



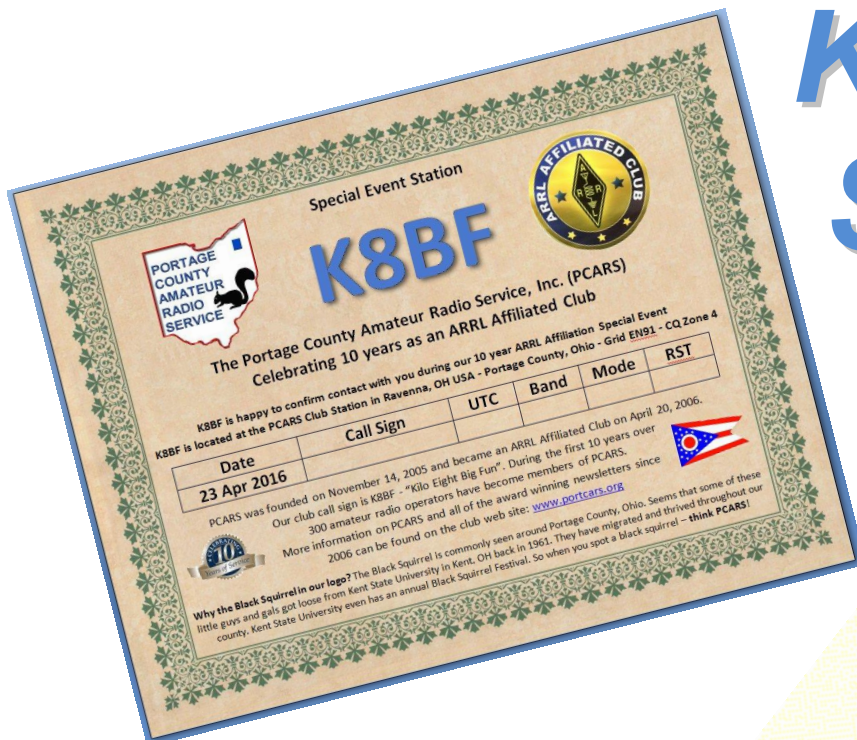
The **RADIOGRAM**

When All Else Fails ~ Amateur Radio Works
~ Official Newsletter of the Portage County Amateur Radio Service, Inc. ~

April 2016 - Volume 11 Number 4

₹271.76

In This Issue -



K8BF Special Event



DOOBIES?



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



April 2016

Volume 11 Number 4

Feature Articles for April

From the PCARS President	3
From the PCARS Vice President	5
Flame Grilled Fragrance	5
Doobies	8
US Amateurs Radio Number Continue to Soar	11
PCARS Strikes GOLD	12
More Certificates Presented at March Meeting	13
FYAO Notes from KB8UHN	14
John, N8WHT - SK	15
Frequency TV Series Now Planned	16
Fishing for Contacts	16
PCARS Charter Members	17
Taco Liberty Bell - Part of NPOTA	19
Danger in Using Stock Photos	19
The Pound Sign	20
Digital Nets	23
Discovering the Microwave Oven	24
Charlie the Tuner's DX Study Guide	26
Pop Science Archive Now Available	28
Heil Sound Celebrating 50 Years	28
NRRL Announces NPOOTA Updates	29
Why You Should Get Amateur Extra	31
Get Ready for Field Day 2016	35
Let's Talk	36
New Amateur Extra Question Pool	39
Sayings for April Fool Day	45
Expanding the Herd	45
Hi from Deron, N8XTH	46

Mark Your Calendars

Schedule of Events	6
Fox Hunting - CFARC	6
PCARS ARRL Affiliation Special Event Station	7
VE Test Sessions	10
Contest Calendar	21
Net Info & NCS Schedule	22
Hamfest Schedule	35
Dayton Contest University	39
Ohio NVIS Day	40
Meetings, PCARS	42
Important Dates During April	46
Important Dates in April	46
Ohio 2 Meter FM Simplex Squares Contest	50
Amateur Technician Class Flier	51
Skywarn Training Flier	52
Pioneer ARF Bus Trip to Dayton 2016	53



Regular Departments

YouTube - PCARS	4
Happy Birthday	4
Patches & Stickers, PCARS	10
EmComm	18
Paper Chase	21
Digital Special Interest Group	30
DX and Contest Special Interest Group	30
Charlie the Tuner's HF High-Lites	32
Swap-N-Shop	38
Member Ham License Plates Wanted	41
Yahoo Group - PCARS	41
Pictures from the Last PCARS Meeting	43
Finals	
Disclaimer	47
Thanks & 73	47
Club Information and Fine Print	54



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



From the President

Rick, K8CAV
PCARS President



Breaking News! PCARS has been awarded a \$100,000.00 grant to build a multi-station radio room with decent radios and ancillary equipment operate phone, CW and digital modes along with computers for each station in the radio room!

OK, it's pretty obvious that was an April Fools lead-in and you might feel disappointed that it's not real but have you actually seen the PCARS radio room and the equipment there? PCARS, with Chuck, W8PT leading the effort has assembled a first class, well equipped radio room with four radio operating positions that include headsets, Signalinks, keys, and computers at each radio location. That, along with a tri-band beam, multiband vertical and wire antenna, make for a pretty decent HF setup. Chuck has also put in a lot of stubby pencil work to set up a contest schedule for PCARS operating under the club call sign of K8BF. PCARS, under Chuck's guidance has done quite well in the QSO parties we've participated in and this year promises to be as good as ever but we're lacking on crucial element and that's you participating in them. I can tell you that everyone that has participated at the club in the various contests has enjoyed the experience. Besides the actual contesting, sharing time with the other folks there is very rewarding. If you've never been involved in contesting, attending a contest session is a great way to see what contesting is all about, how it's done, and even get your feet wet on the air. Keep an eye out for QST's from Chuck for the next one coming up and make plans to be there.

So maybe you're not really into contesting, but you don't have the space or budget or some other reason you can't have an HF station at your QTH? Or maybe you're a Technician class licensee and you're not allowed to operate on the HF bands but you'd like to test drive operating to get motivated to upgrade? Our radio room could have a solution to those issues. We're currently working on some ideas that would open up the club site for more casual operation and we'll be discussing them at the upcoming April board meeting. If you have some ideas on how we might do this, please drop me a note before the meeting on April 4th so I can bring them up.

Another reason for planning for more access to the club site is that we're getting our test lab finished and ready for club members to use. I know it's been a while since we started the project but Jim, AC8NT is going to be helping to put the finishing touches on it so that it will be operational in the next couple of months and members will have a place to work on equipment and build projects.

I mentioned earlier that PCARS has garnered a number of awards in the contest arena but we've also earned many others in different areas of Amateur Radio, and they are unfortunately sitting in a pile on the shelf in the radio room. Jim, AC8NT is fabricating, painting and fastening mounting strips to the wall in the radio room so we can get all of our awards up and available to club members and guests.

With spring and good weather comes some exciting events for PCARS. First up is celebrating PCARS tenth anniversary as an ARRL Affiliated Club with a special event on the air event at the club site using our K8BF call sign. Saturday April 23rd the club site will be open for all to man the radios for this very special on the air event. Chuck, W8PT has sent out details, it's been published in QST magazine, and we'll send out another reminder because we want you to be there to help us celebrate. If you absolutely positively can't make it to the club that day, at least try and get on the air to give us a contact.

PCARS is participating with Kent State University for the third year in their Kent State Mini Maker Faire on Friday April 8th from noon to 4:00 PM on the ground floor of the KSU library. This has been a great opportunity to showcase Amateur Radio to a younger generation with things like using software to “build” a SDR radio, using Arduino and Raspberry PI computers in an Amateur Radio environment, Winlink 2000, and more traditional amateur radio roles. If you’d like to help out, please drop me a note and let me know.

Don’t forget that Skywarn training will be held at the Maplewood Joint Vocational Center on Wednesday evening April 13th. See the flyer in this newsletter for details.

It’s not quite May yet but our all-important Antenna Day is coming up on Saturday May 7th. It’s going to be a full blown dress rehearsal this year for Field Day at our new location at the Freedom Township Community Park on State Route 700 just about a mile north State Route 303.

Well that’s a lot so I’ll close now but not before saying I hope to see you all at our upcoming events and also hope you start and finish all of those “gosh the weather is good” outdoor projects safely!



PCARS is on YouTube

That’s right - PCARS is now on YouTube. So, what does that mean? Hey, we have a new place to put all kinds of videos that are about PCARS for the world to see.

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



Happy Birthday PCARS Members

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

KD8RJV	James	Corbett
KD8GHB	Joe	Racco
N8OQQ	Bryan	Buchwalter
N8QE	Bob	Hajdak
WB2DFC	Dave	Rarrick
KC8FQV	Mark	Studer

KW8KW	Bill	O’Neil
AB8SX	Mark	Eldridge
K1ZZ	David	Sumner
N8GLK	Leon	Loveland
KD8SJF	Paul	Sakalas
W8JJW	John	Wagner



From the Vice President

Jim, AC8NT
PCARS Vice President



It has been a busy month. Weather gets better and the “Honey Do” list grows. But we have also been having some serious fun on the ham radio front. I received two transceiver shields for Arduino computers. Each allows computer control of voice and digital functions for 2 m, 1.25 m and 70 cm. lots of fun getting them to work. We have also been talking to a lot of kids that are interested in getting into the hobby. I was surprised that most of them were interested in the VHF and UHF bands. Lots of interest in satellites, meteor reflection and EME. It will be fun seeing this new generation get into the hobby. We are looking forward to getting some of these students licensed this summer.

Speaking of classes, we just started our Spring Tech session. We have eight including a husband and wife team and two students in the 6th and 8th grade. It's a good bunch and we are looking forward to helping them get into the sport. I want to thank all the club members that are part of the instruction team. They all do a great job!! Our work continues on the production of videos covering the Extra Class requirements. That project should be completed by mid-Summer. These videos will not only supply information to get the Extra Class but also provide help to any ham on technical problems they might be having. It's a lot of work, but also a lot of fun.

Please remember the Ohio 2 Meter FM Simplex Squares contest. It will be held April 23rd and 24th. This is a great way for every ham to get a taste of contesting. This is a contest you can enter and win with a 2 meter handheld. Complete details can be found at <http://www.cfarc.org/contest.php> . The site also provides some good information on antennas you can build to improve your chances at winning a prize along with information grid squares.

**Kent State Mini
Maker Faire®**

Remember other events coming up include a VE session, Saturday April 2nd and the Kent State Makerfaire, Friday April 8th.

Flame Grilled Fragrance

Burger King Japan's perfume, which smells like a flame-grilled burger patty and is named '**Flame Grilled Fragrance**', is seen in front of a whopper at their store as part of the company's campaign in Tokyo.

The perfume, which comes with a Whopper and is limited to 1,000 units, is selling at the price of 5,000 yen (42 USD) and is only available in Japan.

Tokyo Hamfair attendees purchased 900 units.



Schedule of Events

On the calendar for upcoming meetings and activities are:

- **March 23 - May 11 - Technician Instruction Class at the Club Site**
- **April 8 - Maker Faire at Kent State University - noon to 4 pm in the KSU Library**
- **April 9 - K8BF on the air - Georgia QSO Party from the Club Site**
- **April 13 - Skywarn Training at the Maplewood Career Center (see flier in this newsletter)**
- **April 23 - PCARS 10th Anniversary of ARRL Affiliation - Special Event Station**
- **May 7 - PCARS Antenna Day at the Freedom Township Community Park**
- **May 11 - VE Testing at Club Site 7 pm for the Tech Class - Walk-Ins Welcome**
- **May 21-22 - NASA 75th Anniversary open house at NASA Glenn Research Center**
- **June 11-12 - NASA 75th Anniversary open house at NASA Plumbrook**

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



First Tuesday	-	Digital - K8CAV
First Wednesday	-	Free Beer Nut Night
Second Tuesday	-	QRP/CW - WB8LCD
Second Wednesday	-	Hamfest Strategies - Yes dear, I won this
Third Tuesday	-	Antenna - WA8AR
Third Wednesday	-	Pizza Night anywhere but here
Fourth Tuesday	-	DX & Contest - W8PT
Fourth Wednesday	-	Divorce Lawyers , too many meeting nights
Fifth Tuesday	-	Linux for Hams - KB8AMZ
Last Wednesday	-	Which might be the 4 th Wed. Stay home.

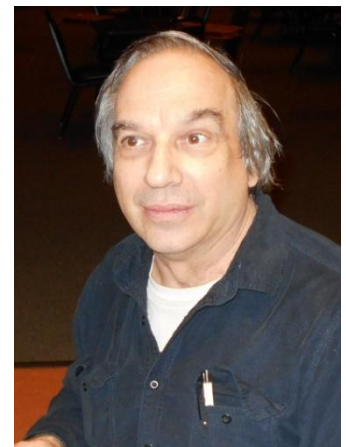


Fourth Thursday - Net Night at the club site - 6:30 pm

Fox Hunting - CFARC

Jim, N8PXW

The Cuyahoga Falls Amateur Radio (CFARC) semi-monthly (1st and 3rd Wed - and 5th, on occasion) Fox Hunt will start at 7:00 PM at the Scout House in Silver Lake, Ohio. The mailing address is 2850 Church St, Stow, Ohio. The GPS coordinates are 41 09.0117 81 27.54714 . It is located on Church St. a block south of RT 59, Kent Rd. The talk-in freq. is 147.27, the club repeater. The hunt freq is 147.525 simplex.



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

Hope you can make it.

PCARS ARRL Affiliation - 10th Year Anniversary

Mark your calendar! Saturday - April 23rd. PCARS will be having a Special Event Station commemorating our 10th year as an ARRL Affiliated Club.

Okay - what does this mean? Special Event Stations can usually be found on the air every week on the HF bands all across the USA and elsewhere in the world.

This anniversary is our opportunity for PCARS to get on the HF bands and call “**CQ -CQ Special Event Station K8BF celebrating the Portage County Amateur Radio Service 10th Anniversary of being an ARRL Affiliated Club - CQ CQ**” That says PCARS is ON THE AIR - give us a call. Many hams all over the USA will be looking for K8BF in order to make a contact and then send in for a certificate. These certificates look pretty sharp and to those that collect them, it will be in demand.



We registered this with the ARRL to make sure we would be listed in the April issue of QST under the Special Event listing. That way hams know we will be out there calling CQ. Our affiliation date is April 20th, but since that fell on a weekday, the following Saturday was chosen to have the special event.

The PCARS club station will be open on Saturday, April 23rd from 10 am until 9 pm. We will be operating on 80, 40, 20, 15 and 10 meters. No ‘search and pounce’ for this event, we’ll find a clear frequency and camp out there calling CQ. Come on out and make some contacts for K8BF!

Review My Information

Event Name	Portage County (Ohio) ARS 10 Year ARRL Affiliation
Event Start Date/Time	2016-04-23 15:00:00
Event End Date/Time	2016-04-24 01:00:00
Event City	Ravenna
Club/Organization Sponsor	Portage County Amateur Radio Service
Call Sign	K8BF
URL/Email	http://www.portcars.org
Event State	OH
Event Zip	
Event Country	USA
Frequency 1	3810
Frequency 2	7210
Frequency 3	14310
Frequency 4	28310
Stations contacted may request	Certificate
QSL Name	Tom Parkinson KB8UUZ
QSL Address	9992 State Route 700
QSL Address 2	
QSL City	Mantua
QSL State	OH
QSL Zip	44255
QSL Country	USA
Public contact name	Tom Parkinson
Public contact call sign	KB8UUZ
Public contact phone	330-389-2026
Public contact email	KB8UUZ@portcars.org
Date/Time submitted	November 3, 2015, 5:58 pm

Special Event Station

K8BF

The Portage County Amateur Radio Service, Inc. (PCARS)
Celebrating 10 years as an ARRL Affiliated Club

K8BF is happy to confirm contact with you during our 10 year ARRL Affiliation Special Event
K8BF is located at the PCARS Club Station in Ravenna, OH USA - Portage County, Ohio - Grid EN91 - CQ Zone 4

Date	Call Sign	UTC	Band	Mode	RST
23 Apr 2016					

PCARS was founded on November 14, 2005 and became an ARRL Affiliated Club on April 20, 2006.
Our club call sign is K8BF - “Kilo Eight Big Fun”. During the first 10 years over 300 amateur radio operators have become members of PCARS.
More information on PCARS and all of the award winning newsletters since 2006 can be found on the club web site: www.portcars.org

Why the Black Squirrel in our logo? 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 in Kent, OH 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!**

Doobies



Joe, W1GFH

After I added these vintage pyrex antenna insulators to my 40 meter dipole I began to hear weird and exotic DX signals in my receiver. But how could this be? Was it my imagination? Or was it....



The Strange Power of the Glass Doobies

WHAT REALLY HAPPENED ON THE TITANIC

The fantastic power of the doobies is known to but a select few. Legend has it that the most sought-after examples were **RCA president David Sarnoff's** personal set of jade-green pyrex insulators, which were said not only to have been responsible for his receiving the **TITANIC's** distress signals, but to have pulled in the squawkings of distant galaxies!

Not so on the ill-fated **TITANIC**. The 4-wire, flat-top antenna installed by the Marconi Company had hard rubber insulators at its end junctions. Wireless operator **Harold Bride** begged to be allowed to replace these with glass or porcelain type insulators, but both Marconi and White Star Lines management refused, stating "we find no particular advantage to modifying the present system".



On April 15, 1912 as the Titanic was sinking, Bride desperately tapped out his distress call for several long minutes before the first reply was heard. "UR SIGS WEAK OM" answered the vessel **Carpathia**, "TRY USNG GLASS INSLTRS". Back in New York, young David Sarnoff listened in fascination as the signals poured into his headphones.

In light of the subsequent disaster and loss of life, shipboard and coastal wireless installations promptly replaced existing rubber and wood insulators with glass or porcelain ones. In radioman's slang, these new antenna insulators were called "**doobies**".



Reprinted from <http://www.qsl.net/wb1gfh/> with permission from Joe, W1GFH - 18 March 2016



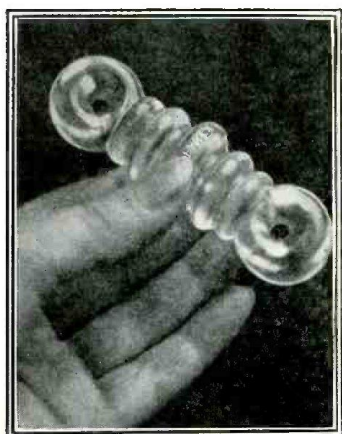
All Byrd Radio Messages from the Antarctic and the First Radio Message from the South Pole



Airplane Floyd Bennett, which carried the Byrd party safely to and from the South Pole.

---flashed over antennae
equipped with PYREX Insulators

"Radio made this expedition possible," says Commander Byrd.



Four PYREX Insulators like this are used on the antennae of the Floyd Bennett.

TRIUMPHANT at last, after months of preparation, Commander Byrd has flown over the South Pole. From his airplane, the Floyd Bennett, he flashed the news by radio while flying directly over the Pole.

On all his base ship, airplane, and portable stations, Commander Byrd uses PYREX radio insulators, exclusively. They have well earned his confidence. The Commander's radio message that he was flying over the North Pole, his distance record for low-wave-length signals, his reports from the transatlantic airplane, America—all were sent over PYREX insulator-equipped antennae.

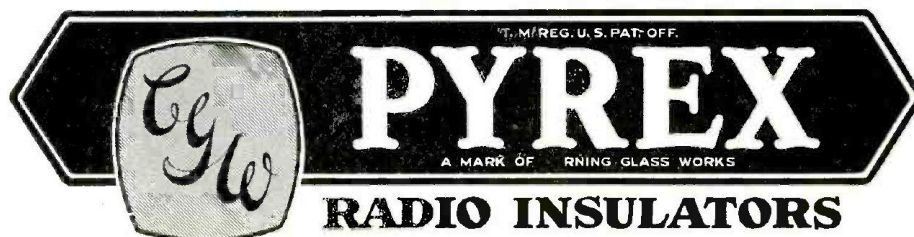
Broadcasting stations, marine and stationary radio communication systems and critical amateurs all over the world find that PYREX insulation preserves maximum strength and clarity of radio impulses.

PYREX Radio Insulators are but one of the many Corning Glass Works' achievements that contribute to human safety, comfort and industrial progress.

CORNING GLASS WORKS, Dept. 65

Industrial and Laboratory Division
CORNING, N. Y.

World's largest makers of technical glassware



Tell them you saw it in RADIO

PCARS VE Test Sessions

Robert, N8RLG
PCARS VE Team Liaison



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

April 2nd - June 4th - August 6th - October 1st - December 3rd

Also: May 11th at the Club Site 7 pm and June 25th at Field Day 4 pm

What to Bring to the Testing Session

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



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:

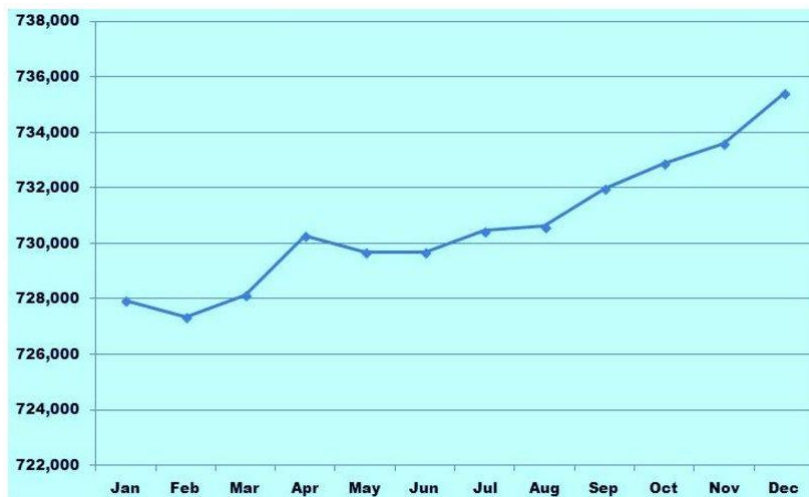
KD8SKL@portcars.org



US Amateur Radio Numbers Continue to Soar

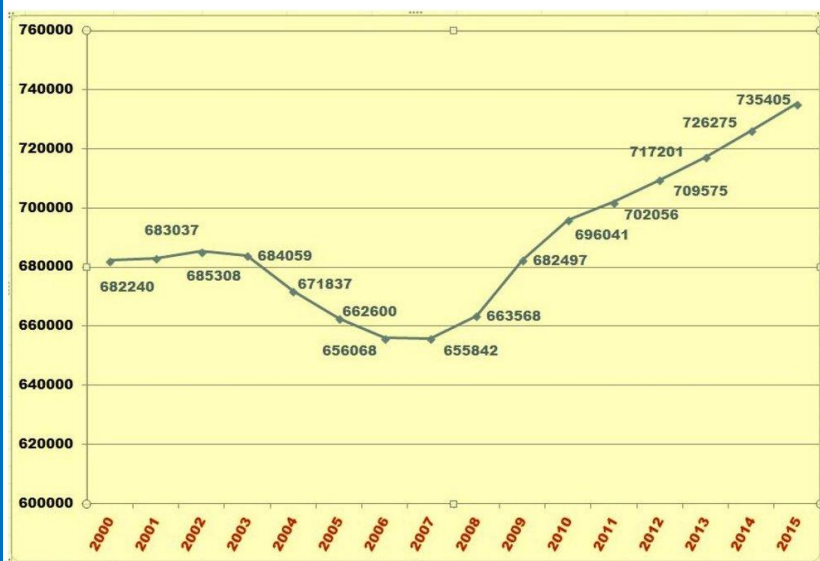
From the ARRL

Amateur Radio is alive and well! Growth in the US continued in 2015, with a record 735,405 licensees in the FCC's Universal Licensing System (ULS) database by the end of the year. That's up 9130 over December 2014, a 1.2 percent rise, continuing a steady increase in the Amateur Radio population in every year since 2007. In 2014, the Amateur Radio ranks grew by a net 8149 licensees. The figures, compiled by Joe Speroni, AH0A, on his FCC Amateur Radio Statistics web pages, exclude expired licenses that are within the 2-year grace period, and club station licenses. Compared with the same month 10 years ago, the Amateur Radio population in the US has expanded by 72,805 licensees — or nearly 11 percent.



US Amateur Radio growth in 2015.

As expected, the biggest growth by license class was in Technician licensees, which rose by 6570 in 2015. General ranks increased by 3079, and Amateur Extra numbers went up by 3496. The 2015 overall numbers faltered a little in April before rebounding in July. The introduction of a new General class question pool on July 1 appeared to have only a slight effect on month-to-month numbers in that license class. ARRL VEC Manager Maria Somma, AB1FM, said 2015 was another banner year for ARRL VEC-sponsored test sessions.



US Amateur Radio population from 2000 to 2015. The FCC dropped the Morse code requirement in 2007.

“For the second year in a row, we have conducted more than 7000 Amateur Radio exam sessions in a year, an important milestone for the ARRL VEC,” she said. “A total of 7358 ARRL-sponsored exam sessions were administered in 2015, compared to 7216 in 2014. The number of exam applicants was down slightly in 2015, compared to the previous year, and the number of examination elements administered also dipped slightly, she noted.

“Since 2014 was a record-setting year, the numbers of 2015 examinees didn’t drop so much as return to more typical levels,” she explained.

Somma pointed out that the ARRL-VEC also processed and filed nearly 10,100 license renewals

and address changes for members in 2015. This is a free service to ARRL members.

Technician licensees still comprise a little less than one-half of the US Amateur Radio population. As of December 31, some 47,850 Advanced and 10,800 Novice licensees remained in the FCC database. The FCC no longer issues Advanced and Novice licenses, and their numbers continue to decline.

Once again, California far and away was home to the largest number of licensees among the 50 states, with 103,938 at the end of 2015, up from 107,735 at the end of 2014. North Dakota remained the state with the fewest number of Amateur Radio licensees, with 1510, up very slightly over the previous 12 months. Club station licenses in the US number 11,599, according to Speroni’s web pages. — Thanks to Joe Speroni, AH0A; FCC ULS licensing statistics.

PCARS Strikes Gold

Yes, 11 PCARS members struck **GOLD**. During the last California QSO Party contest (back in October), 11 PCARS members were on the air making contacts from the club site. The team included: **W8PT, KB8UUZ, N8QE, K8MSH, N8BI, KD8FDK, W8KNO, K3GP, KB8AMZ, W5OV and WB9LBI**. Since this was the 50th anniversary of the CA QSO Party they had an extra special event going on during the regular contest. They decided to have a number of special 1x1 call sign stations on the air. The extra challenge was to get those special stations and spell out the words "GOLD RUSH". And, PCARS got them! As a special award, each of the team members received a beautiful stamped color challenge coin that commemorated the 50th running of the CA QSO Party. Chuck, W8PT presented the team members that were present at the March club meeting with their contest certificates and their Gold Rush Coin. Terry, KB8AMZ and Parky, KB8UUZ donated their coins to be put in the frame with the PCARS CA QSO Party certificate which will be hanging in radio room at the club site. Contest results were published in the February issue of The RADIOGRAM

Members Present: W8PT, KB8UUZ, K8MSH, N8BI, K3GP, W5OV, WB9LBI



More Certificates Presented at the March Meeting

Chuck, W8PT was kept busy at the March PCARS meeting passing out certificates. Not only did he have the CA QSO Party certificates, he also passed out the 2015 Ohio QSO Party team certificates. AND presented the “BEST DISH” awards for FYAO 2016.

OQP Certificates



FYAO 2016 Best Dish Awards - 1st Place - Karen N8HUC (James accepted the award for her).
2nd Place to Mark, K8MSH and third place went to Amy, KD8SKL



FYAO Notes from KB8UHN



John, KB8UHN

Hey! I got my picture on the cover of the Radiogram last month for winning FYAO!

I thought about buying five copies for my mother, but I think she's questioning the sanity of her son, who would go out in eight degree weather just to talk on the radio.



I'm not sure how I even managed to do so well in the contest. So many things went wrong. And not because of Murphey, but because of my own stupidity. So I assemble and raise the mast for my so-called inverted vee Carolina Windom antenna and stretch out the antenna wires. I tied the rope to the 4:1 BALUN to hoist up the antenna. That was when I realized I had forgotten the coax at home! What an idiot! Nice antenna, nothing to hook it up with. Fortunately, my Wife Coletta, W8CDL, was still at home and can bring the coax to me. It's a special piece of coax to be used with the Carolina Windom. A certain length of the coax is used as a radiator, and then choked at the right spot. So I really needed this piece of coax.

After a while, she arrives with the roll of coax and I'm ready for the contest. That was until I jerked a wire out of the power connector for the radio. I always solder the power pole connectors after I crimp them. Well, almost always. Idiot. I sat there thinking maybe I should just pack up and go back home. It's clear that this is not going to be a good day. But after a few minutes I managed to shove the wire back together and tape it, not expecting it to hold. Just don't pull on it or bump it. Finally, an hour after the contest started, I'm ready to get on the air. At this time, I'm really resisting the urge to ask myself what else can go wrong? I've learned that when you ask that question, you're gonna get the answer.



After about an hour on the air, I had only two contacts. And one of them was from within the park! The other one was from Aurora.... Ohio. And I could barely hear him. Something else is wrong. I happened to have a 25 foot roll of coax in the truck and out of desperation, I changed out the coax, so I had no choke. I have to lower the antenna and hope it's long enough to connect to the radio. What have I got to lose? Signals increased a lot on 40 meters, but I could tell I was getting RF back to the radio. If I touched the radio, SWR went crazy, and the only band my audio wasn't distorted was on 40. Finally, I'm making some

contacts, and nobody is complaining about my audio. I guess things are ok but I wasted two and a half hours of the contest. I must be way behind! Just keep calling CQ.

Thanks to everyone who gave me a contact and helped me win. It goes to show that even a blind squirrel can find a frozen acorn once in a while.

John, N8WHT - SK

John, N8WHT was a former member of PCARS.

Published: March 10, 2016 4 in the Record Courier

John H. Beck, 68, of Ravenna, passed away on Monday, March 7, 2016. John was born in Ravenna, Ohio on July 29, 1947 to parents Howard C. and Hazel (Kelsey) Beck.

He was retired as a bus driver for PARTA but many people would remember him working at was once "Wood's Funeral Home" running ambulance and his involvement with the American Red Cross where he was a member of the Disaster Action Team traveling throughout the country and the world when disaster struck. John was an enthusiastic collector of toy and model hearses and ambulances having amassed an extensive collection. He also enjoyed attending flea markets and loved country music. John was a member of the First United Methodist Church of Ravenna and a 20 plus year member of the Portage Amateur Radio Club.



John is survived by his children: Jack Beck and Dawn (Roy G. Norman) Beck. He also leaves his 5 grandchildren, 7 great-grandchildren and his aunt Jean Beck. He was preceded in death by his parents, his siblings: Keith Beck, Lula Pol, Louie Flowers and his great-grandson Masyn Miller. Per his wishes cremation has taken place and no services will be held.

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!**

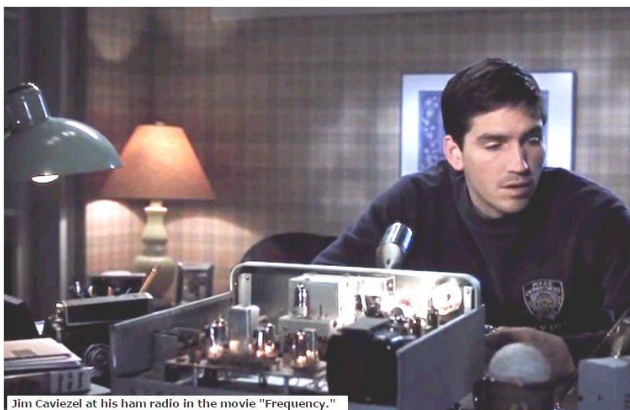
National Parks ON THE AIR 2016

Frequency TV Series Now Planned

From the ARRL

“Frequency” TV Series Now Planned for CW Network

The buzz from Hollywood is that a TV series based on the 2000 movie “Frequency” now is in development on — appropriately enough for a show featuring ham radio — the CW. Amateur Radio served as a plot device in the movie and will do the same in the TV series.



Jim Caviezel at his ham radio in the movie "Frequency."

In November 2014, The Hollywood Reporter indicated that NBC had committed to a “Frequency” series, but those plans apparently fell by the wayside.

Now, the CW has ordered a pilot episode of “Frequency,” and if the network does go forward with the project, the modern-day version of “Frequency” the TV series would feature a young female police detective named Raimy, who uses ham radio to communicate through time with her deceased father, played by Riley Smith. Actress Peyton List is said to have landed to role of Raimy, reprising Jim Caviezel’s movie character.

When the original “Frequency” movie debuted, the ham radio theme and the chance to see vintage ham gear and real, glowing vacuum tubes on the big screen generated considerable interest within the Boat Anchor community. The ARRL worked with the film’s producers.

Fishing for Contacts

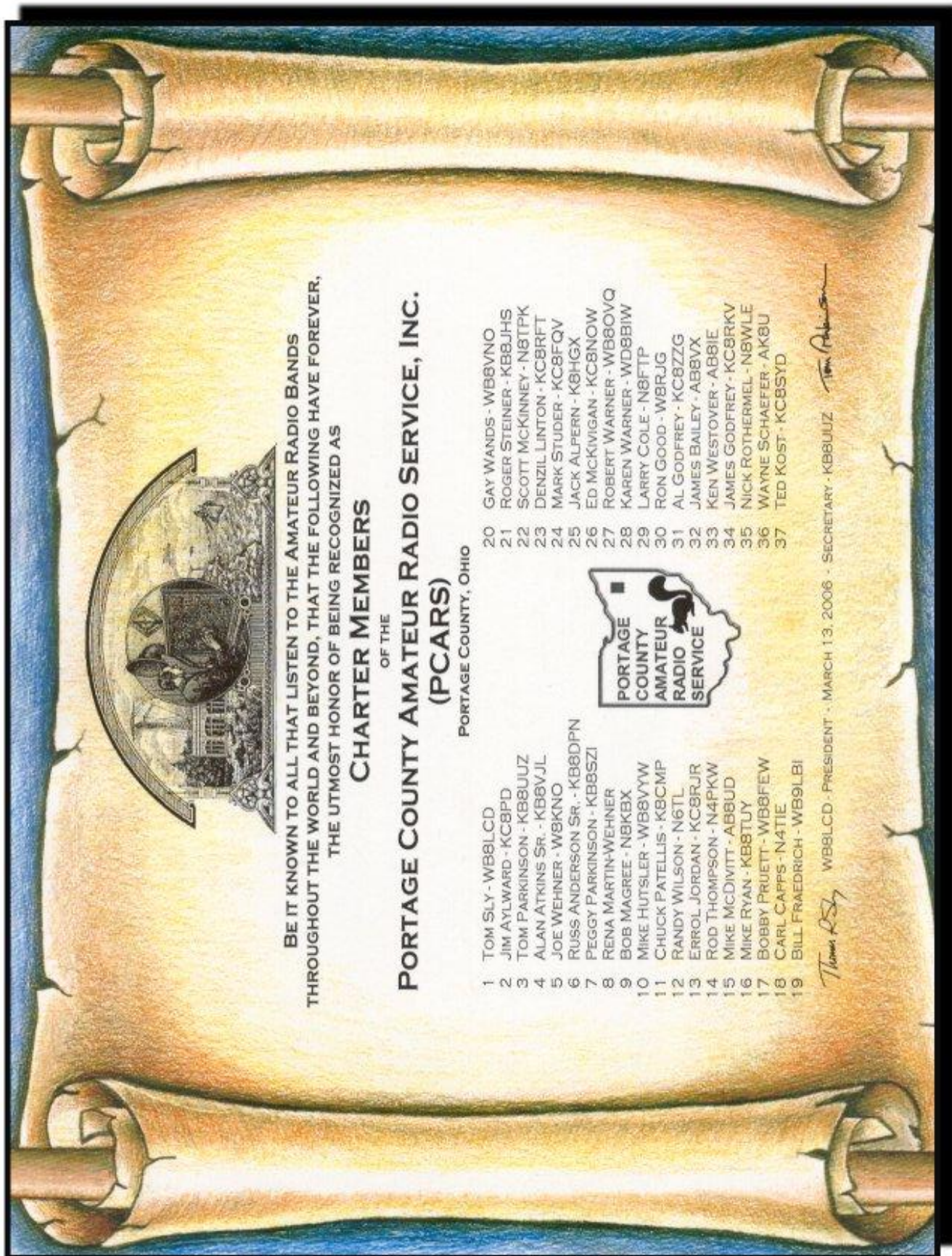
Al, KB8VJL

It’s been a long winter here in Mantua Township and I’ve had lots of time, since I’m retired, to branch out a bit in my hobby. I studied the physics of ham radio and frequency propagation in regards to submersible transmitters that would aid in combining two hobbies into one. I can go fishing, and also make contacts on ham radio at the same time. Right now, these only work on 10 meter CW by twitching the line after it has been cast. I hope to make more improvements as time goes by and possibly get either PSK or RTTY working.



PCARS Charter Members

When PCARS first started, Charter Membership Status was granted to anyone signing up through March 13th 2006. During that time 37 people became Charter Members and we presented with this certificate.



Jim, KC8PD/AAF5PD

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



On Wednesday, March 23rd, the State of Ohio conducted its annual tornado warning siren drill. The goal of the drill is to have local communities set off their warning sirens or other warning systems 0950 hours around the state.

For many locales this may be the only time during the year that they actually test their systems. Widespread publicity about the test helps to alleviate the public's concerns when the sirens start wailing. Other communities may have regularly scheduled tests during the Spring and Summer months that residents are familiar with.

As in many other counties, here in Portage County the amateur radio community supports the drill by making reports of locations where sirens can be heard. This year, ARES® of Portage County and the Portage County EMA's Communications Unit worked together to get a net on the air to collect siren reports.

An announcement regarding the siren test was sent out to all PCARS members because all area hams are invited to participate, not just ARES® or CU members. It is always a bit of a challenge getting participants because the drill occurs during the morning of a weekday, so we want to make sure that everyone who is on the air has a chance to join the net. This would be the same practice during a severe weather net.

Mike, KD8FLZ, the Emergency Coordinator for ARES® of Portage County served as the net control station. For the first time, the net was run from the radio room at the EMA's Emergency Operations Center at the Justice Center on Infirmary Road in Shalersville. Mike opened the net 0930 and took check-ins right up until the sirens were set off. After the three minute siren test, Mike polled the net and took reports as to whether sirens were heard at the participants' location.



Thanks to an invitation from Ravenna City Police Department Captain Dave Rarrick, WB2DFC, I had the chance to participate from the City's dispatch center. Also attending were Mayor Frank Seman and Police Chief Tim Adkins.

An interesting lesson was learned by the city thanks to this year's test. A VHF radio link is used to trigger the sirens. Another municipality in the area was also transmitting on that frequency at the same time so the coded signal from Ravenna was not received by at least two of the sirens. A solution is in the works!

In conjunction with this year's tornado siren test, and as a part of FEMA's national PrepareAthon, the Portage County EMA was encouraging schools, businesses, and public offices to hold an actual tornado drill. This provides a terrific opportunity for all of those entities to review and test their emergency plans to ensure that they can keep their students, staff and the public safe during a severe weather event.

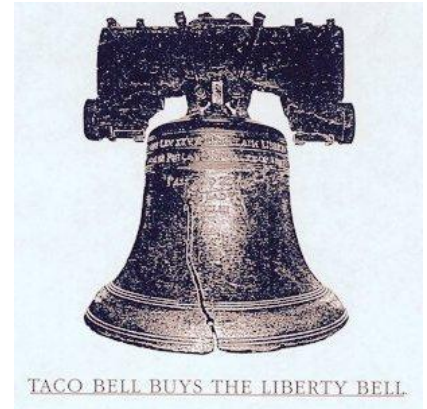
You can be sure that there will be another local tornado drill in 2017 and this is the perfect time to start reviewing safety plans at home and at work to make sure that you are prepared!

The Taco Liberty Bell - Part of NPOTA

The Taco Bell Corporation took out a full-page ad that appeared in six major newspapers announcing it had bought the Liberty Bell and was renaming it the Taco Liberty Bell.

Hundreds of outraged citizens called the National Historic Park in Philadelphia where the bell was housed to express their anger. Their nerves were only calmed when Taco Bell revealed, that this action would allow Amateur Radio Operators working with the National Parks On The Air festivities the opportunity to activate at every Taco Bell since they were now part of the National Park System.

The best line of the day came when White House press secretary Mike McCurry was asked about the sale. Thinking on his feet, he responded that the Lincoln Memorial had also been sold. It would now be known, he said, as the Ford Lincoln Mercury Memorial.



Danger in Using Stock Photos

Paul, KD8SJE



Care must be taken when choosing photos for an article. There are a number of companies that specialize in 'Stock Photography' supplying photos for writer to use. Sometimes those companies have no idea what they are shooting and don't realize how wrong it can go.



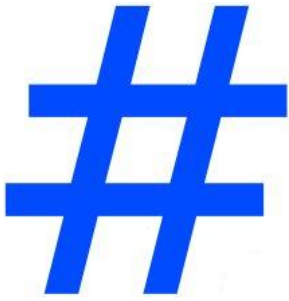
This photo is a prime example of that. But the biggest irker of all is the photo's title: "Beautiful woman repairs soldering a printed circuit board."

I understand how marketing works, but I still lament that we continue to point out the physical attributes of a person doing an activity. In this case, it says that the woman is an anomaly, rather than just a woman doing something that women do all the time. Something we see through incredible female electronics superstars who

represent this field that all know damn well how to hold a soldering iron.



The Pound Sign



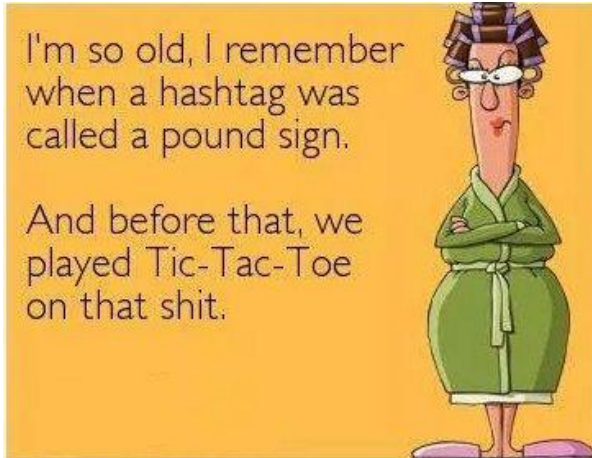
John, KD8IDJ
Ohio ARRL Section Public Information Coordinator

You never know what you're going to dig up when you ask or research a simple question...like what does the # sign really mean!

Boy, did I get an education and maybe even busted a few myths of my own. What I thought was just a simple "pound" sign has a history of its own.

Butchers, as far back as the Roman Empire used the pound # sign to actually indicate the weight of meat and other goods. Some would-be-butchers today prefer to use their thumb to indicate a pound!! The Chinese have a similar symbol...but it means you get a free fortune cookie... or something like that. Today, most answering machines use the pound # sign to retrieve messages.

As a young journalist I was taught the # sign was to be used three times at the end of a typewritten story...# # #. I used it a lot in journalism school and so did most the world. All of the stories that came across the teletypes of the Associated Press (AP) and United Press International (UPI) ended with # # #. In fact, you could tell just by listening to the chug and grind of the teletype machine when a story was complete. The machine grunted a distinct noise and rhythm as the three pound signs were printed out. On occasion, when I got to type directly to the AP, the style manual required that I end every story in an approved manner...# # #.

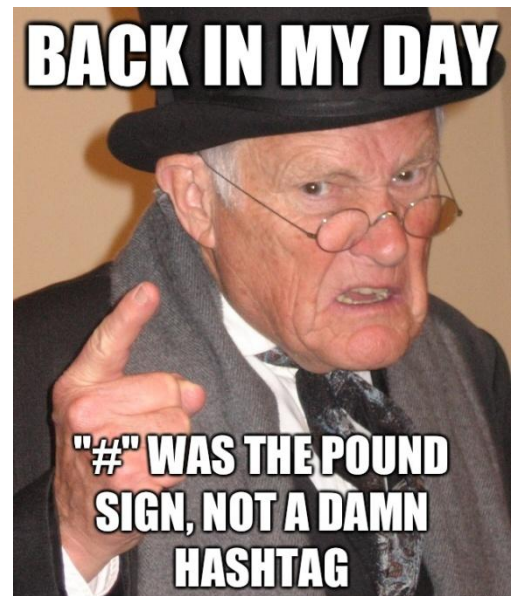
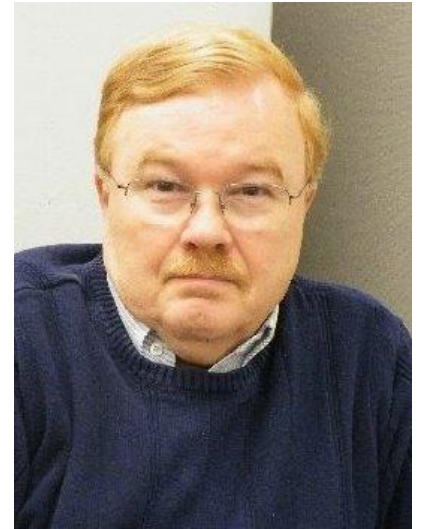


As an "old" journalist I often ended my news releases with the 3 pound sign moniker. As a ham radio operator I know I often used the three pound signs...right after 73!

Today the pound sign is called

HASHTAG. It's the driver for millions of social media messages and I'm not sure I even know when all of that started and how. I still feel that whoever invented the internet stole the pound sign from legit journalists and are using it incorrectly to communicate a bunch of meaningless garbage. Maybe it's just me!

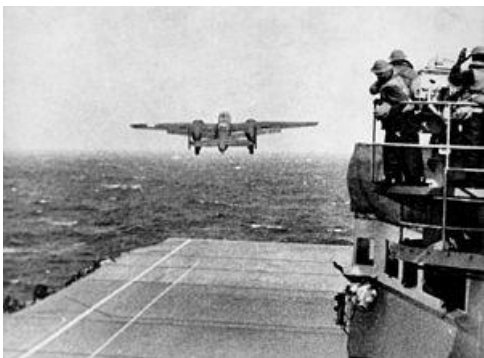
So tonight I'm going to fire up my three old teletype machines and wait for the familiar grunt to see if anyone still likes the old way of doing things. I have a sinking feeling my cell phone, I-Pad and computer will be HASHTAGGING while I'm waiting.



Paper Chase

Joe, W8KNO

We all know the most important piece of paper to get this month is the Certificate from PCARS for our 10 Year ARRL Affiliation. However, there is a QSL you might want to obtain.

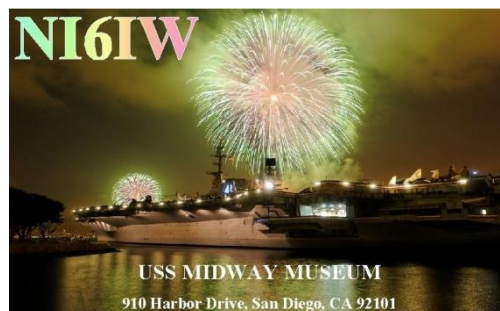
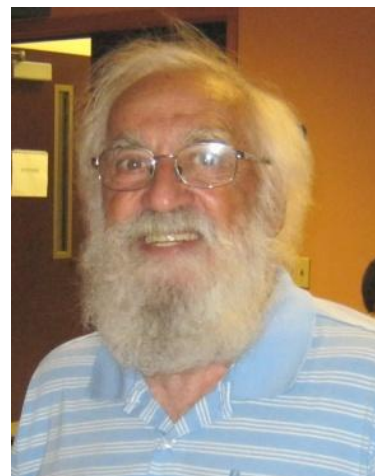


The USS Midway (CV-41) Museum Ship is sponsoring a special event to commemorate the Doolittle Raid. The Doolittle Raid, also known as the Tokyo Raid, occurring on Saturday, April 18, 1942, was an air raid by the United States, from the USS Hornet, on the Japanese capital Tokyo and other places on Honshu Island during World War II.

It was the first air raid to strike the Japanese Home Islands. It demonstrated that Japan itself was vulnerable to American air attack, served as retaliation for the Japanese attack on Pearl Harbor and provided an important boost to American morale. The raid was planned and led by Lieutenant Colonel James Harold "Jimmy" Doolittle, United States Army Air Forces.

You will find them using SSB around 7.250 and 14.320; PSK on 14.070; D-STAR on REF001C or XRF041A from noon to 7 pm EDT. Send your QSL and SASE to:

USS Midway Museum Ship Radio Room
910 N Harbor Drive
San Diego, CA 92101



Contest Calendar

April 2016	
Missssississippippi QSO Party	1400Z, Apr 2 to 0200Z, Apr 3
Georgia QSO Party	1800Z, Apr 9 to 2359Z, Apr 10
Michigan QSO Party	1600Z, Apr 16 to 0400Z, Apr 17
Ontario QSO Party	1800Z, Apr 16 to 1800Z, Apr 17
10-10 Int. Spring Contest, Digital	0001Z, Apr 23 to 2359Z, Apr 24
Florida QSO Party	1600Z, Apr 23 to 2159Z, Apr 24

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



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 !!

April	
7	K8CAV
14	N8RLG
21	KD8FDK
28	N8QE

May	
5	KB8UHN
12	WB8LCD
19	NR8W
26	KB8UUZ

June	
2	WB2DFC
9	K8IV
16	WB8LCD
23	KD8SKL
30	K8CAV

July	
7	KC8PD
14	N8QE
21	WB8LCD
28	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!

PCARS Net & Net Nights at the Club Site

Tom, WB8LCD

Nets and Net Night at the Club Site continue to be popular PCARS activities. As of this writing, there is one more net to be held in March (KC8PD as Net Control on March 31st), the information I have here is short by one. So Far, there have been 12 nets in 2016 with a total of 236 check-ins. That's an average of about 19.5 per week. No, I'm not sure who the half check in is every week, but, if you could, please pull it up to a full check in! We've had 9 different Net Control Operators – Parky, KB8UUZ leads the pack with 3 nets already this year.

As always, we appreciate all of our Net Control Operators. I think most of them would tell you that it's a good experience, and with practice becomes a **Fun** experience. I'm pretty sure variety is appreciated by the net participants, too. If **YOU** have never been a Net Control Operator and would like to give it a try, please drop me an email and I'll make sure to put you in the rotation, at your convenience. And you don't have to do it alone! We have a script and plenty of experienced operators who would be happy to sit with you to make sure it goes without a glitch. Even if you don't think you have an adequate station, it can be done from the PCARS club site in Ravenna. No Excuses! In February, Amy, KD8SKL, stepped in and did her first time as Net





Control Operator. Everything went fine, she had a total of 20 check-ins on the net (that's ½ more than average), and, her handwriting is much more legible than most! Thanks Amy...

Movie nights have been a big hit at Net Night at the Club Site. In February, after the nets, we watched the movie "Oh Brother, Where Art Thou?". In addition to great flicks, there's always plenty of "theater style" popcorn (thanks to Mike, KB8TUY) and other snacks and beverages. It's always a good time. In April, we will screen the Woody Allen movie "Sleeper". This is just a slapstick, funny movie about the future.

Our March Net Night at the Club Site was our St. Patrick's party. So who do you think showed up? Santa Clause! That's right, Russ, KB8DPN, was in town for the Easter weekend and paid us a visit. It was good to see Russ and hear about his new job and Ham Radio activities out in the corn fields of Iowa.

Thank you all for your participation in the PCARS nets!



PCARS Digital Nets

Rick, K8CAV

PCARS current holds a digital net twice a month on the second and fourth Tuesday at 7:30 PM. Of late, the first net of the month has been on VHF FM through the K8IV repeater and the second has been on the digital sub-band of 80 meters.

Tuesday evenings have also been scheduled for the club's Special Interest Groups at about the same time frame and there is some feeling that participation in either the nets or the Special Interest Groups may be suffering to a degree because they both occur at the same time.



With that in mind I'd like to ask your opinions about changing the day or time for the nets to get more participation. Specifically, what day or time would be most likely to get you to participate in our digital nets? When thinking about the answer to that question, keep in mind that the first two Mondays of each month are occupied by either a club board meeting or our monthly membership meeting; Thursdays are totally out of the question due to existing club voice nets; and Fridays tend not to be a good day for scheduling much of anything for a number of reasons. Wednesday evenings may be an ideal place to schedule although we do have Tech and General classes on Wednesday evenings during parts of the year.

Please give this some careful thought and drop me an e-mail at K8CAV@portcars.org to tell me what day and/or time might get better participation on the nets.



Discovering the Microwave Oven

Matt Blitz

Spencer was no timid lab rat. "Gramps was loud, wanted to make everything happen at all times"—so the inventor's grandson George "Rod" Spencer Jr. told *Popular Mechanics*. "There were no 'challenges,' simply everything was a goddamn problem that needed to be solved. Everyone trusted him to do just that."



Growing up poor around the turn of the century in the wilderness of Howland, Maine, Spencer had little formal schooling and, unlike the millions of modern Americans who now heat up their lunch in his invention, often had to hunt for his food. Modern conveniences like the automobile and electricity were unfamiliar to him at young age, but he got into engineering anyway, thanks in large part to a natural curiosity that drew Spencer to the mills that populated the region. At 12 he got a job at the spool mill one town over. At 14 Spencer got hired to install electricity at the nearby paper mill. A few years later he was so inspired by the heroic actions of the Titanic's radio operators that he joined the Navy and learned the new technology. Spencer would later explain, "I just got hold of a lot of textbooks and taught myself while I was standing watch at night."

A chef using a Raytheon Radarange III, an early commercial microwave oven, circa 1958.

After World War I, Spencer landed a job at the newly-established American Appliance Company, co-founded by engineer Vannevar Bush, who today is most known for organizing the Manhattan Project and predicting many of the innovations that led to the computer revolution and the internet. In 1925, the company changed its name to Raytheon Manufacturing Company. It's still around today making missiles, military training systems and electronic warfare products.

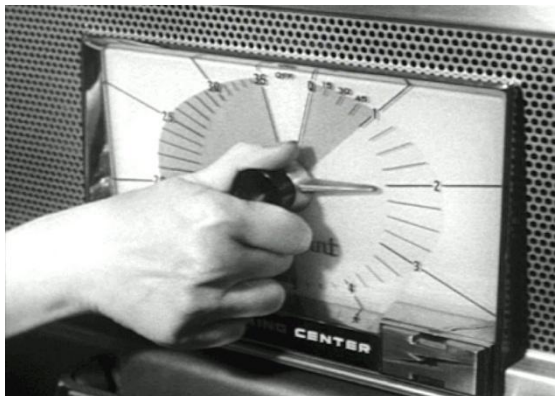
In the '20's, Spencer became one of Raytheon's most valued and well-known engineers. During World War II, while Raytheon was working on improving radar technology for Allied forces, Spencer was the company's go-to problem solver. For example, he helped to develop proximity fuses, or detonators that allowed you to trigger artillery shells so they'd explode in mid-air prior to hitting their mark. In an email to *Popular Mechanics*, current Raytheon engineer and part-time company historian Chet Michalak says Spencer "had a knack for finding simple solutions to manufacturing problems."

"THERE WERE NO 'CHALLENGES'—SIMPLY EVERYTHING WAS A GODDAMN PROBLEM THAT NEEDED TO BE SOLVED"

Spencer earned several patents while working on more efficient and effective ways to mass-produce radar magnetrons. A radar magnetron is a sort of electric whistle that instead of creating vibrating sound creates vibrating electromagnetic waves. According to Michalak, at the time Spencer was trying to improve the power

level of the magnetron tubes to be used in radar sets. On that fateful day in 1946, Spencer was testing one of his magnetrons when he stuck his hand in his pocket, preparing for the lunch break, when he made a shocking discovery: The peanut cluster bar had melted. Says Spencer, "It was a gooey, sticky mess."

The Snack



A story this good can't help but change as it's passed down over the years. Some tellings of the legend say it was a melted chocolate bar that led to Spencer's eureka. But if you ask Rod Spencer today, he'll tell you that's dead wrong.

"He loved nature (due to his childhood in Maine)... especially his little friends the squirrels and the chipmunks," the younger Spencer says of his grandfather, "so he would always carry a peanut cluster bar in his pocket to break up and feed them during lunch." This is an important distinction, and not just for the sake of accurate storytelling. Chocolate melts at a much lower temperature

(about 80 degrees Fahrenheit) which means melting a peanut cluster bar with microwaves was much more remarkable.

Understandably curious just what the heck had happened, Spencer ran another test with the magnetron. This time he put an egg underneath the tube. Moments later, it exploded, covering his face in egg. "I always thought that this was the origin of the expression 'egg in your face'," Rod Spencer laughs. The following day, Percy Spencer brought in corn kernels, popped them with his new invention, and shared some popcorn with the entire office. The microwave oven was born.

At this point you might be wondering: How did Spencer know cooking with microwaves was safe? According to his grandson, he didn't. Today, we know that the low doses of electromagnetic radiation emitted by microwaves are generally considered safe (though, the FDA admits that no studies have been done to assess the impact of low levels of microwaves on humans over time, and there are those who still firmly believe microwaves are killing us). But back in the 1940s, this information was not available. "He didn't care about that," Rod Spencer says. "This was when people would wear nuclear stuff around their neck to get rid of cancer."

In 1947, just a year after Spencer's snack food serendipity, the first commercial microwave oven hit the market. Called the "Radarange," it weighed nearly 750 pounds and cost more than \$2,000. Needless to say, it wasn't a big seller. The first domestic microwave was introduced in 1955, but it too failed to launch because it was expensive and because microwave technology was still an unknown. It wasn't until 1967, two decades after its invention, that the microwave oven finally caught on in American homes in the form of Amana's compact "Radarange." By 1975, a million microwaves were sold every year.

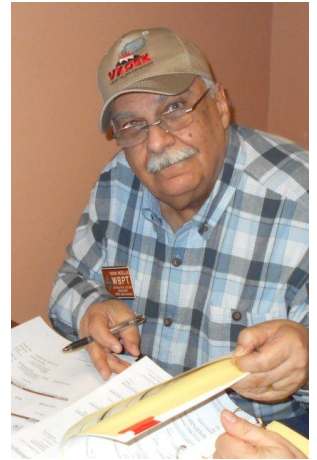
Today, Rod Spencer is a project manager and engineer himself. He's writing a book about his grandfather. "I love telling these stories. I grew up with so many of them, my head is full. Some of the stuff he did - he was crazy, he was smart and everyone loved him." And thankfully, he liked feeding the squirrels.



Dave, NF8R found this on: <http://www.popularmechanics.com/technology/gadgets/a19567/how-the-microwave-was-invented-by-accident/>

Charlie the Tuner's DX Helpful Study Guide

Chuck, W8PT



It's Spring!!! As many of you know, our April issue of the Radiogram is a Special Issue and I thought that I would do something to help those who are new to DXing and those veterans of the bands who need a certain amount of refresher.

I got several interesting questions regarding DX and topics involving DX and contesting and I thought that I would list a few here. So let's start:

Q1. I call "CQ" for hours looking for DX, but no one will respond. What can I do to get some DX hams to QSO with me?

A1. Oh - did I mention I don't take questions from dimwits? Next question?

Q2. When planning a DXpedition, what are some of the critical elements that have to be considered?

A2. Good question. When planning a DXpedition you need to divide the hams into two operating types and naturally there needs to be someone to coordinate them: possibly a part-time volunteer planner and an evaluator; maybe an expeditor or two and a coordination team. A quality assurance group is an absolute must. There also must be a procurement division to oversee the critical outsourcing of the delicate liaison coordination advisory consulting group, along with an augmented full service corporate jet executive travel and entertainment bureau. We'll need an expanded personnel department to locate a highly placed unnamed source for leak management and spin doctoring. An extensive search will be necessary to acquire a clueless CEO of the DXpedition to front for us and a hyper-energetic sales staff before our initial public offering.....errrrr,, what was that question again?

Q3. I want to be a good DXer and tester. I own twelve VHF/UHF and eight HF transceivers. I sometimes feel, however, like they own me. What is the ideal number of rigs for a DXer like me?

A3. Some where between one and all of them. Keep in mind, however, our suppliers can probably import them faster than you can buy them.

If you check the latest ARRL Handbook, 143 Edition, you will find that the maximum number of belt-clip transceivers, obviously depends on your belt size. The formula is: $N_t = B/4$. Where N_t is the number of transceivers and B is your belt length in inches. If you have too many transceivers for your current belt size, simply take all of your meals at Eat-N-Park in Streetsboro like I do. I am proud to say that I can handle 12 transceivers. You can of course use an auxiliary trouser support system (suspenders) while you are "building" the more permanent support system.

The ideal number of transceivers at your QTH is the maximum tolerated by your spouse. You can help yourself with this issue by conditioning him or her to accept the fact that the purchase price of ANY transceiver is only \$39.95, if you act right now. But wait, there's more. If you act in the next 10 minutes, they will throw in a 20 meter Yagi at no additional cost. All you pay is \$39.95 plus shipping and handling at \$2,345.00.

For your vehicle, the exact number of transceivers depends upon the space available for your rooftop/trunk lid antenna farm. A full-size van is the ideal vehicle for maximizing this capability. Remember to install all remote-head transceivers otherwise any passengers will have to sit in the back seat. If you want a practical demonstration of this, just check out K3LR's SUV.

Which brings us to the next question.

Q4. I'm going to putting up a huge antenna system and I might need some help with the zoning. Do you know of any good attorneys in the area that might be able to help in this matter?

A4. Let me caution you that the phrase "good attorney" is a huge contradiction in terms. Next?

Q5. I am going to the Dayton Hamfest this year and it's always hard to tell the Techs from the Extras. Do you have a solution?

A5. Funny you should ask. I'm thinking of color-coded apparel. I feel that colors should be assigned in bands such as our resistor code does. My method would be very noticeable at hamfests.

Cap indicates your class of license held, since it is the most obvious piece of apparel, standing or sitting:

Red: Extra; Orange: Advanced; Yellow: General; Green: Tech Plus; Blue: Tech; Violet: Novice; White: Reciprocal Alien. Shirt/blouse color indicates where your last test was taken: Brown: VE; Red: FCC. Pants/Skirt color indicates your code speed: Red: >20wpm; Black: 13 wpm; Brown: 5 wpm; No pants: No code.

Q6. I hold a Bachelor's and Master's Degree in Education. Yet, I found the Technician Operator Class exam to be one of the hardest things that I have ever had to do. Now I want to do some HF DXing and so I have to move up to General.

How am I ever going to do that?

A6 Just memorize some of the key answers to the key questions and you should have no trouble. Here, let me help you.

1. What is the correct spelling of the word "amateur?"

- a. amature
- b. amateur
- c. ameteur
- d. amuater

Draw a line under choice C. It looks something like an "O" with a gap on the right side.

Remember that amateur has a "mate" in the middle.

2. What is the mathematical expression for Ohm's Law?

- a. $A+B=C$
- b. $E=I \text{ times } R$
- c. X marks the spot
- d. $O=H/M$

Don't waste your time memorizing such drivel. When in doubt, choose B. Stick with the important issue: Write a 100 word essay about E's feelings about its totally unfair binding relationship with I and R.

3. How much electrical power is dissipated in a 10 ohm resister carrying 1 ampere of current?

- a. 1 watt
- b. 100 watts
- c. none
- d. 10 watts

Have your personal trainer crunch the numbers while you write an environmental impact statement about the effect of the resistor's dissipated power upon global warming. (Hint: The answer is 10 watts. That's choice D – the last one on the list, the one following C, the first one from the bottom up. Oh, I give up.)

Well, there you have it. I hope that this study guide helped you out in your quest for that elusive DX. I want to thank John Johnston, W3BE, whose QCWA Journal article helped greatly in formulating the above column.

Have your own Radio Station!

Learn AMATEUR RADIO



AT HOME IN YOUR SPARE TIME

Get your Amateur Radio license and "go on the air." NRI, leader in Electronics home training for more than 50 years, offers a choice of training plans leading to required FCC licenses, ranging from Basic Amateur Radio for the beginner to Advanced Amateur Radio for the ham who already has a license and wants to move up.

HAM RADIO EQUIPMENT INCLUDED

NRI's beginner's course includes your own Novice Class 25-watt transmitter, 3-band receiver and transistorized code practice oscillator with code key and headset. You learn code using special LP records. Choose from 3 Amateur Radio courses. Low tuition. Monthly payment plans. Get all the facts. Mail coupon. No salesman will call. NATIONAL RADIO INSTITUTE, Washington, D.C. 20016.



.....MAIL COUPON TODAY.....
: NATIONAL RADIO INSTITUTE 57-049
: Washington, D.C. 20016
: Please send me information on Amateur Radio training.
: Name _____ Age _____
: Address _____
: City _____ State _____ Zip _____
: ACCREDITED MEMBER NATIONAL HOME STUDY COUNCIL
:

Entire Popular Science Archive Now Available

The entire 140-year history of Popular Science magazine has been archived for free browsing, thanks to a partnership with Google. Popular Science includes some Amateur Radio-related articles, such as "You Can Talk Around the World" in the January 1932 edition, "Thousands of Radio Amateurs Find it Easy to Learn Morse Code" from the March 1932 edition, and "The Hams Join Up" from the November 1941 edition. Many other articles deal with radio and radio repair as well as do-it-yourself electronics projects.

Check it out at: <http://www.popsci.com/archives>



Heil Sound Celebrating 50th Anniversary

[Heil Sound](#), a name that's probably synonymous within the Amateur Radio community for its microphones and "boom set" microphone/headset combinations, is marking its 50th anniversary this year. Heil Sound came into being in 1966 as Ye Olde Music Shoppe -- a music store in Marissa, Illinois, the hometown of its founder, Bob Heil, K9EID. The celebration -- called "50 Years of Maximum Rock N' Roll" -- kicked off at the winter NAMM show. A commemorative series of [interviews](#), packaged as podcasts, also debuted with the new year. The series highlights the history of Heil Sound.



Bob Heil initially made a name for himself working with music performers to provide sound reinforcement for their live gigs, initially supplying full sound system packages for venues and festivals throughout the Midwest and later working with world-class acts, such as Humble Pie, The Who, The Grateful Dead, and Joe Walsh, WB6ACU. Heil said it was the Dead's Jerry Garcia who suggested changing the name of his enterprise to Heil Sound. Among other innovations, Heil created the quadraphonic sound system for The Who's "Quadrophenia" tour as well as the Heil Talk Box made famous by Joe Walsh and Peter Frampton.



Bob and Sarah Heil at the 2016 NAMM show.

By 1982, Heil Sound had curtailed the touring side of the business and began concentrating on developing products for the Amateur Radio market. Heil also launched a home theater division. Amateur Radio and professional audio came together in 2006, when Walsh suggested that Heil Sound develop microphones for concert use. Heil Sound designed and manufactured high-quality microphones, and has gained a reputation among music performers for its professional microphone products, such as the PR30 and PR40.

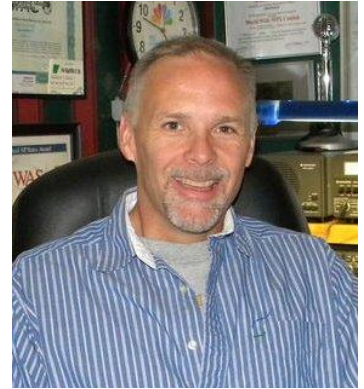
Bob Heil and his wife and business partner Sarah -- who is the president of Heil Sound -- are frequent visitors at major Amateur Radio conventions and gatherings



NRRL Announces NPOOTA Updates

Gary, WB0RUR

NEWINGSTEAD, VERMONT – “An overwhelming response and an overload of calories!” That’s how the man chosen to lead the National Radio Retransmission Legion describes the first few weeks of the organization’s “National Pizza Ovens On The Air” (NPOOTA) event.



Pictured to the left is NPOOTA activation site PO-1375, noted as a sensitive site due to the particular way in which the pepperoni is prepared.

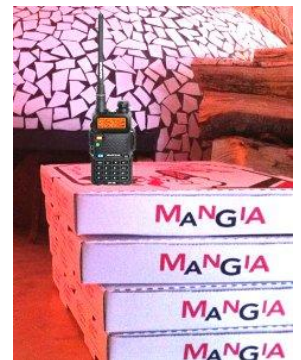
Pictured to the right is NPOOTA activation site PO-0401, noted as a “sensitive site” due to its frequent restroom malfunctions.



“It is designed to celebrate local pizzerias across our country; those unsung heroes of regional cuisine and empty carbs! But it’s become more – MUCH MORE! It’s become a ‘bacon-wrapped, cheese stuffed crust, triple decker, mucho-grande’ version of a radio operating event,” says NPOOTA CEO Bob Gilligan. Gilligan, a former jet set playboy millionaire with a penchant for single malt scotch and ‘extreme’ yachting, was tapped to lead the organization just last month. Straightening his ascot and tapping the toe of his deck shoes, he says more ham operators are visiting our country’s pizza ovens than ever before – and most are able to activate without ever getting out of their vehicles. “Honestly, because of a technicality in the rules, our operators can activate a site without ever having any interaction with the local population,” says Gilligan. “At first, we were upset. But after reconsideration, we decided it was actually for the best.”

The NRRL has updated the list of “Questions and Answers Submitted By Hams:

- Q: My two local pizzerias are located next door to each other. Can I give out a “two-fer” if I am parked in the right location?
- A: Yes, if you are within 10 feet of each pizzeria’s pizza oven. Please send us the names of the establishments and a large ½ pepperoni and ½ sausage and we will amend your upload certificate to allow you to confirm both via the NRRL Logbook of the Globe.
- Q: My local pizzeria attempted to charge me for the “adult buffet” when I am clearly eating only salad.
- A: This is terribly unfortunate, as we recommend the “supreme pizza” with extra cheese.
- Q: Is it considered “pecuniary interest” if the pizzeria provides me a free pizza in exchange for specifically mentioning them on 40 meters 5x each hour?
- A: No. Please review Part 97, Sec. IV, Sub Sec. 9, Para. A, Sentences 5-24 which details the amount of free food an operator may ingest prior to it being considered a “bribe.”
- Q: Yesterday, my activation count on the leaderboard showed 15 units worked and 1300 calories. Today, I am missing 2 units and 500 calories.
- A: In a random audit, it was determined that you activated the “Japanese Tofu House,” not the pizzeria.
- Q: I worked a NPOOTA activator but my QSL confirmation has not shown up on Logbook of the Globe.
- A: Please make sure that you correctly uploaded the QSO date, time, frequency and number of pizza toppings.



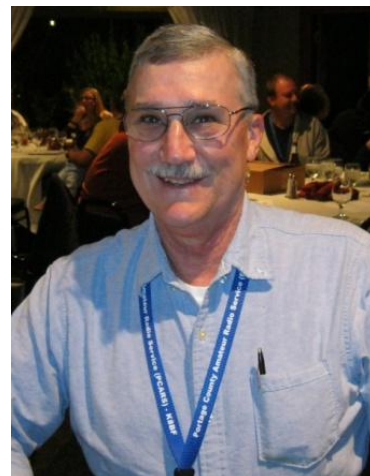
HamHijinks.com

Digital SIG

Rick, K8CAV

PCARS will be holding its April Digital Special Interest Group meeting on Tuesday April 5th at 7:00 PM at the club site in Ravenna.

This month we'll be doing a hands-on demonstration of sending e-mail via both VHF FM and HF using the Winlink 2000 RMS servers. If you have a portable setup you'd like to bring to try please don't hesitate to bring it out. As always, we'll make time to answer questions or help with any digital communications problems you have.



DX & Contest SIG

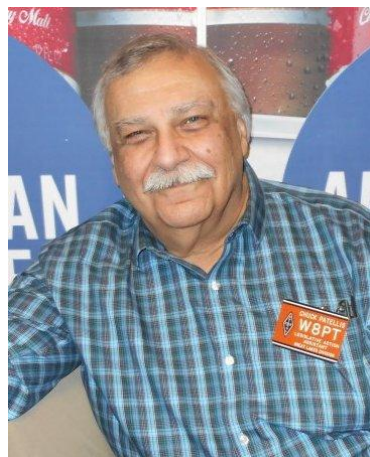
Chuck, W8PT

During our last meeting on March 22, we continued planning for our Special Event station celebrating PCARS 10th Anniversary of becoming an ARRL Affiliated Club. I'm sure you will hear more about this in this Newsletter.

We also discussed how we might use some of our DX/Contest meetings to better acquaint PCARS members with the equipment we have available at the club. With that in mind, we discussed the idea of having operating nights at the club from 7 to 8 or 8:30 on some of the Tuesday night meetings. Since it would still be early enough to work some DX and knowing that some members do not have the opportunity to do so from their own QTHs, we thought this would be a good way to get more members out and on the air.

Also this allow members to work DX while not having to be under any pressure as in working contests. So it would be a Win-Win. No contest pressure and working DX! And it's another way of getting members to the club site for fellowship and fun.

You will be hearing more about this and we will be announcing our first DX Operating Night very soon.



Why You Should Get “Amateur Extra”

Dan, KB6NU

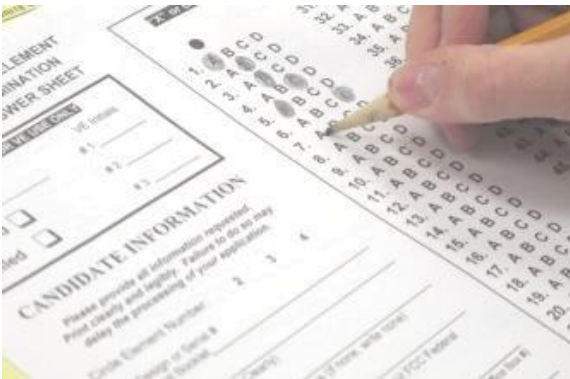
The Amateur Extra Class license is the highest class of license in the United States, and perhaps the world. Many hams—even hams that live outside the U.S.—aspire to pass the test and be awarded one.

There wasn't always an Amateur Extra Class license. The Extra class license, as we know it today, was created as part of the 1951 license restructuring that also created the Novice and Technician Class licenses. (In 1951, the Novice license was the “beginner's license.” To get a Technician Class license, you had to pass the written test that General Class operators had to pass.)

Although it gave an operator no additional privileges, to get an Extra Class license, one had to:

- * Pass a 20 wpm code test (Generals had to pass only a 13 wpm code test).
- * Pass a longer and more difficult written examination than the General Class exam.
- * Have at least two years of experience as a licensed radio amateur.

Today, without the code test and the experience requirement, many hams upgrade to Extra Class as soon as they can. Some even pass the Technician Class, General Class, and the Amateur Extra Class exams in a single test session.



So, what's the attraction? Why should you upgrade to Extra?

One of the reasons that you should upgrade to Extra is that you get use of the entire 80 m, 40 m, 20 m, and 15 m bands. Portions of those bands, such as 3.6 – 3.7 MHz in the 75m band and 14.150 – 14.175 Mhz in the 20m phone band, are reserved exclusively for Extra Class licensees. Extra Class operators also have exclusive privileges in the CW portions of the 80 m, 40 m, 20 m, and 15 m bands. These are the frequencies where the DX stations hang out.

Another reason to get your Extra Class license is that only Extra Class licensees can administer General Class and Extra Class license exams. General Class operators can become Volunteer Examiners (VEs), but they are only allowed to administer Technician Class exams.

Another reason you might want to get an Extra Class license is to get a fancy vanity callsign. Only Extra Class operators can apply for 1×2 or 2×1 callsigns, such as W8RP or KT8K. A short, snappy callsign can help you work more DX or improve your contest scores.

Whatever your reason, studying for the Extra Class exam will open your eyes to many aspects of the hobby that you may not be familiar with. And, as you work your way through the material, you'll learn things that make you a better amateur radio operator and enable you to enjoy the hobby more. It's not easy, but in the end, an Extra Class license will help you have more fun with amateur radio.

When he's not ruminating on the latest wireless technologies, KB6NU likes to make use of some vintage wireless technologies by working CW on the HF bands. He's also a prolific blogger (www.kb6nu.com) and the author of the "No Nonsense" amateur radio license study guides (www.kb6nu.com/study-guides). If you have a comment or a question, email him at cwgeek@kb6nu.com.



Charlie the Tuner's HF High-Lites

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

Spring has arrived. I can tell because instead of snow, we have rain. So if we have to stay inside due to wet WX, what better way than to be able to play radio. And there are a lot of great DX possibilities happening this month, including a few DXpeditions that we have been waiting for. As I am typing this report, the VK0EK DXpedition is operating from Heard Island. We also have a DXpedition that will be setting up on Juan de Nova (FT4JA). In addition, for those of you who missed Spratly Island, look for a report listed in this column. So let's take a look at what will be happening in the near future.



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, K4ZW, N4AA & QRZ DX, N4JF, K5GS, N6GT, W6IZT, K8GI, K8YSE, W8GEX & 60m DX News, W9ILY, DC8QT, DL1SBF, DL7UXG & The DX News Letter, DxCoffee.com, DXNews.com, DX-World.Net, EA4CWN, ES1CW, F5NQL, F6AJA & Les Nouvelles DX, HL1VAU, I1JQJ/IK1ADH & 425 DX News, I2MQP & DX Italia News, IK7JWX, JG7PSJ, JR1EFG, LA7GIA, OZ6OM & 50 MHz DX News, OZ6TL, RSGB IOTA Web Site, Sixitalia Weekly, VA3RJ & ICPO, and VHF-DX-Portal (MMMonVHF)? for the following DX information. And a big thank you to Tedd Mirgliotta - KB8NW and his Ohio/Penn DX Bulletins.

COWS OVER THE WORLD (DXpeditions Planned). The ARRL Web Site/Daily DX reported on January 12th: Tom Callas, KC0W, has announced the all-CW "Cows Over the World" DXpeditions for 2016. All callsign suffixes will contain "COW". The schedule calls for a summer departure to (in this order): American Samoa, Samoa, Tokelau, Solomon Islands, Temotu Province, and Bangladesh. He may add Nepal and Bhutan. There will be no time frame for operation from each entity. "The determining factor will be when the pileups die down it's time to pack everything up and move along", he said. Callas said he's spent months researching the absolute best DXing locations for each island and for Bangladesh (he's secured all but Tokelau). "This will be the only DXpedition that I'm aware of in which the operator will operate from separate sides of the islands", he said. The Minnesota DXer pointed out that the west and east coasts of South Pacific islands are separated by mountains, and that he learned first-hand how much mountains attenuate HF signals while he was operating from Haiti. Emphasis will be on 160, 80, and 40 meters. A tentative phase II "Cows Over Africa" DXpedition is on the drawing board. <http://www.arrrl.org/news/cows-over-the-world-cw-dxpeditions-planned>

4A. MEXICO (Bird Op, Special Event). Ops Ismael/XE1AY and David/XE3DX will be active as 4A1DX between now and June 14th. Activity is to celebrate 11th anniversary of the Grupo DXXE, Mexico's top contest and DX radio club. Operations will be on the satellite, FM only (**SO-50, AO-85 y Lilacsat-2). The QSL Manager is Dick, N7RO, direct or by the Bureau (Make sure your Bureau QSL card is clearly marked via N7RO). Don't send your QSL cards to the Mexican Bureau; they will not be answered because they have no QSLs. They will be uploading the log to LoTW and ClubLog at the end of their operation (June 2016). QSOs with this station are also good for the DXXE Award. ADDED NOTE: The special event call sign 4A1DX is also active on all HF bands using CW, SSB, RTTY, PSK31, JT65 and EME. QSL Manager is also N7RO. See QRZ.com under 4A1DX for more details.

4W, TIMOR LESTE. It was announced that operators Tack/JE1CKA, Hide/JI1AVY, Jim/7K4QOK, Yutaka/JQ2GYU and Miho/JJ2VLY will be active from Timor Leste between April 5-11th. Operators will sign 4W/homecall or use a special 4W call sign. Activity will be on 160-10 meters using CW, SSB and RTTY. They will participate in the Japan International DX CW Contest [JIDX] (April 9-10th). Non-JA stations are welcome to call them. Look for more details (call sign[s] and QSL info) to be forthcoming.

5V, TOGO. Operators Werner/DL9MBI, Robert/DL6MFK, Armin/DF1AI and Rudi/DL5MEV will be active as 5V7D from Kpeme (outside the capital city Lome, between the sea and Lac Togo) between March 24th and April 11th. Activity will be on 80-10 meters using CW, SSB, RTTY and EME. QSL via DL9MBI, direct or by the Bureau. They will try to upload their log daily on ClubLog.

8Q MALDIVES. Operators YL Helen/RC5A and Yuri/RM0F will be active as 8Q7CA and 8Q7FU, respectively, from Maldive Islands (AS-013) between April 17-30th. Activity will be on 160-6 meters using CW and SSB. QSL via their home call sign, direct, by the Bureau or the OQRS on ClubLog.

9M4, SPRATLY ISLAND. Ops Pekka/OH2YY and Pekka/OH1TV will activate Spratly Islands from Pulau Layang Layang Island (AS-051) April 5-9th. They will have two K3 stations with verticals for 80-20 meters and a 2-element antennas for 17-6 meters. The call sign will be released on April 4th. They will try to get the logs to ClubLog daily and also inform daily the band/frequency-plan for the next day. SSB will be the main mode, but they plan to do some CW as well. QSL via OH2YY or by the SRAL Bureau.

9Y, TRINDADE AND TOBAGO (Update). Bill, K2HVN, will be active as 9Y/K2HVN on the Island of Tobago between April 19-26th (he informs that he will arrive on the 14th, but setup later than expected). Activity will be vacation style operation on 40-10 meters. He informs OPDX, "I will only be on 40m CW and only on 10m and 12m if the bands are open. Will be on CW and SSB on all bands (except 40m SSB)." QSL via his home call sign. Cards are already printed. NO LoTW. See QRZ.com for info.

CE0X, SAN FELIX. Two sources are reporting that Felipe, CE5WQO, is planning to operate from San Felix once he obtains the official Chilean license and authorization to land on the island. San Felix is ranked #12 on ClubLog's most wanted list. Felipe hopes to activate San Felix sometime between July and September in 2016 for up to 3 weeks. The dates will be confirmed by the Chilean Maritime Authority. Look for more details to be forthcoming in a press release.

CT9, MADEIRA ISLANDS (Reminder). Operators Hardy/DL3KWF and YL Rosel/DL3KWR are now active again as CT9/DL3KWF and CT9/DL3KWR from Madeira (AF-014) until and April 7th. Preferred activity will be on 30/17/12 meters and CW. Equipment is an IC-7000 + AH-4 into a vertical 7m. QSL via their home call sign, direct, by the Bureau (also via E-mail request), eQSL or LoTW. Visit their Madeira page at: <http://www.dl3kwf.com/CT39/CT39-Results-e.htm>

W8, PARKMAN. Operator Chuck, W8PT during his annual outing and backyard DXpedition overlooking where the ground hogs have dug up his radial field during the past winter season. He laments that if he could just train them to make straight tunnels from his shack to the tower, his coax cable routing problems would be much easier to deal with. Chuck will be active as W8PT from his back porch while having a cup of gourmet coffee and smoking a quality cigar on April 1st. Activity will be on the HF bands. Look for Chuck to operate SSB and CW modes. QSL via address on QRZ.com.

E4, PALESTINE. Operators YL Elvira/IV3FSG and Angelo/IK2CKR active as E44YL from Bethlehem until April 7th. Activity will be on the HF bands. Look for Elvira to operate SSB and the Digital modes, while Angelo is on CW. QSL all SSB and Digital mode QSOs via IK3GES. QSL all CW QSOs via IK2CKR.

E5, SOUTH COOK ISLANDS. Doug, W6HB, active as E51DLD, probably from the QTH of Andy, E51AND/E50A and Jim, E51JD, on Rarotonga Island between April 24th and May 10th. Activity will be on 80-10 meters. QSL via his home call sign. No LoTW, no E-QSL, no QRZ.com logs – hard cards ONLY folks.

JD1, OGASAWARA. Harry, JG7PSJ, will once again be active as JD1BMH from Chichijima Island (AS-031) between April 27th and May 6th. Activity will be on 40-10 meters (maybe 80m) using CW, SSB and RTTY. QSL via the Bureau to JD1BMH or direct to JG7PSJ. Visit his Web page for more details at: <http://sapphire.es.tohoku.ac.jp/jd1bmh> Also, on Twitter: <https://twitter.com/jd1bmh>

KH1, BAKER AND HOWLAND ISLANDS. OPDX was informed that ops Hrane, YT1AD (Leader) and (Co-Leaders), Paul, N6PSE, Dave, K3LP and Aleksey, UA4HOX are planning a large expedition in the Pacific Ocean to Baker Island (OC-089). WAZ zone 31. The expedition is planned for Sept - Oct 2017. Landing on the island requires a special permit USFW service. The team will be composed of members from the WWDX, Interpid DXers and other interested amateurs. More info coming in May 2016.

LU/R, ARGENTINA. Operators Horacio/LU5BE (CW), Henry/LU8EFF and Arnaldo/ LU3AAL will be active as homecalls/R from San Jose, Province of Catamarca (Grid Locator FG63xe), a Region in Argentina with very little activity and almost no CW operations between April 14-17th. They will try to have 2 active stations. Activity will be on 80/40/30/20/17/15/12/10 meters using CW, SSB, PSK31 and JT65. They will try to be on the air from 2300 UTC on the 14th. QSL via their home call signs (see QRZ.com).

OE16, AUSTRIA (Special Event). The Amateur Radio Section of ORF (Austrian Broadcasting Corporation) and the Documentary Archive Radio Communications/ QSL Collection will operate, for 72 hours only, a special event station with the call sign OE16M on Friday, April 22nd-Sunday, April 24th (00:00- 24:00 UTC). OE16M is an official "International Marconi Day" station. Contacts made on Saturday, April 23rd, are valid for the IMD Award. QSL info available at: <http://www.qrz.com/db/oe16m>

T8, PALAU. Yousuke, JJ1DQR, will be active as T88QR from Koror Island (OC-009) between May 13-15th. Activity will be holiday style on 40-6 meters using SSB. QSL via his home call sign. direct or by the Bureau. No eQSL and No LoTW.

IOTA NEWS

AS-202. (Update) Members of Bahrain Amateur Radio Group (BARG) will be active as A91HI from **Hawar Island** between April 28th and May 1st. This is a first time activation. Operators mentioned are Fawaz/A92AA (Team Leader), Ahmed/7Z1OO, Khalid/A41OO, Obaid/A61DJ, Ely/A93LT, Jeremy/EI5GM, David/EI9FBB, and Col/ MM0NDX. Activity will be on 40-10 meters using CW, SSB and RTTY, with four stations running simultaneously. QSL via A92AA, ClubLog's OQRS or LoTW. For more details, see: <http://www.a91hi.com> <https://www.facebook.com/a9iota> https://twitter.com/A9_IOTA

EU-032. Didier, F4ELJ, will be active as F4ELJ/P from Re Island (WLOTA 1407, DIFM AT-02) April 9-16th. Activity will be on the HF bands. QSL via his home call sign.

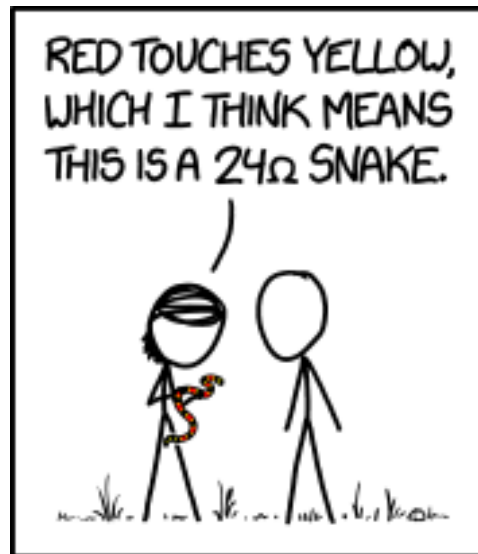
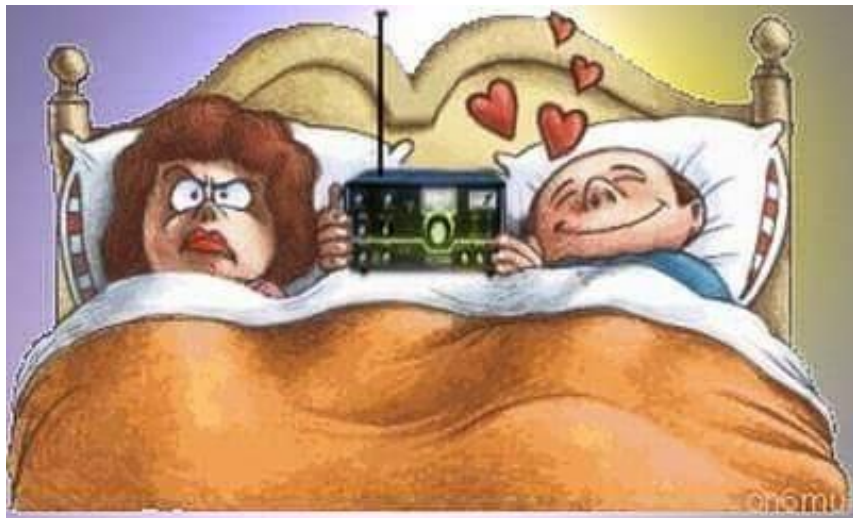
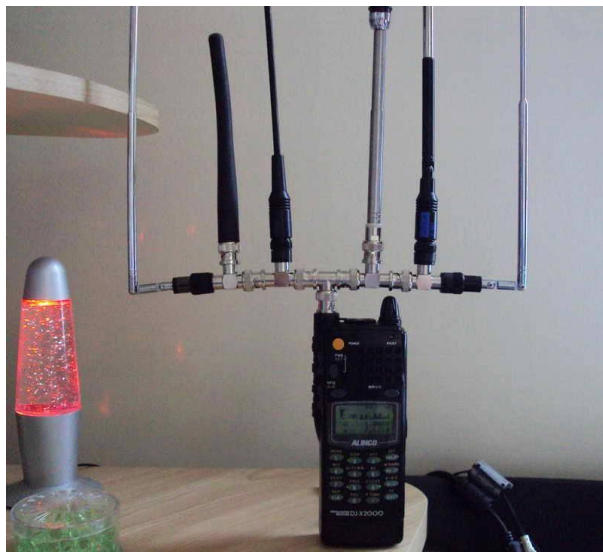
EU-114. Members of "The Vulture Squadron Contest Group" will be active as GU9V from **Guernsey** between July 30-31st. Operators mentioned are Iain/M0PCB, Peter/2E0SQL and Tom/2U0TKB. Activity will be during the RSGB IOTA Contest. QSL via ClubLog's OQRS. For more details, see Website: <http://www.m0vsq.co.uk>

EU-145. Operators Colin/G3VCQ (CT7ACG), Cliff/CT7ANG, Andy/M0GAV and Sharon/M3VCQ will activate **Culatra Island** (DIA AI-01, DIP AL-001) in the Algarve Province of Portugal during the RSGB IOTA Contest (July 30-31st). They will use the special call sign CR5CW from the Cabo de Santa Maria Lighthouse (ARLHS POR-013, DFFA FA-06, DFP FAL06, WLOTA 0144), located in the Parque Natural da Ria Formosa (WWFF CTFF-007). QSL via CT7ACG.

NA-079. Operators Ricky/K4JTT, Tim/WK4U, Nathan/K4NHW, Emmett/W0QH and Emmett/KD0DTS active as K4T from **Dry Tortugas Island** (USI FL013S, NPOTA NP17, WWF KFF-0023, ARLHS USA-316 & USA-236, WW Loc. EL84) between May 6-9th. Activity on 80-10 meters using CW and SSB. Suggested operating frequencies are: CW - 3530, 7030, 10105, 14030, 21030 and 28030 kHz SSB - 3950-3990, 7250-7290, 14250-14290, 21350-21390, 24950, 28350-28390 kHz. QSL via by the Bureau, direct, LoTW or eQSL. Look for updates to be posted on QRZ.com.

SA-024. Members of the Cabreúva DX Group will be active as ZV2CO from **Comprida Island** (ARLHS BRA-135, DIB SP-03, DFB SP-12) between April 15-17th. Operators mentioned are Murilo/PY2DS, William/ PU2XIZ, João Carlos/PU2KKE, Fabiano/PU2LJH, Flavio/PU2KFL and Leandro/PU2LEW. Activity will be on 80/40/20/15/10 meters using CW, SSB and the Digital modes. QSL via PY2DS, direct or by the Bureau. See QRZ.com for more info.

Well there you have it for this month and a little beyond. Get on the air and work some DX. Have fun with your hobby. Until next month, 73



Hamfest Calendar

04/09/2016 - Cuyahoga Falls ARC's 62nd Annual Hamfest - Location: Emidio & Sons Party Center - 48 East Bath Road - Cuyahoga Falls, OH 44221 - Website: <http://www.cfarc.org/hamfest.php> - Contact: Ted Sarah, W8TTS - 239 Bermont Avenue - Munroe Falls, OH 44262 - Phone: 234-206-0270 - Email: hamfest2016@cfarc.org

06/05/2016 - BreezeShooters Amateur Radio Club - Western Pennsylvania Section Convention - Location: Big Butler Fairgrounds - 1127 New Castle Road - Prospect, PA 16052 - Website: <http://breezeshooters.org> - Contact: Jim Heiles, KB3IYS - 134 Easley Road Pittsburgh, PA 15237 - Phone: 412-600-1979 - Email: hamfest2016@breezeshooters.org

07/10/2016 - 20/9 Radio Club Hamfest 2016 - Location: Austintown Senior Center - 112 Westchester Dr - Austintown, OH - Website: <http://20over9.org> - Contact: Dotti O'Neil Meleski, KC8SYF - 17520 Denver Dr Lake Milton, OH 44429 - Phone: 330-651-8420 - Email: Hamfest@20over9.org

09/11/2016 - Butler County Amateur Radio Association BCARA SwapFest - Location: Unionville Fire Dept - 102 Mahood Rd - Butler, PA 16001 - Website: <http://www.w3udx.org> - Contact: Rick Melton, N3VKM - 214 Criley Rd - Cabot, PA 16023 - Phone: 724 287-8134 - Email: n3vkm@arrl.net

09/25/2016 - Cleveland Hamfest and Computer Show - Location: Cuyahoga County Fairgrounds - 164 Eastland Road - Berea, OH 44017 - Website: <http://www.hac.org> - Contact: Glenn Williams, AF8C - 4134 Stoney Ridge Road Avon, OH 44011 - Phone: 800-CLE-FEST - Email: info-list@hac.org

Get Ready for Field Day 2016

Chuck, W8PT
Field Day Chairman



Just want to bring you up to date on our 2016 Field Day preparations. During our recent FD meeting, we finalized the placement of the various stations at the new venue - Freedom Community Park. Tom Sly will be setting up a Facebook page and will be updating it DURING the event! Jim, AC8NT - has graciously volunteered to do an educational presentation Saturday afternoon, which is one of the things that we have done each year. Don't look now but can you spell Arduino?? Only kidding Jim. I'm sure that Jim will put together a presentation that will be interesting and informative.

Mike, KB8TUY - has taken on the task of being the VHF station captain for this year and I know that he will do a great job.

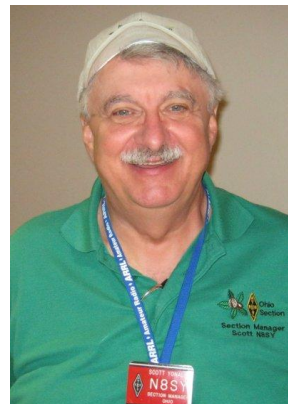
And don't forget about Antenna Day on May 7th. It will be a full blown operating event, testing out the antennas, rigs and looking for any type of noise or interference concerns. We will take advantage of the several state QSO parties that will be happening that weekend.

There is one very important spot that still needs to be filled and that is Safety Captain. The individual that was to have that responsibility has a conflict and cannot do it. So I am looking for someone who feels they have the ability to fill that position. This year, there are additional duties since a questionnaire must be filled out regarding our safety set-up and submitted along with the rest of our documentation. So if you feel up to filling this very important staff position, let me know.



Let's Talk

Scott, N8SY
ARRL Ohio Section Manager



Late Breaking NEWS.. There's now less than 4 days left until spring arrives, March 19th for us in the northern hemisphere!! We've beaten old man winter and gotten over the hump! Now we can look forward to 90+ degree temperatures with 100 percent humidity days once again, yuck.. (and some say I'm not an optimist!!)

I've been really busy attending meetings and hamfests. As you may know, the Ohio Section of the ARRL is the largest Section in the country. It's even bigger than a Division or two. So, with that in mind, it's only fair to say that Ohio also deserves to have a full time Section Manager. One that can freely travel all over the state visiting with, and representing YOU. So, don't be surprised when I just "pop-in" at your meeting or function. I really do like traveling and visiting with all of you at your hamfests, club meetings, picnics and especially breakfasts. It's fantastic!

Speaking of Hamfests.. It's only 2 months until the biggie at Dayton. The Ohio Section Cabinet has already been busy making preparations for our booth there. Yes, if you didn't know the Ohio Section is the only Section in the nation that has its own booth within the ARRL area at Dayton. Now for some really big news.. We have also been asked to man a National Parks on the Air station during the Hamvention as well.. Take a look at the article National Parks on the Air above.. We are working on the details right now, but what I can tell you for sure is that we are going to need some help. Please, if you can give just an hour or two to volunteer with this it would be great! We really need folks to staff the station. You don't have to be an expert or anything like that, just have a friendly face and willingness to help others for an hour or so. All of the equipment is being provided by the League, so you know that it's going to be first class stuff all the way.. It's going to be a lot of fun for sure and I'm sure that it's also an event that is going to get a lot of exposure with the press as well.. How's about it.. Got an hour or so on Friday, Saturday or Sunday to help out?? (Daytime hours only) We'd sure love to have ya'.. Contact John Myers, KD8MQ at kd8mq1@gmail.com for more details on this fantastic adventure!!

Now, switching bands to another subject.. As I said earlier, I've been busy visiting with a lot of you and I have heard a lot of PROs and CONs about Ohio's goal of seeing that all of its ARES members have been trained and certified in ICS-100, 200, 700 & 800 by the end of June, 2016. For those of you who really aren't seeing the reason for this I want you to take just 10 minutes of your time and read an article that was published in the March edition of QST. It's by Rick Palm, K1CE. Now for those of you who don't get QST, I have this article reprinted on our website <http://arrl-ohio.org/QST.pdf> it is with permission of the ARRL so there's no copyright problems. I am also producing a handout for all who is interested that I will be giving out at hamfests and club meetings. I think Rick's views will help you better understand the in's and outs to all of this, and why this is so very important to YOU. I do want to assure you that even if you still decide not to go through with completing these courses, there will still be things that you can do, just not as many of them, and probably the most import item to remember, you most likely will not be asked to participate in any activity within the FEMA organization. But, there are other things, like bike races, parades and the like that won't require this extra training.

Now let's switch bands.. Are you getting those emails from me? If not, all you have to do is to "Opt-In" to receive them. Heck, just send me an email n8sy@n8sy.com, I'll get you added to the mailing list. There's a link to do this on the Ohio Section website, it's on the bottom left corner.. For your convenience, here's a direct link to it: <http://arrl-ohio.org/forwarder/forwarding.html> I urge all of you to make sure that everyone,

regardless of whether they are a League member or not, get signed up for one of these options. You can always “Opt-Out” at any time if you feel this is not what you were expecting.

Let’s shift bands once again.. Let’s talk about the Ohio Section Website.. You can find the Ohio Section Website at: <http://arrl-ohio.org> If you don’t have this website set as your home page, I urge you to do so.

Have you seen the NEWEST “Handbook Giveaway” drawing on the website yet? It’s there..!! Looking at the results so far entered in the latest question poll it looks like you really want this drawing to continue. To enter the drawing all you need to do is fill in a couple of boxes on the form.. (your name and email). That’s you need to do to be entered into a drawing to win a 2016 ARRL softcover Handbook. There’s nothing else required (Oh.. You do need to be a resident of Ohio to win..) The winner will be mailed the Handbook at my cost.

This is being offered just to see how many folks are really checking in on the website. Got the idea? Best of luck to you!!

Switching bands once again.. HEY, there’s another NEW – one question – questionnaire on the Ohio Section Website? This question is really important for me to know.. I’m asking if you use Facebook or Twitter.

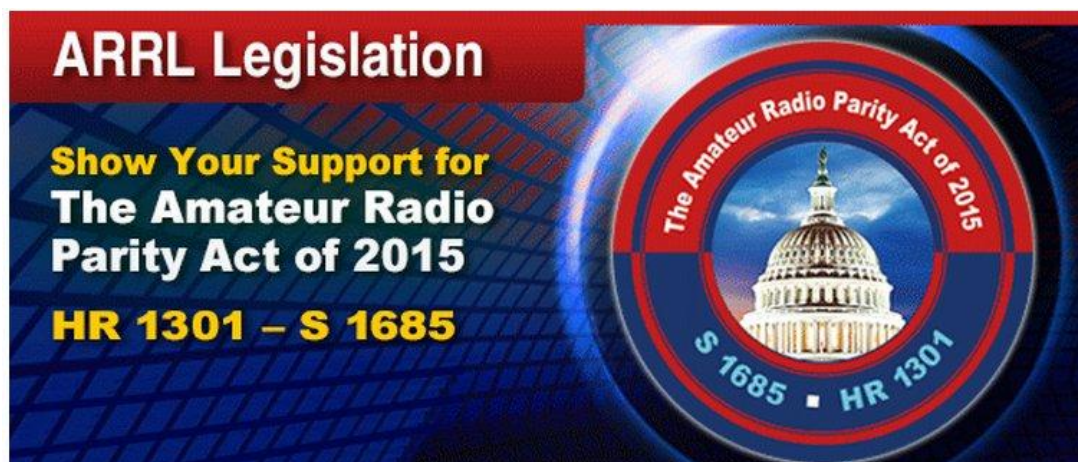


I really want to know if you are using either of these Social Media outlets so I can better communicate with all of you. It only asks this one question and it will take all of about 2 seconds for you to answer it, and you can see how your answer stacks up with others instantly. If you haven’t done it yet, please do.. I really want to hear from you.

Are you a member of the ARRL?? If you aren’t a League member, this is a great opportunity to become one. Want more information on how to join? Here’s the link: <http://www.arrl.org/membership-levels> . There’s even a 90 day FREE trial that you can apply for if you’ve never been a member.. Got questions about being a member or what the League is all about? Send me an email.. n8sy@arrl.org I’ll be happy to call or write to you. We can even have coffee if you’d like.. and I’ll buy!!

One last spin of the dial.. Well, I think that’s going to do it for me this month.. I have lots of meetings and hamfests to attend these next few months, as well as representing YOU at the Ohio Public Private Partnership (OP3) meetings, the Emergency Management Association of Ohio (EMAO) and let’s not forget the Voluntary Organizations Active in Disaster (VOAD) here in Ohio. The Ohio Section has a presence like never before with our state agencies, and we are working very hard at making that presence grow and prosper for all of YOU.

Oh, and don’t be too surprised when I show up at a meeting you’re at!!



Swap-N-Shop

FOR SALE: DRAKE R-8 HF Receiver. Multi-mode (AM, FM, USB, LSB, RTTY and CW) receiver offering excellent sensitivity and high dynamic range covering 100 kHz to 30 MHz. It features an high-Q, 8-pole electronically switched IF filter providing a range of five bandwidths, selectable AGC, wide/narrow Noise blanker, RF Preamplifier, Attenuator, adjustable RF gain, Notch filter, Muting control, built-in Speaker, 2 VFOs, Passband offset, 100 Frequency memories, 3 Scan modes, 9 Scan functions, Clock and Timer, multiple RF inputs, etc. Original Manual. This quality R.L. Drake Receiver is in good to very good condition. \$485.

Drake "7-Line" Logbook. Blue cover logbook with the entire Drake 7 Line pictured. It was a handout at Dayton in the early 1980's. No entries. In good condition. \$20. **Shure 444D Microphone.** Magnetic-controlled cartridge desk microphone 200Hz-6KHz. Dual impedance (Hi-Low switch selectable) with PTT/VOX switch, DC-Isolated, coiled-cable wired for Kenwood TS-830S but can be changed. \$25. **Burndy P8A PENETROX A** Oxide-Inhibiting Joint Compound 8 oz Squeeze Bottle. Assemble your antennas correctly! Brand new, never opened. I bought an extra this summer when I built my tower and beam. Originally \$17.... Yours for only \$10. **Alliance HD-73 Heavy Duty Rotator** Last try before the dumpster. Used, in service for 10 years then stored. Dual speed, maximum of 10.7 sq/ft wind load, 6 conductor wire required. Working Rotator, 2-working Control Boxes. Original manuals. Reduced to \$20

Contact: Bill, KW8KW at KW8KW@sbcglobal.net [04/02/16]

FOR SALE: MFJ-259B Antenna Analyzer with Case. Good condition - \$170 **Heil Headset** with Yaesu adapter cable
Serial CAT Cable - for computer logging & control **Yaesu FT-1000MP** - excellent condition with extra filters, manual- \$1000
Classic Hammarlund HQ-129 shortwave receiver, electrolytics and tubes replaced 5 years ago, average to good condition, \$110
Ten Tec Corsair - complete with external power supply and speaker, optional CW filter and manual - great CW rig - \$450 OBO

Contact: George, K3GP by phone at 330-829-9504 evenings or weekends [05/02/16]

FOR SALE: Kachina 505DSP In great shape, original DSP SDR radio, \$400 **Kenwood SP430 Spkr**, \$40
Heathkit SA2060 Tuner, \$100 good condition **Kenwood TS-711A**, 2 Mtr All Mode, \$300 In original box with mike and manual
Kenwood TS-811A, 440 Mhz All Mode, \$300 **Swan-250** 6 Meter radio, \$50 or make offer **Nye Viking MBI-001 Tuner**, \$100
Yaesu G-450A Rotator, Brand new, \$100 **Gwinstek Function Generator**, \$25 **EZ Oscilloscope** 60MhZ Dual Channel, \$50
MFJ-4225, Switching PS, New, \$85 **Mosley 10, 15, 20 MTR BEAM** antenna, \$200 **Vibroplex Bug**, \$50

If interested make offer. Also have Misc Tower parts

Contact: Allan, AB8AA by phone at 330-207-3296 or e-mail at: AB8AA@portcars.org [04/02/16]

FOR SALE: Antenna Specialist 100 watt mobile amplifier - \$100 **Lafayette HA-410 10- Meter AM transceiver** (Two Radios) w/AC cords, mobile hand mic., working. Plus two spare radios for parts - \$300 for all 4 radios. **Bird VHF slugs** - \$50 each
Sure-444D Base Microphone - wired for Kenwood 8-pin - \$45 **Palstar AT-2K** 2KW Tuner with 4:1 Balun - NEW - only a couple of months old - \$500

Contact: Jeff, WA8SAJ by phone at 440-951-6406 [05/02/16]

WANTED: QST Magazines -April 1969, April 1991 February 1998, April 2007 and January 2014.

WANTED: J-38 Straight Key - Decent to good condition. Reasonably (cheap) price.

Contact: Bucky, N8OQQ by e-mail at: N8OQQ@portcars.org [06/02/16]

FOR SALE: Icom IC-7800 - low mileage, great condition.

Contact: Tim, K3LR by e-mail at: K3LR@K3LR.com [07/02/16]

FOR SALE: For Sale Yaesu FT-991 HF/VHF/UHF all mode transceiver. Purchased new August 2015. Includes Heil Proset headset adapter and RT Systems programming software with USB cable. \$1,500 **NON-FUNCTIONING Icom IC-756** (non-pro model) HF transceiver and **Icom IC-R70 receiver.** Both units intact but not functioning, some manuals and documentation included. \$25 each or \$40 for both.

Contact: Rick, K8CAV by phone at 330-620-8826 or e-mail at: K8CAV@portcars.org [06/02/16]

FOR SALE: Kenwood SP-820 Speaker - with filters \$80. **DenTron Jr Monitor 300 watt antenna tuner** - Tunes long wire, coax, twin lead antennas. \$75 **Dentron model 80-10 Long wire antenna tuner** - \$65.

Contact: Mark, W8BBQ by e-mail at: W8BBQ@portcars.org [08/02/16]

New Amateur Extra Question Pool

From the ARRL



New Amateur Extra Question Pool Puts Greater Emphasis on Digital, SDRs, Propagation

The new Amateur Extra class license examination question pool, effective from July 1, 2016, through June 30, 2020, now is available at the National Conference of Volunteer Coordinators (NCVEC) website. The latest revision contains a few minor corrections that had been released in a February 5 errata of the initial January 8 release. NCVEC Question Pool Committee Chair Rol Anders, K3RA, said the new pool represents a fairly significant change relative to the current question pool, which expires on June 30.

“The primary change is modernization of the pool to place more emphasis on digital communications, digital test equipment, software defined radios, and propagation/space weather,” he said. “Also, a number of other topics were added, including questions on some additional antenna types commonly used by radio amateurs.” Anders said that room to cover the new topics was made in the question pool by dropping some questions that had been in the expiring pool.

“Many of the questions removed were on topics which were felt to be of less importance to the current amateur population,” he said. “However, there was also some ‘evening out’ of difficulty in the removal of a number of questions felt to be inappropriately easy or difficult relative to the rest of the pool.” As a result, he said, the net number of questions grew from 700 to 712 questions.

All questions in the expiring pool were re-evaluated for possible clarification or improvement, and approximately 60 questions were slightly modified.

“All in all, the Question Pool Committee has worked to keep the Amateur Extra class exam up to date, to provide a high-quality examination, and to ensure that the incoming Extra class amateurs are well-qualified to be leaders in the hobby,” Anders said.

Dayton Contest University



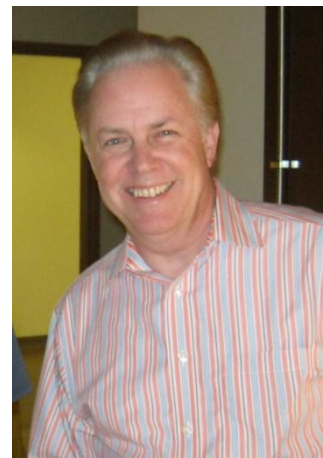
Tim, K3LR

Celebrating TEN years of Dayton Contest University!

The 2016 CTU Professors and 2016 CTU Dayton topics have been posted. You can see them here:
<http://contestuniversity.com>

The 2016 Dayton CTU Course Outline is posted here:
http://www.contestuniversity.com/attachments/2016_CTU_CLASSES.pdf

Student slots are filling up fast. Registration will close when all seats are filled.



Ohio NVIS Day

Stan, N8BHL

ARRL Ohio Section Emergency Coordinator



The Ohio ARES NVIS antenna day is a non-contest operating activity open to all amateurs. In the case of an emergency, we will need to communicate over short distances to stations within the state of Ohio and our neighboring states. NVIS antennas are the technology to do this, but which are best? And, how does YOUR antenna work?

Experimenting with antennas is still one of the most fun aspects of our hobby! Tie the two purposes together, add a group of friends, plenty of coffee and a BBQ grill and you have a formula for a really good time! Our goal is to concentrate on 40 meters, our usual daytime emergency band. We'll hold onto 80 meters as a backup in case 40 just falls apart, but our operation is intended for 40 meters. This year, we will have 6 "Anchor Stations" in operation for NVIS Day. They will be in various parts of Ohio to give you consistent reports as you compare your different antennas. The overall goal is still to figure out your best NVIS antenna, and contact as many other NVIS stations as possible to plot your coverage area. Take pictures! Submit your antenna evaluations: which designs you used, how they performed, etc. and submit a log report with overall number of contacts, your location and operators. Most of all- have a great time!

NVIS ANTENNA DAY GUIDELINES:

Stations: Stations may be operated from anywhere by any licensed amateur, or any group. These may be home stations, EOC stations, or portable. Any power source may be used. The only stipulation is that all stations transmit with 100 watts power. That will help keep comparisons consistent. We would like to get ALL Ohio counties active in this event, as many stations as possible! There is no restriction on food or beverage consumption- enjoying each other's company is a must!

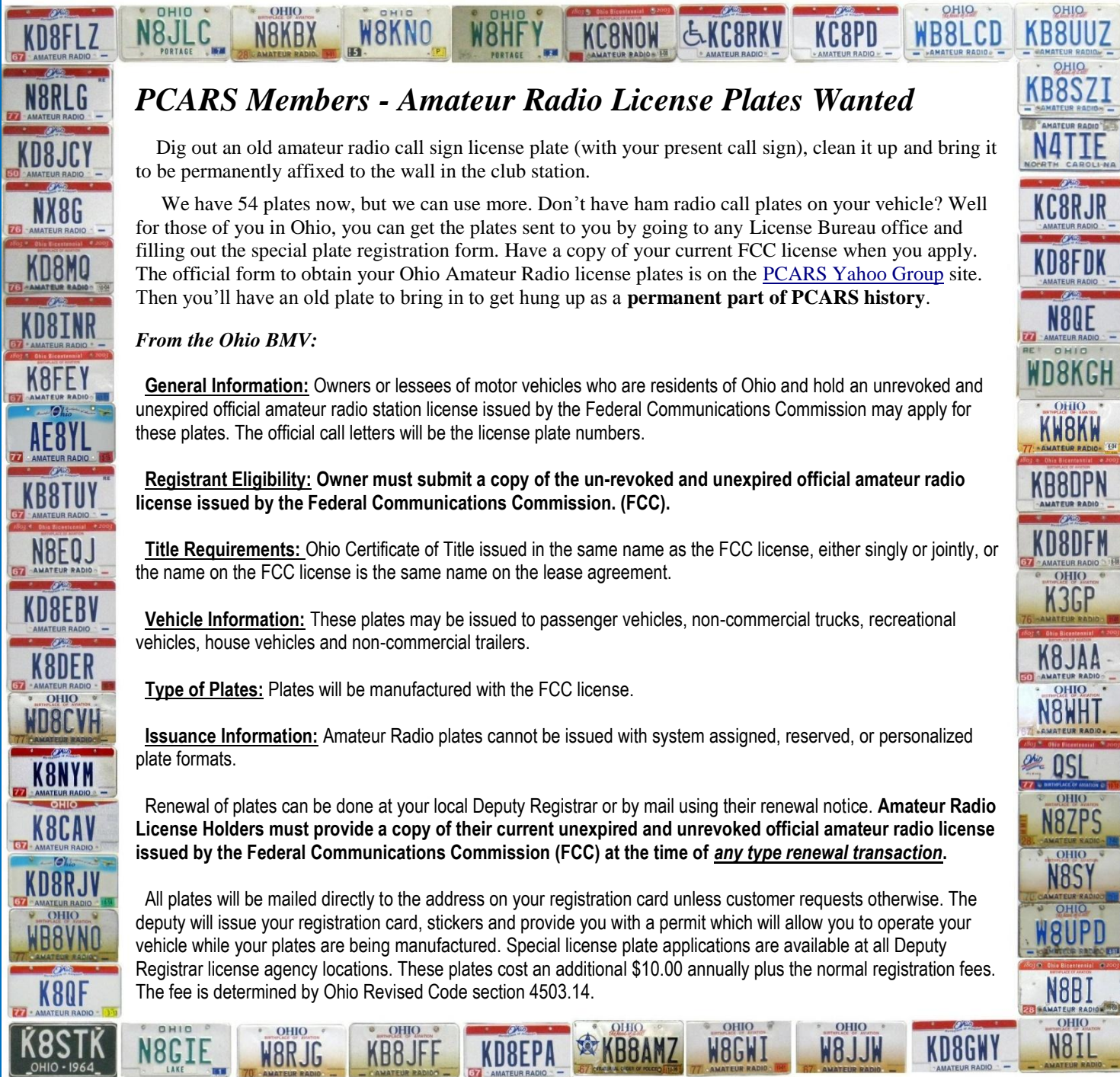
Operation: Operation will be on 40 meter phone (with 80 as a last-ditch fallback) from 10 AM EDT to 4 PM EDT on Saturday, April 23. Make contact with as many Anchor Stations as possible, and make as many contacts with other counties as possible. You can contact any station in the event, but remember we're looking for NVIS contacts, so stay close to Ohio.

Log: Keep records of each antenna you've tried- take pictures! We're interested in compiling which designs are the most successful. Keep a log of contacts with callsign, county, and if possible antenna description of your contacted station. We'll want to know your final count of station contacts. We do have a form you can print and use, but there is no formal requirement for your log: Cabrillo, spreadsheet, or written summary will work. Email your contest report to: nvis@k8es.org

Anchor Stations: Although you are encouraged to contact as many stations as possible, these Anchor Stations will be on the air for the duration of the event to provide comparative signal reports. Their locations will be plus/minus QRM or existing nets. Best practice is to move up a bit if the desired frequency is in use.

7240	W8SGT	Ohio EOC
7250	W8EOC	Medina County EOC
7260	W8MRN	Marion County ARES
7270	KB8DNA	Huron County ARES
7280	W8ERD	Delaware County ARES
7290	W8BI	Montgomery County (DARA)

Evaluation: The Marion County ARES group will compile a listing of the different types of antennas used, and their relative performance. We'll also look at which stations were able to have the greatest number of counties contacted, and which stations have the highest number of contacts.



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/>

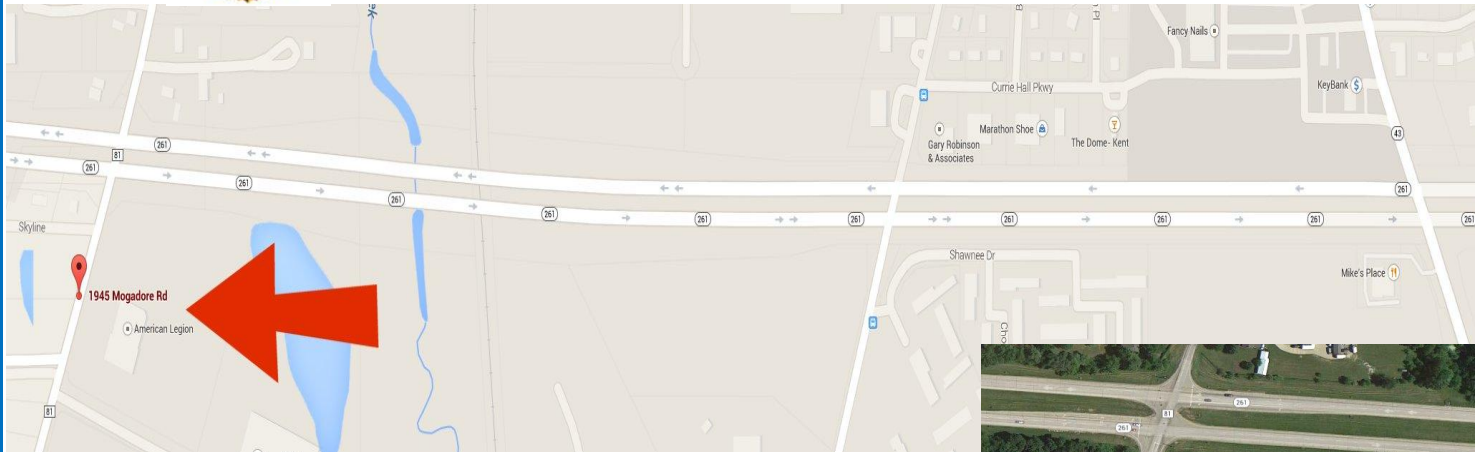


PCARS Meetings

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.

Photos from the March PCARS Meeting





PCARS - March 14, 2016



Sayings for April Fool Day

The compliments of the season to my worthy masters, and a merry first of April to us all! ~Charles Lamb (1775–1834), “All Fools’ Day”

Fool me once, shame on you; fool me twice, shame on me. ~Chinese proverb

Men would not live long in society, were they not the mutual dupes of each other. ~François VI de la Rochefoucault (1613–1680)

He who is born a fool is never cured. ~Proverb

Let us be thankful for the fools. But for them the rest of us could not succeed. ~Mark Twain

If every fool wore a crown, we should all be kings. ~Welsh Proverb

Here cometh April again, and as far as I can see the world hath more fools in it than ever. ~Charles Lamb

I hope life isn’t a big joke, because I don’t get it. ~Jack Handey

We’re fools whether we dance or not, so we might as well dance. ~Japanese Proverb

You can fool all the people some of the time, and some of the people all the time, but you cannot fool all the people all the time. ~Abraham Lincoln

The trouble with practical jokes is that very often they get elected. ~Will Rogers

A man always blames the woman who fools him. In the same way he blames the door he walks into in the dark. ~Henry Louis Mencken

A common mistake that people make when trying to design something completely foolproof is to underestimate the ingenuity of complete fools. ~Douglas Adams

It is the ability to take a joke, not make one, that proves you have a sense of humor. ~Max Eastman

A sense of humor is the ability to understand a joke-and that the joke is oneself. ~Clifton Paul Fadiman

It is better to weep with wise men than to laugh with fools. ~Spanish proverb

I have great faith in fools — self-confidence, my friends call it. ~Edgar Allan Poe

Real friends are those who, when you feel you’ve made a fool of yourself, don’t feel you’ve done a permanent job. ~Author Unknown

Expanding the Herd

It is reported that James, KD8VT is expanding his herd of buffalo.

He purchased a couple of “Super Buffalos” last year and thinks he may have been taken.

“It seems they only want to hang around in the ponds. Not sure why they like it so much” said James, “But they sure are putting on a lot of weight.”



Important Dates During April

April 6th - New Beer's Eve - For lovers of all brews everywhere, the years of 1920 to 1933 were incredibly sad times. This was the period of the Prohibition in the United States, where any and all forms of alcohol were verboten. Thankfully in 1933, the United States government came to their senses, and President Roosevelt decided that this frothy brew should once again flow freely in the taverns and bars of the country. On this date in 1933, people lined up around the block at the doors of their favorite public house to prepare to imbibe the first legal brews in 13 years. Ever since that night, this day has been referred to as 'New Beer's Eve', a precursor of 'New Beers Day'. It was said that at 12:01 on 1933, Roosevelt stated "I think this would be a good time for a beer." For such an auspicious patron, Anheuser-Busch pulled out all the stops, delivering the beer with their Clydesdale draw carriage directly to the Commander in Chief. The first 24 hours of the end of the prohibition saw an estimated 1.5 million gallons of beer consumed.



April 18th - Amateur Radio Day celebrates the beginnings of the IARU – the International Amateur Radio Union – back in 1925. They are best recognized for their contribution to disaster relief workers in areas where communications are little to non-existent.

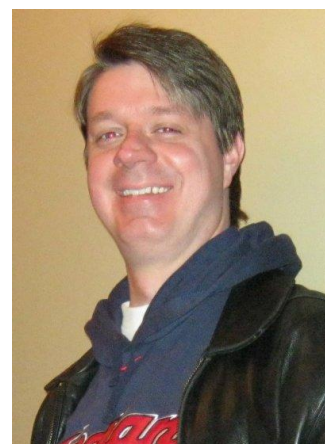
April 23rd - International Marconi Day - Amateur radios, point-to-point contacts, high-frequency wave transfers, a mysterious yet attractive prize for the most connected stations... All of this sounds like the beginning of a quirky yet adorable B-movie. In reality, it is the essence of International Marconi Day, a 24-hour amateur radio event which celebrates the career of Italian wireless communications pioneer Guglielmo Marconi. The event takes place annually on the Saturday closest to his birthday (April 25, 1874). To commemorate the Nobel laureate's achievements, fans use HF radio to make direct point-to-point contact between stations, relying on the same technology Marconi developed and utilized in his time. Although nowadays the Internet is the medium of choice for global communications, the idea behind International Marconi Day is to keep the spirit of invention alive. The event also provides an exciting throwback to the days when a connected planet Earth was but a bold dream and only a few exceptional people, such as Marconi, saw the value in it.

April 27th - Morse Code Day commemorates the birth of the inventor of the Morse Code – Samuel Morse in 1791.

HI From Deron, N8XTH

Deron, N8XTH

Long time no see, hope all is well. It's been ages since I've been able to get to a PCARS event. Life is just too busy.



NORTH DAKOTA • Morton County • DN96						
WØZTL						
CONFIRMING QSO WITH:	DAY MO YR	UTC	MHz	RST	MODE	2-WAY
N8XTH	28/6/2016	0517	1.8	59	SSB	

Try qso Deron 73 Alex

age now 98 yrs - on air 1937

ALEX J. MUGGLI
405 SOUTH D. STREET
GLEN ULLIN, N.D. 58631 USA

PSE QSL TNX

But, I did manage to get on the air for the CQ 160 SSB contest a few weekends ago and did fairly well. Thought this would be a cool QSL card to share. One QSO I made was with a 98 year old gentleman in North Dakota. It was an honor to work him.

Take care and hope to see all of you around soon,

Disclaimer

Yes folks, it is April and with that comes April Fool Day. I try to throw in some material that has a bit of humor to celebrate the 1st. If you found something offensive - I am sorry, really. If you found something that made you laugh - That's Great ! I must say, finding the material for the April issue is getting harder and harder each year, even with the internet. So when you run across something that you think would be good of the next April issue, please send it to me. I'll throw it in my April Folder.



Now, just to be clear about a disclaimer:

This newsletter is meant for educational purposes only. Any resemblance to real persons, living or dead is purely coincidental. Void where prohibited. Some assembly required. List each check separately by bank number. Batteries not included. Contents may settle during shipment. Use only as directed. No other warranty expressed or implied. Do not use while operating a motor vehicle or heavy equipment. Postage will be paid by addressee. Subject to approval. This is not an offer to sell securities. Apply only to affected area. May be too intense for some viewers. Do not stamp. Do not staple. Use other side for additional listings. For recreational use only. Do not disturb. All models over 18 years of age. If condition persists, consult your physician. No user-serviceable parts inside. Freshest if eaten before date on carton. Subject to change without notice. Times approximate. Simulated picture. No postage necessary if mailed in the United States. Breaking seal constitutes acceptance of agreement. For off-road use only. As seen on TV. One size fits all. Many suitcases look alike. Contains a substantial amount of non-tobacco ingredients. Colors may, in time, fade. We have sent the forms which seem to be right for you. Slippery when wet. For office use only. Not affiliated with the American Red Cross. Drop in any mailbox. Edited for television. Keep cool; process promptly. Post office will not deliver without postage. List was current at time of printing. Return to sender, no forwarding order on file, unable to forward. Not responsible for direct, indirect, incidental or consequential damages resulting from any defect, error or failure to perform. At participating locations only. Not the Beatles. Penalty for private use. See label for sequence. Substantial penalty for early withdrawal. Do not write below this line. Falling rock. Lost ticket pays maximum rate. Your cancelled check is your receipt. Add toner. Place stamp here. Avoid contact with skin. Sanitized for your protection. Be sure each item is properly endorsed. Sign here without admitting guilt. Slightly higher west of the Mississippi. Employees and their families are not eligible. Beware of dog. Contestants have been briefed on some questions before the show. Limited time offer, call now to insure prompt delivery. You must be present to win. No passes accepted for this engagement. No purchase necessary. Processed at location stamped in code at top of carton. Shading within a garment may occur. Use only in well-ventilated area. Keep away from fire or flame. Replace with same type. Approved for veterans. Booths for two or more. Check here if tax deductible. Some equipment shown is optional. Price does not include taxes. No Canadian coins. Not recommended for children. Prerecorded for this time zone. Reproduction strictly prohibited. No solicitors. No alcohol, dogs, or horses. No anchovies unless otherwise specified. Restaurant package, not for resale. List at least two alternate dates. First pull up, then pull down. Call toll free before digging. Driver does not carry cash. Some of the trademarks mentioned in this product appear for identification purposes only. Record additional transactions on back of previous stub. Decision of judges is final. This supersedes all previous notices.

Thanks & 73

Tom "Parky", KB8UUZ
PCARS Newsletter Editor

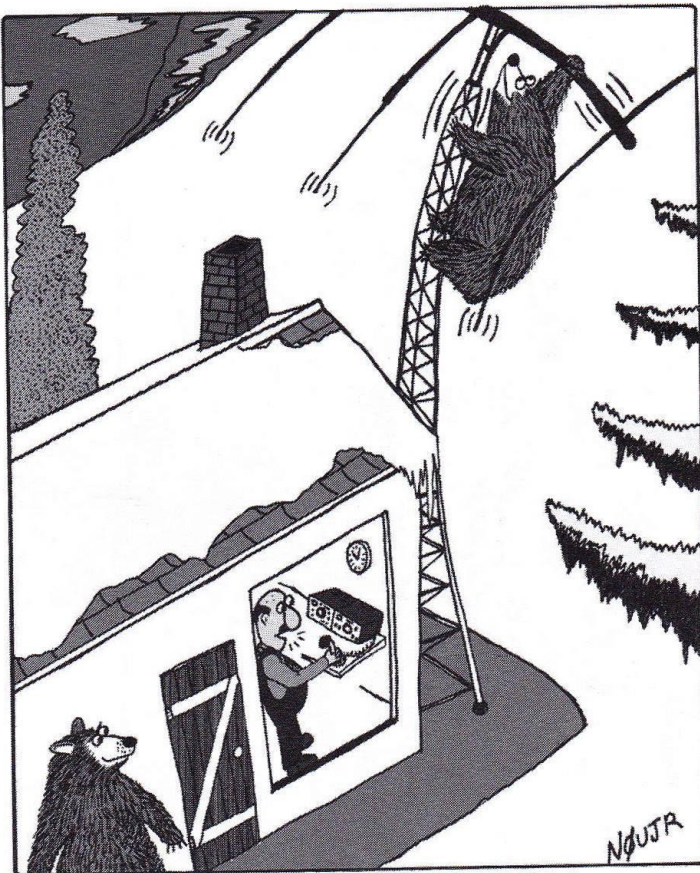
All of our members (and others) look forward to getting this newsletter every month, so keep sending those inputs! I'm sure PCARS will again be known as the **BIG FUN** amateur radio club with plenty of activities to report on in this newsletter all throughout 2016 and beyond.



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

K8CAV, AC8NT, N8PXW, KB8UUZ, W1GFH, N8RLG, KB8UHN, KB8VJL, KC8PD, KD8SJE, KD8IDJ, W8KNO, WB8LCD, W8PT, WB0RUR, KB6NU, N8SY, N8BHL, K3LR, N8XTH, W8Ezt, WX1DER, W8BBQ, NF8R, AF1K, Matt Blitz, Popular Science, Ham Hijinks, The ARRL, The Record Courier and the World-Wide Web

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

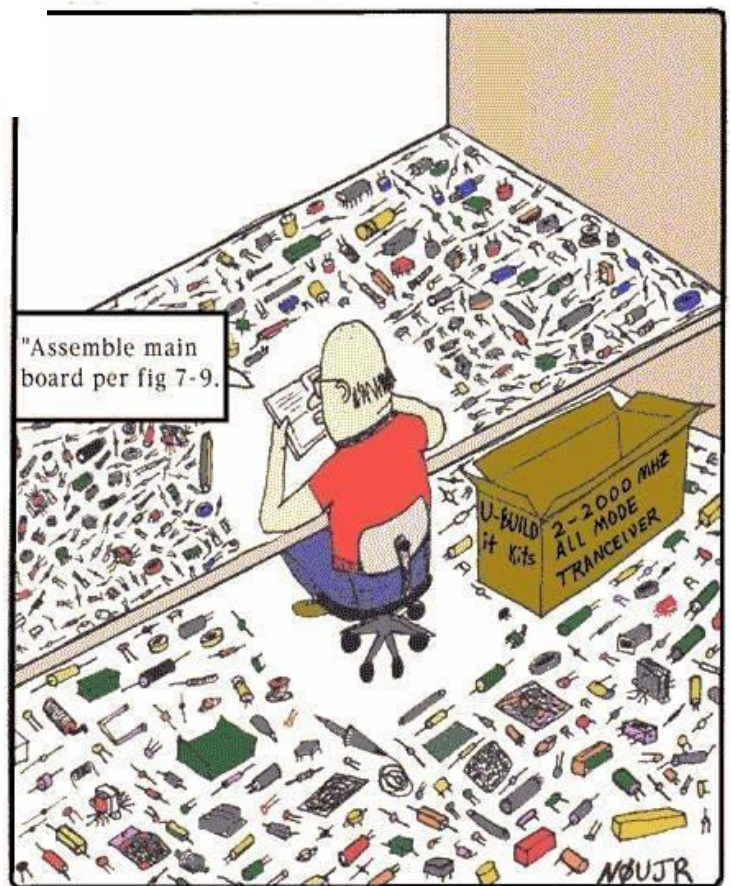


"Hang on a minute Larry...my SWR is jumping...I'm going outside and see what the problem is."



THE MH99 MULTI-PHONES

*Listen to SIX Different
Radios At the Same Time!*



Kit fun.



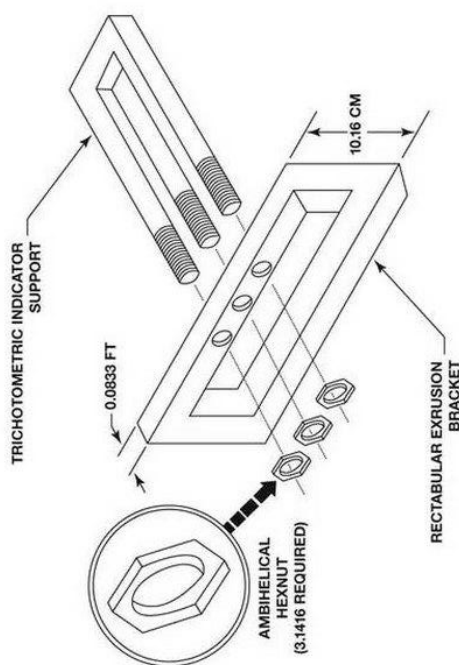
SKYPE®

THE FABULOUS VOICE SYSTEM
ABLE TO PUT YOUR
FAMILY TOGETHER.

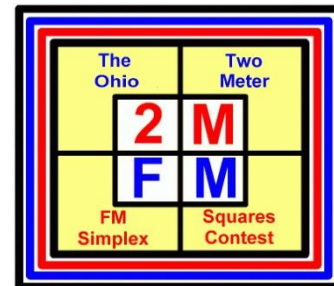


Skype has the finest quality for you and your relatives to communicate via internet. The healthiest, most economical and secure way to keep vigorous family bonds miles away. It's more than a telephone. It's a real audio-visual miracle that will put you in contact with a brand new world.

SKYPE
AND PARTNERS



2nd - Ohio 2M FM Simplex Squares Contest



Mark your calendars and reserve the last full weekend in April to participate in a fun and exciting 2 Meter Contest that offers both awards and prizes of value.

During each of two 5 hour contest windows (one on Saturday **April 23rd** from 11 am to 4 pm and one on Sunday **April 24th** from 1 pm until 6 pm) make as many contacts with other Hams as you can using 2 meter FM in the designated simplex windows. During the contact, you must exchange call signs, modes, and 6 character Maidenhead Grid Square locations with each other.

Like most Ham contests each valid contact counts towards achievement awards like “Most Contacts” and “Longest Distance Contact”, however in this contest, each valid contact will also earn you 2 or more “points”. These points become entries in a random drawing to be held in late May for prizes of value. Scoring favors mobile over base and portable over mobile contacts so plan on getting out and about for the contest. Currently we have DX Engineering Gift Certificates committed by the hosting club (Cuyahoga Falls Amateur Radio Club) and its members, and we expect more prizes to be announced in the near future.

A duplicate contact to the same station is still considered valid if one of the two sides has moved to a new 6 character grid square. That’s not far, because in this section of the country, 6 character grid squares are only about 3 by 4 miles in size. Also, because it’s an Ohio contest, one side of the contact must be from a 6 character grid square that is at least partially within the political boundary of the State of Ohio.

Finding your 6 character grid square location is relatively easy these days, especially if you have a Smart phone. There is an app called QTH (free for Android phones, a dollar or two for iPhones) that will tell you what 6 character grid square you are in. It displays a map that you can zoom in and out of, showing grid square boundaries in relation for cities and roads.

Don’t have a smart phone? Many GPS units can be configured to display your location in 6 character Maidenhead Grid Square format. There are also web sites that allow you to display grid square boundaries overlaid on maps. These can be printed and taken with you if you want to operate mobile or portable.

The points you earn are determined for each contact you make and based on your operating mode; 2 for base, 5 for mobile and 10 for portable. Your operating mode is **NOT** defined the way the FCC used to specify. Portable means all your equipment, including power, was carried or wheeled to the operating site by human or animal power. Mobile means you are using equipment installed in or on a motor or recreational vehicle or are getting power from such, and base means you are using permanently installed equipment or getting power from the AC mains. For example, using an HT and a hand held antenna in your back yard is considered portable, but if you disconnect the hand held antenna and connect the coax that runs to the beam on your tower, your operating mode is now base.

This is primarily a single operator contest, and while club and contest stations are encouraged to participate and submit logs, they are not eligible to win prizes or earn single operator awards. However, Clubs can earn awards based on the aggregate log submissions of their members. When a single operator submits their log, they can specify their affiliated club. This is an excellent opportunity for clubs to hold an antenna building session and encourage and foster “Elmering” their newer and inactive members.

The contest web site, www.cfarc.org/contest.php has all the details including rules, a grid square overview, antenna construction plans, winning tips, the current list of prizes, FAQs, and more. Look it over and if you still have any unanswered questions, e-mail o2mfmss@cfarc.org. Mark your calendar now and plan to have fun and get out and about and for the second annual Ohio 2 Meter FM Simplex Squares Contest!

~ 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.
March 23, 2016 through May 11, 2016
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 SKYWARN



**Spotters Training
Severe Weather 2016**

Wednesday, April 13, 2016
6:00 PM....Basic SKYWARN Spotter Training

Location:
Maplewood Career Center
Lowell B. Myers Dining Room (Cafeteria)
7075 State Route 88
Ravenna, Ohio 44266

Instructor:
Michelle Sowers
Emergency Management Specialist
Northeast Region-Ohio Emergency Management Agency

Severe Weather Spotter Training

Learn how to identify and report severe weather using cloud formations and other weather indicators. SKYWARN spotters are a vital part of the National Weather Service warning system. The training is free and typically lasts about 2 hours.

To become a spotter, attendance at a storm spotter class is required. Pre-registration is not required. You will receive spotter information at the training and be registered with the National Weather Service. The target audience for the training is Fire, EMS, Law Enforcement, Amateur Radio Operators, School Representatives, and any individual with a weather interest.

ID cards are no longer issued, participants must visit <http://www.weather.gov> to download and print the card and training certificate



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



Pioneer Amateur Radio Fellowship, Inc.

Dayton Hamvention 2016

Saturday, May 21, 2016 - 5:30 AM



Don't miss out on this year's PARF Bus Trip to the world's largest topical conference and product exhibition. Save on gas, parking, and walking by riding with us! Leave the driving to us and you can come and go to the flea market with your great purchases and leave them on the bus. The bus will be parked close to the flea market entrance.

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

The cost of the **Bus & Entrance ticket** to the Hamvention:

\$70* before April 15, 2016

The cost of the **Bus Only** to the Hamvention:

\$55* after April 15, 2016

(You will need to get your own Hamvention Entrance Ticket at gate \$25,
or order by phone & have held at Will Call--possibly getting Advanced \$20 price.)

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

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

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

Parking will be in the back of the church.

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

Transportation is being provided by the Crossroads Transportation Company.

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

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

Joy Spencer K8TDF

2101 Bigelow St

Akron, OH 44314

Or call 330-745-5115

E-mail: K8TDF@arri.net

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

Location of Departure:**

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

Located on Rt. 93 just north of Rt. 224

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

Repeaters 147.135 & 146.610

Please pass the word out to all of your ham friends & computer geeks.

The above pricing does not include any tips...a hat will be passed for driver's tip.

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

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


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

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

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

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

~ 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
~ Meetings & Net ~ 2 nd Monday of each month. 7pm Thursday night Club Net at 8 pm on 146.895	Net Night - Club Manager	WB8LCD	Tom Sly
	Newsletter Editor	KB8UUZ	Tom Parkinson
	OSPOTA Chairman	KB8UUZ	Tom Parkinson
	Public Information Officer	WB8LCD	Tom Sly
	Secretary	K8MSH	Mark Haverstock
	Tech, Gen & Extra Class Manager	AC8NT	Jim Wilson
	Volunteer Examiner Liaison	N8RLG	Robert Gurney
	Webmaster	KD8MQ	John Myers

 <p>PCARS Active Volunteer Examiner Team Members</p>	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

PCARS Incorporated
Nov. 1, 2005

First Meeting
Nov. 14, 2005



ARRL Affiliated
April 20, 2006



Special Service Club
March 22, 2010

The **RADIOGRAM** is the official **Award Winning** (ARRL Ohio Section Newsletter First Place Winner for 2012 AND 2013. Second Place in the Great Lakes Division for 2013. Second Place ARRL Ohio Section Newsletter for 2014. Third Place Winner in the Ohio Section 2015) newsletter of the **Portage County Amateur Radio Service, Inc. (PCARS)** – copyright © 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 ones.) to the newsletter editor: kb8uuz@portcars.org



NLC



"When All Else Fails - Amateur Radio Works"