minor harmless ailment, the sight of these hideous sweaters, to help save the children from medically similar situations.

How to Celebrate Ugly Christmas Sweater Day: In schools, colleges and offices Christmas jumpers are donned to raise money for the global charity that works to combat premature death among children from easily preventable diseases such as diarrhea, malaria and pneumonia, and whose mission is clinically summed-up in the slogan 'No Child Born to Die'.

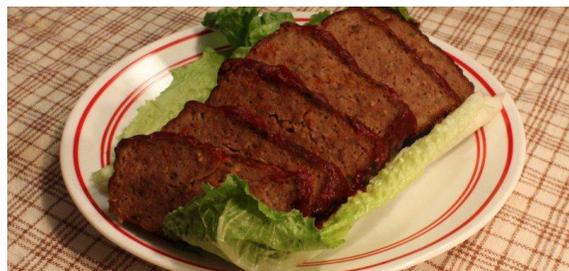
So if you want to celebrate Ugly Christmas Sweater Day, then dig into your wardrobe, and organize a day among your friends and co-workers to assault the eyes of everyone around you with the garish and uncomfortable designs of your Christmas Sweater.

One thing you can do is organize an ‘Ugly Sweater’ auction, where everyone brings their worst sweaters, and people bid to have them take them off. Anything to stop the assault on their eyes. For the trolls in the audience, you can have it be counterbid by people seeking to have the sweaters remain and continue to torment friends and co-workers for the day. As the ultimate finale to this event, you can take all the sweaters that have been auctioned ‘off’ their wearers, and burn them in effigy to these awful emblems of the holidays. The proceeds obviously go to a worthy charity. Alternately, we have to admit that there is something to the ‘ugly sweater chic’, and if you happen to know a group of people with the skills to produce a sweater, you can organize an actual auction. Have people bring their own holiday designs and auction them off in a silent auction, and donate the proceeds to a charity of your choice.

=====

Fri 23rd Dec, 2016 - Festivus

Whilst first celebrated by Dan O’Keefe in 1966, Festivus didn’t gain widespread popularity until his son, Daniel O’Keefe – a writer on the TV sitcom Seinfeld at the time – used the celebration as a joke in the show in 1997.



Festivus encourages the celebration of the festive season without the commercial overtones typically associated with Christmas. Celebrate by getting a plain aluminum pole in place of a traditional Christmas Tree, and labeling common and perfectly normal events as ‘Festivus miracles’. The meal of the day - meatloaf.

=====

Fri 30th Dec, 2016 - Bacon Day

There’s nothing in this world that doesn’t taste better with Bacon. Whether it’s chocolate covered bacon from the confectioners shop, bacon cheeseburgers, bacon wrapped tater tots, or even bacon covered chapstick, you can’t deny that it’s a delicious tasty treat that’s truly gotten it’s fingers in everywhere.



History of Bacon Day

The origins of Bacon stretches back into the middle ages, with the name originating in Middle English from the word “Bacoun”. Following it back you find it in France as Bako, Germany as Bakko, and old Teutonic as Backe. All of these words mean “back”, and what’s that tell us about Bacon? Piggy got back. But that’s not even the earliest example of bacon, the first bacon was known to come from the Romans, and was known as ‘Petaso’.

Bacon has been a popular method of preserving meat and adding a delicious flavor to it by soaking it in a specialized brine. There were even certain breeds that were specially bred for their copious back meat, and those were the Yorkshire and Tamworth. But it wasn’t always just the back meat that was referred to as Bacon, at one time it referenced any kind of preserved pork, but that usage fell out of practice in the 17th Century.

How to Celebrate Bacon Day

This is easily one of the tastiest holidays you can celebrate! The best way of celebrating this dedication to swine delicacies is by indulging in the delicious treats that come from our four hooved friends. You can start by going to an all you can eat breakfast place that has bacon on the menu, trust us, they exist! Then you can head on out

to your favorite lunch stop and get your favorite bacony treat, we personally prefer cheeseburgers with extra bacon!

But there's more to bacon than just meat on meat, bacon is an open-minded kind of food, and has already been known for being part of any of the three major meals of the day. But in recent days it has expanded even more! There's bacon chocolate milkshakes, and bacon flavored lubes, bacon flavored chewing gum, and a million other variations!

To really get into the spirit of the holiday, you can get one of the hundreds of themed pieces of clothing there are. There's bacon underwear and bras, pants and pajamas, hats and sunglasses, if you can wear it, it's been made with bacon patterns applied to it! So get out there and celebrate Bacon Day, and have a delicious new year!

Thanks & 73

Tom "Parky", KB8UUZ
PCARS Newsletter Editor



All of our members (and others) look forward to getting this newsletter every month, so keep sending those inputs! I'm sure PCARS will be known as the **BIG FUN** amateur radio club with plenty of activities to report on in this newsletter all throughout 2017 and beyond.

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

K8CAV, AC8NT, KB8UUZ, N8RLG, W8PT, WX1DER, KC8PD, KB8AMZ, WB8LCD, KA4KOE, WB0RUR, KB8JFF, The ARRL and the World Wide Web.

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





Portage County Amateur Radio Service, Inc. (PCARS)

Membership Application [] New [] Renewal

Name: _____ Call Sign: _____ License Class: _____

Address: _____

City: _____ State: _____ ZIP: _____

Phone: _____ E-Mail Address: _____

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

Birthday: Month: _____ Day: _____ (don't need year)

A \$5.00 initiation fee will be assessed in the first year of membership for all new members.

Membership year is Jan 1 - Dec 31. Dues are due no later than Jan 31st. If you don't pay by 1/31 - you are no longer a member and you will have to pay the \$5.00 fee again plus dues per the schedule below.

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

Check One

Dues Amounts

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

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

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

What are YOUR Ham Radio interests:

Signed: _____ Date: _____

Mail to: Portage County Amateur Radio Service, Inc.
c/o: Mark Haverstock, K8MSH
6835 Colleen Dr.
Youngstown, OH 44512

Date Received:	<input type="radio"/> New	<input type="radio"/> Renew
Initiation Fee: \$	+	Dues: \$ = Total \$
Paid: <input type="radio"/> Cash	-or-	<input type="radio"/> Check Check #
Date Voted:	Results:	Member Number:
<input type="radio"/> Database Updated		Rev. 15 Jan 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



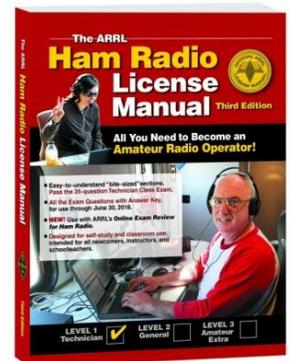
When: Wednesday evening 7:00 p.m. – 9:00 p.m.
January 18, 2017 through March 8, 2017
8 weeks. Official Amateur Radio License testing will be held
at the end of the course

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**

Portage County Amateur Radio Service, Inc.



PCARS - K8BF

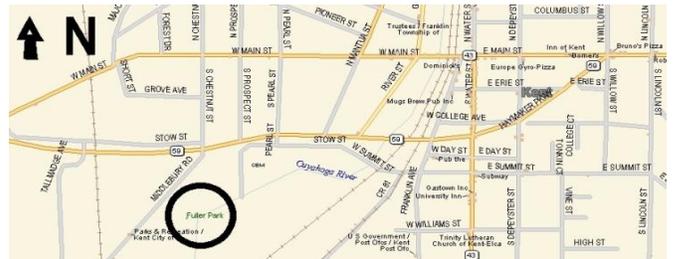


Twelfth Annual "Freeze Your Acorn Off" (FYAO) Special Event Station

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

When: Saturday - Feb. 11, 2017 Set up: 9am

Operating Time: 10am - 4pm EST



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



A beautiful color (suitable for framing) 8" x 10" certificate is available if you contact K8BF and send your QSL with a large SASE to the club call trustee: Bob Hewett, K8FEY - 3670 Sea Ray Cove Reminderville, OH 44202

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



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



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

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

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

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

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

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



~ 2016 Officers ~	2016 PCARS Appointments & Committees	
President - Rick Kruis - K8CAV Vice President - Jim Wilson - AC8NT Treasurer - Amy Leggiero - KD8SKL 3 Year Trustee - Jim Aylward - KC8PD 2 Year Trustee - Chuck Patellis - W8PT 1 Year Trustee - James Andrews - KD8VT Past President - Tom Sly - WB8LCD	ARRL Awards - DXCC WAS, VUCC, WAC	W8KNO Joe Wehner
	ARRL Awards - WAS	KB8UUZ Tom Parkinson
	Club Site Manager/Liaison	KC8PD Jim Aylward
	Contest Coordinator	W8PT Chuck Patellis
	EchoLink	K8SRR Steve Randlett
	Field Day Chairman	W8PT Chuck Patellis
	FYAO Chairman	W8PT Chuck Patellis
	Historian	KB8SZI Peggy Parkinson
	K8BF Callsign Trustee	K8FEY Bob Hewett
	K8BF QSL Manager	K8FEY Bob Hewett
	Membership Chairman	KC8PD Jim Aylward
	Net Control Manager	WB8LCD Tom Sly
	Net Night - Club Manager	WB8LCD Tom Sly
	~ Meetings & Net ~	Newsletter Editor
2 nd Monday of each month. 7pm Thursday night Club Net at 8 pm on 146.895	OSPOTA Chairman	KB8UUZ Tom Parkinson
	Public Information Officer	WB8LCD Tom Sly
	Secretary	K8MSH Mark Haverstock
	Tech, Gen & Extra Class Manager	AC8NT Jim Wilson
	Volunteer Examiner Liaison	N8RLG Robert Gurney
	Webmaster	KD8MQ John Myers



**PCARS
Active
Volunteer
Examiner
Team
Members**

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

THE RADIOGRAM

PCARS Incorporated
Nov. 1, 2005

First Meeting
Nov. 14, 2005



ARRL Affiliated
April 20, 2006



Special Service Club
March 22, 2010

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

This is the **Electronic E-Mail** version of the **PCARS Newsletter, The RADIOGRAM**. The advantages to receiving this way are: You get **COLOR** pictures, active links, **NO postage needed** and the newsletter is delivered right to **YOUR e-mail box!** The **RADIOGRAM** is published every month and only sent to subscribers. If you would prefer not to receive this newsletter, we understand. We'll try not to take it personally. It's not you saying you don't like us, but maybe you just don't have the time to look at all this hard work we've done just for you. Hey, that's cool. But if your heart is truly set on making sure you no longer receive this newsletter, even though we promise to one day reveal the meaning of life in it and you're going to be really upset when you miss out on that, we can take you off the e-mail list. Yes I know the cover says there is a cost, don't worry you won't get sent a bill or be hounded by bill collectors. Since this now looks like a magazine, I thought - what the heck, let's put a price on it. Every month it's listed in a different currency just for fun. Send your newsletter inputs (in **.TXT format**) along with in-focus pictures (not small 20 kb photos) to the newsletter editor: kb8uuz@portcars.org



NLC

