



The **RADIOGRAM**

When All Else Fails ~ Amateur Radio Works

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

PCARS - the 2018 Hamvention® Club of The Year

August 2019 - Volume 14 Number 8

FIELD DAY 2019 Results Submitted



ohio BBQSO Party club Picnic & Open House August 24th



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



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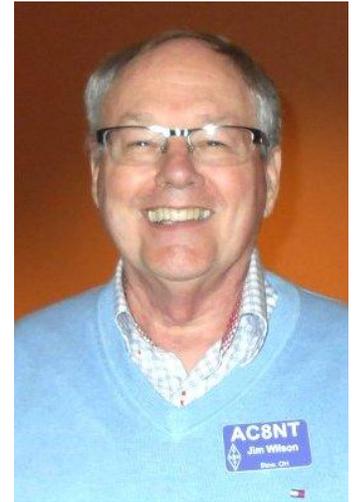


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From the President

Jim, AC8NT
PCARS President



Operating in the Great Outdoors

Why does the end of July seem to make me feel summer is ending? Maybe it is the solstice viewed in the rear view mirror or maybe it is all the back to school sales in the stores. At any rate, it makes me focus on doing as many outdoor things as I can before Ohio sends us inside. To that end I am playing with my “go kits” and seeing just how many contacts I can do from the back yard without remotely controlling my 7300. I have fired up my LD-5 with an endfed antenna with great results on CW and SSB. I will be taking it to the park a few times in the near future. I also plan to take my satellite gear out more often. This should prepare me for OSPOTA in September. I would very much like to hear from those of you that work in the great outdoors. A good discussion at the August meeting would be fun.

Libraries on the Air

Rick, K8CAV and I have received some requests from local libraries to make presentations or demonstrations. So far 5 libraries have asked when we can schedule events. One great thing about events at a library is they are very well publicized and the events I have attended have had excellent turnouts. Rick, Nick - AC8QG and I will be working to get some of these events scheduled. We may even try to “**Work all Portage County Libraries**”. This is an opportunity we should not pass up. If you are interested in helping please let one of us know. We will be working out a schedule in the upcoming weeks.

Project Build Day

I will be at the club site Saturday **August 17th from 9-Noon** for those that would like help building a BALUN. If you need help with other projects, bring them to the club and maybe we can help get them running. Remember, if you want to operate from the club, this would be a great time.

We have some great events and meetings coming up, so check our club calendar often and join us for some serious ham radio fun!

From the Vice President

Nick, AC8QG
PCARS Vice President



I hope everybody's been having a great summer! I've been busier than ever, but having a great time so far! That said, we have a lot more to do as we wrap up summer and head into fall. August 15th is our annual Amateur Radio Cruise-In at the Ravenna A&W. Then on the 24th, we have our Open House and BBQ and the Ohio QSO Party, so come on out to the club site, bring family or friends, and enjoy some food, fellowship, and radio too! I expect to see a lot of faces this month!

We still need to do some work on Bay 3, so watch for some QSTs on that project. Any help is always

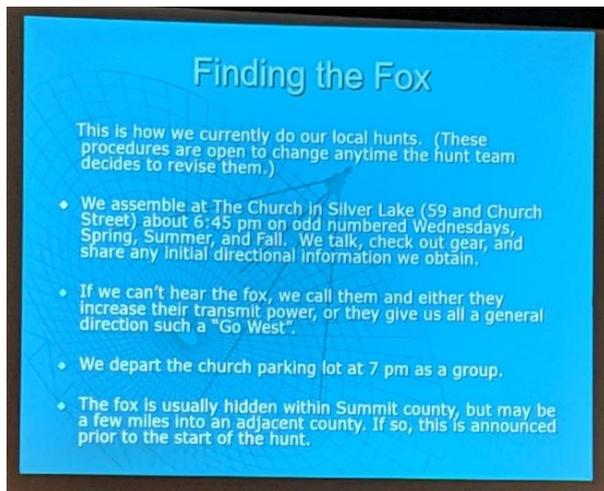
greatly appreciated! We already have a great club site, but finishing the Bay 3 work will really give us some nice, extra space.

I want to thank Frank Tompkins, W8EZT for a pretty nifty presentation about fox hunting at the July meeting. I really appreciated all the antennas strewn across the floor and tables! I'm constantly fascinated by how many aspects there are to this hobby. I guess I better add participating in a fox hunt to my bucket list!

Upcoming Monthly Meetings

- August: Jim Wilson, AC8NT - Antenna analysis
- September: Ryan Shackelford - Director of the Portage County EMA
- October: Australia Radio Club - Special Skype Presentation from Down Under
- November: Election of officers and Center of Hope fundraiser
- December: Christmas social

As always, if you have any suggestions for a meeting topic, or if you are interested in giving a presentation please let me know. We're always looking for new and interesting topics! Thank you to all the people that helped fill this list!



Schedule of Events



On the calendar for upcoming meetings and activities are:



- August 3rd - VE Testing at the Club Site - Starts at 10 am
- August 5th - Board Meeting at the club site - 7 pm
- August 10th - DX Engineering Hamfest
- August 12th - PCARS Meeting at the American Legion in Kent - 7 pm
- August 15th - 10th Annual Mobile Cruise-In at the Ravenna A&W
- August 24th - Ohio QSO Party - OPEN HOUSE, Club Picnic & BBQ at club site
- September 3rd - Board Meeting at the club site - 7 pm
- September 7th - Ohio State Parks On The Air contest
- September 9th - PCARS Meeting at the American Legion in Kent - 7 pm
- September 14th - Tour of the K8JYL old Radio Museum in Jackson Township
- September 28-29th - Texas QSO Party at the club site

Special Interest Groups (SIGs) - Every Month at the Club Site in Ravenna - 7:00 pm

- First Tuesday - Digital - **AUGUST DIGITAL SIG CANCELLED**
- Second Tuesday - QRP/CW - Moderator: Terry, KB8AMZ
- Third Tuesday - Antenna - Moderator: Tony, WA8AR
- Fourth Tuesday - DX & Contest - Moderator: Chuck, W8PT
- Fifth Tuesday - Linux for Hams - Moderator: Terry, KB8AMZ

Fourth Thursday - Net Night at the Club Site - 6:30 pm - Moderator: Tom, WB8LCD



Club Site Caution !!!

Tom, WB8LCD recently took this photograph at the club site.

Tom wanted to warn everyone to be careful when parking (or standing) below the tower guy wires.

Obviously, the birds that dropped their message on Jim's windshield must be from the old Chevy plant in Lordstown

Jim's car is *not* a Chevy



PCARS Field Day 2019 - All Submitted to ARRL

The final PCARS Field Day 2019 report was done and sent in to the ARRL. It was submitted on the ARRL's web ap for Field day and the additional required information was mailed to the ARRL. Everything has been received and accepted. Now we have to wait until later this year to see how we did compared to the other 4A stations. It was a GREAT Field Day and all went fine and it appeared all had FUN. Only 11 more months until Field Day 2020. Start planning NOW.

Portage County Amateur Radio Service - Field Day 2019

Call Used: **K8BF** ARRL/RAC Section: **OH** Class: **4A** Participants: **98**
 Power Source(s): **Generator, Battery, Solar** Power Multiplier: **2X**
Score Submitted: 9,288 + Bonus 1,710 = 10,998

Score Summary:

	CW	Digital	Phone	Total	
Total QSOs	791	292	2,478	3,561	
Total Points	1,582	584	2,478	4,644	X2 = Claimed Score = 9,288

Bonus Points:

Description	Points
100% Emergency power	400
Media Publicity	100
Set up in a Public Place	100
Information Booth	100
NTS message to ARRL SM/SEC	100
W1AW Field Day Message	100
Formal NTS messages handled - No.=11	100
Natural power QSOs completed	100

Description	Points
Site Visit by invited elected official	100
Site Visit by invited served agency official	100
Educational activity	100
Youth Element Achieved	60
Submitted via the Web	50
Social Media	100
Safety Officer	100
Total Bonus Points	1,710

Band/Mode QSO Breakdown:

	CW		Digital		Phone		
	QSOs	Pwr(W)	QSOs	Pwr(W)	QSOs	Pwr(W)	
80m	149	100	53	100	202	100	
40m	482	100	66	100	1,569	100	
20m	151	100	131	100	698	100	
15m	9	100	0	100	-	100	
6m	-	100	42	100	9	100	
Total	791		292		2,478		3,561

First Contact was logged at 1800 UTC on June 22nd by the **20 Meter Phone Station** to W5MWL in OK.
 3565th Contact was logged at 1759 UTC on June 23rd by the **40 Meter Phone Station** to N2JF in NNY.

Station Totals:



Station	QSO's
40M	1,569
CW	762
20M	698

Station	QSO's
Flex	481
VHF	51



Field Day 2019 Entries Nearly 3,100

From the ARRL



The 30-day deadline to submit ARRL Field Day entries via app upload and (timely postmarked) USPS mail is now past, and the ARRL Contest Branch reports 3,070 entries have been [logged into the system](#).

Last year saw 2,903 entries. ARRL Radiosport and Field Services Manager Bart Jahnke, W9JJ, said the total does not include entries postmarked by July 23 and still in transit. A number of entries still show a status of "PENDING." These include 280 incomplete entries that are missing the required list of call signs by band/mode (also known as a "Dupe Sheet"), or a Cabrillo file.

"This requirement is to ensure that claimed contact totals do not include duplicate contacts on the same band and mode," Jahnke said. "These entries, if not complete, may end up as check logs in the final listings."

An additional 191 entries are missing something *other* than Dupe Sheets. "These entries are complete," Jahnke explained. "Their scores at present are not benefitting from certain bonuses, for which documentation is still outstanding," he said. "Confirmation for entries submitted online using the web app include a link to update your entry."



A young visitor to the Boulder Amateur Radio Club's W0DK Field Day site in Colorado makes his first contact on ham radio. This 3A operation was beset by rain and cool to chilly temperatures.

If ARRL generated the entry from paper, or if you are unable to update your entry, submit pending documentation via email, and the Contest Branch will update your entry, assuming that documentation/photos confirm the bonus points claimed."

Updates are permitted until August 23. After that, all entries as of that moment will be considered final. Results will appear in the December 2019 issue of *QST*. Jahnke encouraged groups to separately [submit](#) photos with captions for possible inclusion in *QST*. Individuals should be identified by names and call signs, and any subject younger than 18 years old will require a signed [publication release](#). Photos should have a minimum resolution of 250 kB.

Editor's Note: Have no fear - we were fully submitted and on time.

Call Sign	GOTA	Status	Club	Class	Section
K8BF		Complete	Portage County Amateur Radio Service	4A	OH



Major WSJT-X Upgrade Boosts FT4



From the ARRL

Major WSJT-X Upgrade Boosts FT4 into "a Finished Protocol for HF Contesting"

The [WSJT Development Group](#) has announced the "general availability" release of *WSJT-X* version 2.1.0. This major upgrade formally introduces FT4 as "a finished protocol for HF contesting." Users have been advised to discontinue using any "release candidate" (beta) versions of the software that *WSJT-X* version 2.1.0 supplants. The latest edition of the popular digital software suite also includes improvements and bug fixes in several areas, including FT8.

The list includes:

- FT8 waveform generated with GMSK and fully backward compatible
- User options for waterfall and spectrum display
- Contest logging
- Rig control
- User interface

The *WSJT-X* Development Group is providing a separate *WSJT-X* version 2.1.0 installation package for 64-bit Windows that offers significant improvements in decoding speed.

A detailed list of program changes since *WSJT-X* version 2.0.1 is included in the cumulative [release notes](#). Upgrading from earlier versions of *WSJT-X* should be seamless, with no need to uninstall a previous version or to move any files.

[Installation packages](#) for Windows, Linux, and Macintosh are available.

Visit the [FT8/FT4/JT9: WSJT 2-Way Narrow Modes for Amateur Radio](#) Facebook page for additional information. Read [more](#).

Happy Birthday PCARS Members

PCARS members having their birthday in **August**:

K8IG	Frederick Freer, III	N6TL	Randy Wilson
N8GPS	Ned Brown	KB8VJL	Al Atkins
N8SKN	Robert Rohde	N3BSN	Laura Gibson
W8LSQ	Evan Liechty	KD8ZSH	Randall Thorpe
K8VOX	Julie Martin	KD8CGH	Robert Benedict
WD8RAY	Ray Woods	KE8ELR	Andrew Williams
W8RJG	Ron Good	WD8ICX	Gary Marks
KB8TUY	Mike Ryan	W8JFQ	Robert Davet

PCARS Custom Coffee Cups - Limited Edition

PCARS has obtained a number of special, custom made coffee cups that are available only to members.

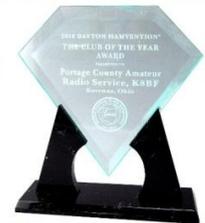
Supply is limited. If you are a current (PAID) member of PCARS you get one coffee cup for **FREE** !! The only catch is you have to claim it in person from the **Treasurer - Paul, KE8EGF**.

Paul has a list of current members and will check off your name when you get your **FREE** PCARS coffee cup.

There are a limited number of extra coffee cups and they will be for sale at \$5.00 each - **Again, see Paul for all of the details.**



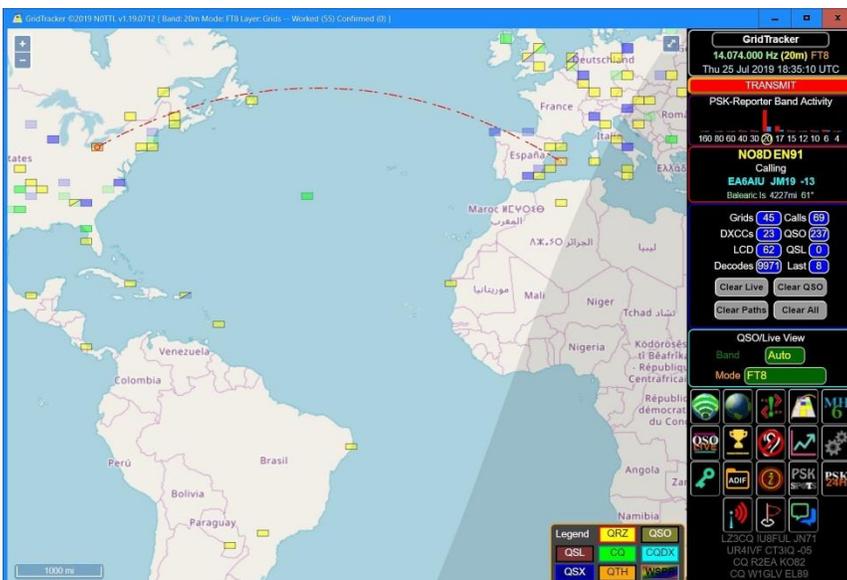
Portage County Amateur Radio Service



K8BF

2018 Hamvention® Club of the Year

Gridtracker for WSJT-X or JTDX



Paul, NO8D

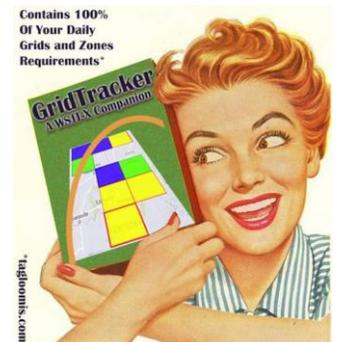
I have been using Gridtracker for a while. It is a companion program for WSJT-X or JTDX and decodes and displays what is happening on a world map.

Not only is it helpful and entertaining it also is a great way to learn where all of your contacts are located.

It also indicates the relative number of signals on

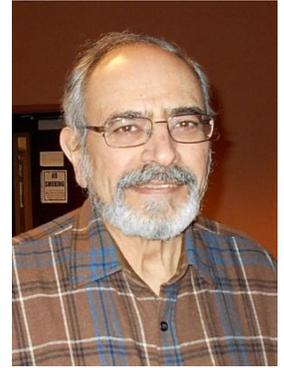
each band as reported by PSK-Reporter so that you can show up to work your fair share !

The price is right and it is easy to get running. See: <https://tagloomis.com/grid-tracker/>

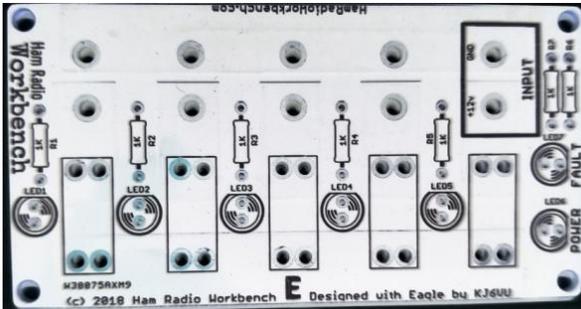


Workbench: Powerpole Distribution Board

Doug, WA8UWV



I have visited the Ham Radio Workbench (<https://www.hamradioworkbench.com/>) booth at the Hamvention these past two years. The first time I purchased their circuit board for the 12V DC Outlet Strip project intending to purchase the components according to instructions on their website.



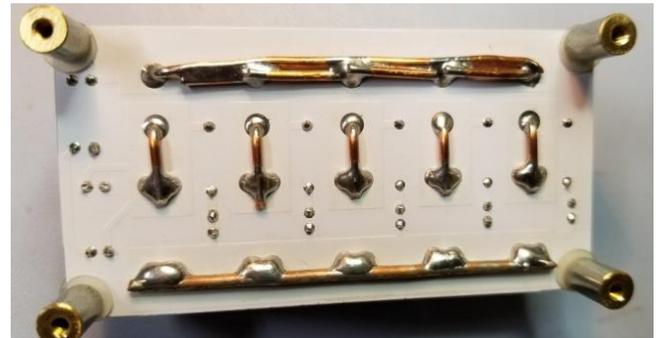
This year, having not gotten around to purchasing the components, I purchased the complete kit.

The instructions state that the board traces are not quite sufficient to carry 25 amps continuously so I decided to bolster them by paralleling them with bus wire.

I followed their instructions closely but cut the wires on the positive (red) Powerpole contacts long enough to be able to bend over and reach slightly past the fuse socket leads on the bottom of the board. The wire from the negative (black) INPUT Powerpole contact was left long enough to reach across all 4 of the output contacts. The wires from the output negative contacts were left long enough to reach the adjacent negative contact solder pads. This is to reinforce the traces on the board.

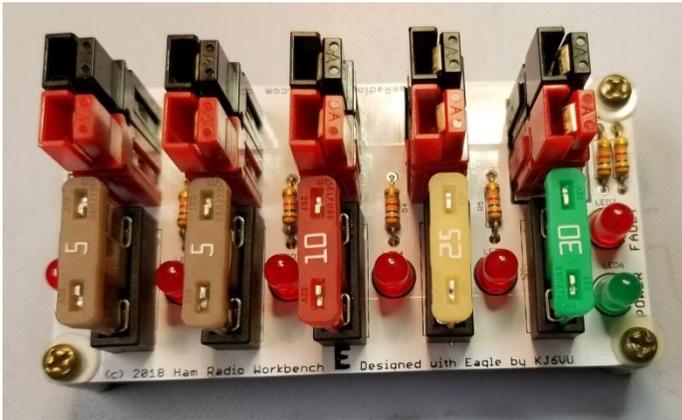
The contacts were inserted into the housings immediately after being crimped so the wire could be trimmed according to the following process.

I started by crimping the supplied 14 AWG solid bus wire to the Power pole contacts cutting 5 of them about 0.5 inch past the bottom of the board for the positive contacts; 4 of them about 0.75 inch past the bottom of the board for the negative output contacts; and one about 2.5 inches past the bottom of the board for the negative input contact. When crimping, I use the DX Engineering crimper with the Powerpole applicator head. I crimp each contact onto the end of the entire length of bus wire remaining. Then, with the contact inserted in its housing, the wire was pushed through the board to determine the length to leave on the contact.



A proper crimp is generally more reliable than a soldered connection to a terminal. I am sometimes tempted to apply solder to a crimped terminal to be doubly sure but that runs the risk of getting solder to wick up onto the spring contact and ruin it. I'm also not sure what affect the expansion/contraction or distempering of the heated crimp has on its reliability.

The first components assembled to the board were the resistors since they are the shortest. They are all 1000 Ohm ¼ watt. Then I installed the LEDs. Green for power and the rest are red. I determined that LED 5 must be inserted backward from the silk screen in order for it to light when the input fuse blows.

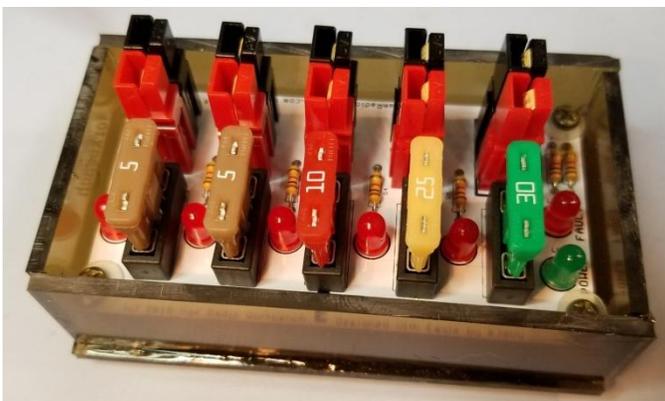
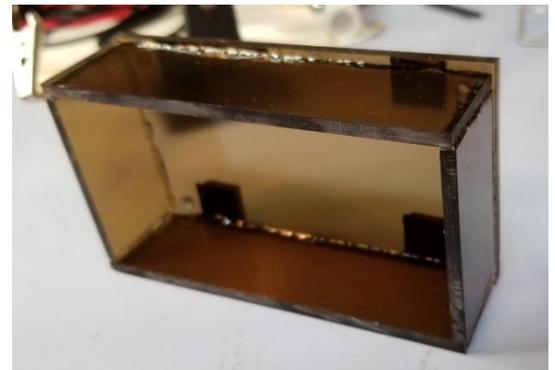


the bus wire between the two fuse leads.

The long extended bus wire from the input negative (black) terminal was bent along the negative output terminal pads and all the negative bus wires were soldered together. This results in two parallel lengths of 14 AWG wire to carry the current of the negative terminals.

I soldered a length of 12 AWG solid bus wire across the 5 positive fuse socket leads to carry the current to the positive Powerpole terminals through the fuses. This reinforced the board so that it should be able to carry 25 amps without damage. I haven't tried that as yet. That test would require a 0.48 Ohm, 300 watt load resistor. I suppose it could be done at lower voltage.

It is essential to prevent the bottom of the board from shorting out to any metal it might be contacting. This can be accomplished by installing the board in a case. The Ham Radio Workbench website suggests a source for a case. I decided to build my own since I have a few scraps of 0.12 inch thick plastic. I cut out a base 2.25 inch wide by 3.825 inch long. I drilled holes to match the holes in the board such that the board would be centered. The holes are spaced 1.58 inch by 3.25 inch center to center. I then cut out plastic for the sides. The short sides, or end caps, are 1 inch by 2.88 inch and the long sides are 1 inch by 3.81 inch. This height for the sides provides easy access to the fuses. Since I haven't provided a top I'll have to avoid letting conductive things fall onto the board.



Next, the fuse sockets were soldered followed by the assembled Powerpole connectors.

The red and black housings attach together by sliding them into position when properly oriented. The pair were then inserted onto the board with the extended wire bent over the foil. The extended wire from the red contacts are bent over to be between the two near fuse leads. The extended wires from the black terminals are bent over to the pads of the adjacent negative contacts. The contact housing was held tight to the board while soldering. A large solder bead was applied to encompass

I had some 1-inch threaded standoffs which I cut in half to yield 0.435-inch standoffs. They are longer than necessary. These were mounted to the board with 4-40 screws using nylon washers against the board. The board assembly was then mounted to the case base using 4 more 4-40 screws. The board will provide guidance for positioning the sides and end caps.

Epoxy was applied to the bottom edges of the sides and end caps as well as the vertical edges of the end caps where they will contact the sides.

The end caps were attached to the base and then the sides were attached to the base and pressed against the end caps. The end caps were positioned close to the board but slightly spaced away. I also kept a tiny space

between the board edges and sides so that it would be easy to remove the board. With the long sides pressing against the end caps and the end caps spaced slightly away from the board I let the epoxy cure for a day.

Rubber stick-on feet were applied to the bottom in the corners to prevent the screws from scratching whatever surface it's resting on.

The Ham Radio Workbench website states the 12V DC Outlet Strip Kit is not in stock but I expect them to be replenished eventually. This seems to be a popular item.

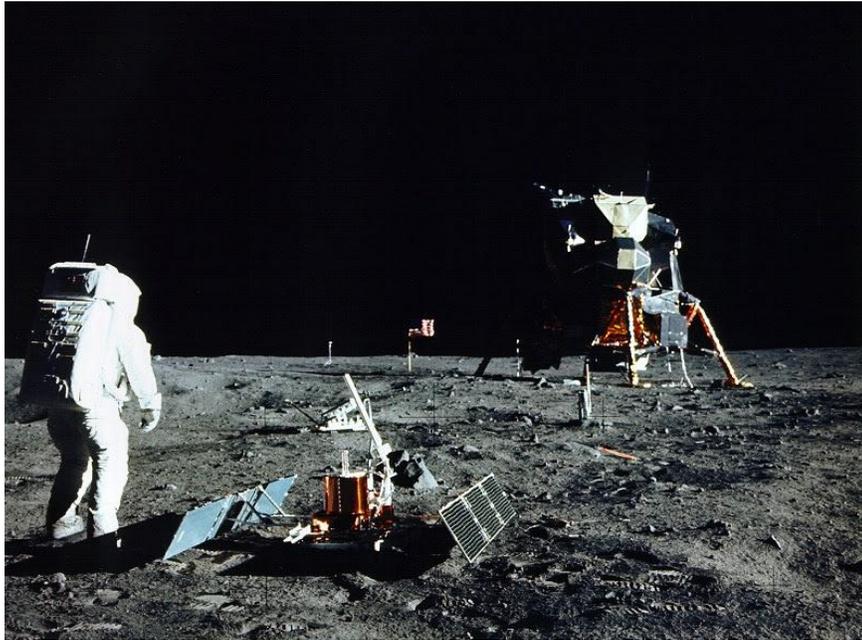
USB and the Man on the Moon?



VOA Bethany

No, not that USB.

It was the Unified S-Band Radio System that helped Apollo 11 place a man on the moon on July 20, 1969, 50 years ago.



[NASA Photo]

Collins Radio played an important part in Voice of America history, as it built the powerful 250,000 watt shortwave transmitters that replaced original Crosley transmitters in 1963. Collins also made an important contribution to Project Apollo.

The earlier Mercury and Gemini space programs used separate radio systems for voice communications, tracking, and telemetry (data collection for monitoring). The multiple systems were adequate for these simpler missions. However, the Apollo mission to land on the moon required expanded communications capabilities due to the

increased distance and the use of two separate manned spacecrafts - the command module and the lunar module.

NASA, Jet Propulsion Laboratory, and Collins Radio met this challenge by developing the Unified S-Band System (USB), which integrated the different radio systems into a single system. During the Apollo 11 mission, it used the ultra-high frequency S-Band, also known as the microwave band, for radio transmission between the modules and the NASA ground station. The USB antennas could transmit and receive radio signals simultaneously. These 80-foot antennas were built by Blaw Knox, who also constructed the iconic 831-foot WLW tower in Mason, OH. The system even had an "emergency key" that allowed for Morse Code transmission in the event that voice communication was lost. And, yes, this USB system also supported video signals, so that the world could see Neil Armstrong's "giant leap for mankind" on television.

Today, the S-band frequencies are used to carry GPS and Bluetooth radio signals.

PCARS VE Test Sessions

Tom, KB8UUZ
PCARS VE Team Liaison



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

August 3rd, October 5th, December 7th

What to Bring to the Testing Session

- \$15 is the current test fee. We prefer the exact amount in cash or a check made out to: **ARRL-VEC**
- A government photo ID (**driver's license or state ID card preferred**).
- Your Social Security Number or FCC Federal Registration Number. We are required to submit either your Social Security Number (SSN) or your FCC Federal Registration Number (FRN) with your application. If you are upgrading, your FRN is on your current Amateur Radio license.
- A pen (black ink) and pencil (we can loan you either or both)
- **If you already have an Amateur Radio license: One copy of any current (unexpired) amateur radio operator license issued to you.**
- If you've already passed a test: The original (**and one copy**) of any document that you will use to prove you've already passed a test element.



These documents may include:

- An unexpired Certificate of Successful Completion of Exam (CSCE) indicating the credit(s) earned indicating the credit(s) earned.
- Original and copy of a pre-March 21, 1987 Technician license (this provides credit for the Element 3 [General] exam) - you must be currently licensed to get this credit.

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

Any Questions? Contact: KB8UUZ@gmail.com

PCARS Patches & Stickers



PCARS logo patches (**iron on**) & stickers (stick on) are now available!! Put the patch on your hat, your shirt, your jacket and show off that PCARS logo!! The patch is about 3". The embroidery on the white patch is in Red, Black and Blue. Cost for a patch is only \$2.00 each and can be obtained



at any PCARS meeting. There are 2 types of stickers available - a 4" x 6" oval and a 3" x 10" bumper sticker. Stickers are \$1 each. Show your pride in PCARS - Wear a patch, use the stickers! See the club Treasurer: **Paul, KE8EGF** or e-mail him at: phyland@neo.rr.com

Contest Calendar

August Contest Calendar	
Contest Name	Times
10-10 Int. Summer Contest, SSB	0001Z, Aug 3 to 2359Z, Aug 4
North American QSO Party, CW	1800Z, Aug 3 to 0600Z, Aug 4
Maryland-DC QSO Party	1600Z, Aug 10 to 2400Z, Aug 11
North American QSO Party, SSB	1800Z, Aug 17 to 0600Z, Aug 18
Hawaii QSO Party	0400Z, Aug 24 to 0400Z, Aug 26
Ohio QSO Party	1600Z, Aug 24 to 0400Z, Aug 25

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

Contests that will be active at the PCARS Club Site in 2019	
Date	Contest
Aug 24-25	Ohio BB-QSO Party
Oct 5-6	California QSO Party
Oct 12-13	Arizona QSO Party

NAQP RTTY Contest July 20-21 Results

George, K3GP

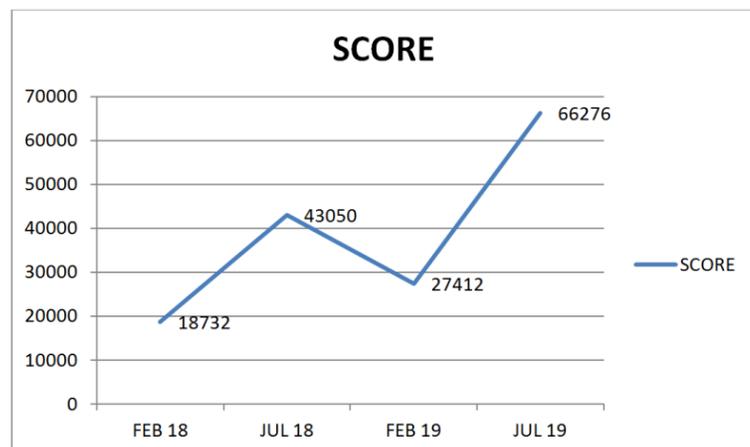


At the start of the contest it was surprising to find minimal activity on the 40 meter band - it was basically dead. However, we quickly discovered that 15 meters was wide open, and it stayed open until nearly sunset. At that time 40 meters came alive and shortly thereafter 80 meters came awake with many RTTY signals. With the exception of several brief outages due to software/hardware malfunctions, K8BF remained on the air for the entire 12 hour contest.

This was the fourth time K8BF was activated for NAQP RTTY, and our best effort so far:

Band	QSOs	Pts	Sec	Mt2	Pt/Q
3.5	110	110	27	0	1.0
7	115	115	30	0	1.0
14	172	172	35	0	1.0
21	129	129	34	0	1.0
Total	526	526	126	0	1.0

Claimed Score: 66,276



Contacts by Operator: KB8AMZ 76, WA8US 74, N8QE 73, K8YLK 73, W8PT 65, K8IV 54, WB9LBI 50, K3GP 40, KB8TUY 14, W8NET 5, W8AHC 2. TOTAL 526

From the Ohio Section Manager



Scott, N8SY
ARRL Ohio Section Manger



Hey Gang...

Wow.. was it ever hot this weekend!! Even though it was hot it was a week of anniversaries. It was the 50th anniversary for the first moon landing and moon walk (sorry Michael Jackson, you weren't the first to do a "Moon Walk).

It was also 53 years ago this past week I got to go to "Derby Downs" in Akron as the runner up in our local Soap Box Derby. I did get to go down the track for timing only, but it is a memory I'll never forget. All of us kids there were treated like kings that week!

This past week was also the third anniversary for what is now known as PostScript, our weekly newsletter and it was also the second anniversary when I almost met our maker when I was involved in that very serious motorcycle crash.

But even though it was a week of anniversaries, it was also a weekend of Hamfests. Saturday was the NOARS Fest at the Lorain County Community College in Elyria, then on Sunday it was the Van Wert Hamfest. Wow.. what a week it was. It was really great to get to see and talk with all of you.

I'm still working on getting my dipole just right where I want it and getting the pullies and springs set to just the right tension, but for the most part, it works fantastic! I've had several folks tell me that I now owe them a new speaker for sure. My next project is getting the 40 though 10-meter Compact Antenna up and running. Yup, I'm going with an entirely new design antenna for that portion of the bands. I've got just the right location for this new antenna and I'm definitely going to give it a good workout. I'll keep you all informed on its performance and "customer satisfaction...!!"

Sliding down the band a bit... Have you taken the time to get signed up in "Connect" yet? I know that this must sound like a broken record, but it is important for everyone to not only get signed up but start using as well. Please, don't let the name ARES fool you, this new system is for everyone and not just for ARES. So, if you haven't already signed up, now is the time. I know that this must sound like a broken record to most of you, but you won't believe how many folks I meet every week that still tells me they haven't heard of it yet. TOP^49 | P a g e Here in the Ohio Section we only require our Level 2 volunteers to have the 4 basic courses, IS 100, 200, 700 & 800. For our Level 3 volunteers we do require the additional ICS 300 / 400, or the equivalent professional series courses IS 120, 230, 240, 241, 242, 244 & 288. These equivalent courses are all on-line classes just like your basic 4 NIMS courses are and being offered as an alternative way for you to get credit for taking the professional series courses in the event you just cannot get scheduled into an ICS 300/400 class. By the way, if you decide to take these 7 on-line courses and complete them all, you will want to take just one more class IS235. By completing this additional course, you will get a really great looking certificate from FEMA recognizing that you have completed the entire Professional Series courses. I do hope that this clears up the confusion that has been going around lately. As we have stated on the website and in this newsletter many times "We want no one left behind." Yes, the Ohio Section is extremely lucky to have the relationships that we do

with Law Enforcement, EMA, fire and other government agencies, that's why we've partnered with EMAO, OP3 and Ohio VOAD to show our support for them and our Ohio citizens.

Moving up the band a bit... Newsletter Editors... are you ready for the results of the 2019 ARRL Ohio Section Newsletter Contest! I will tease you all just a bit. The certificates are all make out and framed just waiting for August 3rd for John, KD8IDJ to make the announcement as to who won! The winner of the Newsletter Contest this year will go on to the Divisional Contest that will be held at the Great Lakes Division Convention in March. Which newsletter do you think won? My answer to that is ALL OF THEM!!! If your club has a newsletter, everyone wins! Now, I haven't really mentioned it yet this year, but I do have another recipient of the Allan Severson, AB8P award chosen and that person's name will be announced on August 3rd at the hamfest as well. Got any ideas as to who it will be this year?

[08/03/2019 - Columbus, Ohio Hamfest - ARRL Ohio Section Conference - Location: Aladdin Shrine Center - 1801 Gateway Circle - Grove City, OH 43123 - Website: <http://www.columbushamfest.com> - Sponsor: Voice of Aladdin Amateur Radio Club - Public Contact: John Lehman, K8PJ - 7415 Hagerty Road Ashville, OH 43103 - Phone: 614-571-5179 - Email: k8pj.john@gmail.com]

Website updates... Ken "Digital Dorsey" has updated his Alinco codeplug for Ohio. He added several new DMR repeaters.

Is your club doing any special activities that you'd like the Section to know about? Do you have a story that you'd like to tell about something that you or your club has or is doing? Let me know about it and let's get it in the next edition!

Whelp... That's going to do it for this time around. Stay safe, enjoy the sunshine while we have it, and most of all... have FUN!!

2019 COLUMBUS HAMFEST

ARRL SANCTIONED HAMFEST

Saturday, August 3, 2019

Sponsored by:
The Voice of Aladdin Amateur Radio Club - W8FEZ

8:00am - 1:00pm
Talk-In 146.760 - PL 123.0
(Doors open at 6:00am for vendor set-up)

Located at:
Aladdin Shrine Center
1801 Gateway Circle
Grove City, Ohio 43123
(Behind Tee Jayes restaurant, off of Stringtown Road at I-71)

FORUMS: Covering a wide range of fun and informative Amateur Radio topics!!!

VENDORS: Universal Radio, and other vendors. See the website for our growing list.

V.E. Amateur Radio License Testing

Ohio Single Side Band Net (OSSBN): Annual Meeting

For MORE Hamfest Information visit our Website
<http://www.columbushamfest.com/>

Admission	Indoor Tables	Outdoor Space
\$5.00 at the gate	\$10.00 per Table	\$10.00 per space
12 and under FREE		

NO ADVANCED TICKET, TABLE OR SPACE SALES



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

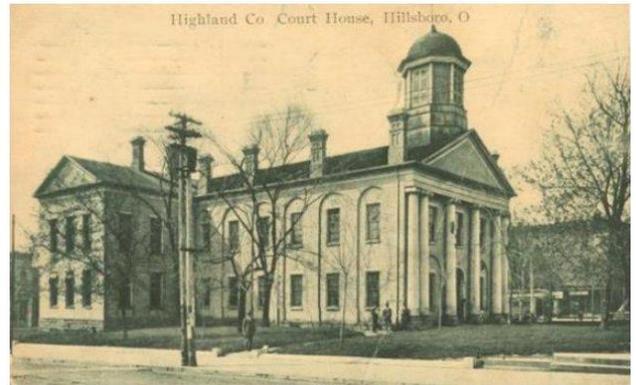




Ohio Statewide Courthouses On The Air Special Event, August 24, 2019

Event Background

Last year there was the Ohio Covered Bridge Special Event that was led by John Levo, W8KIW Editor of the Highland ARC's Monday Morning Memo. Several clubs participated and was a complete success. Additionally, there were several folks interested in Ham Radio at the event who have now become new Hams. Yes, anytime there is a public event resulting in a gain to the Ham Radio community, it is a total success. This year in keeping with the historical event series, John and the members of the Highland ARC decided to do a special event from their courthouse lawn. John published an article in the Monday Morning Memo which attracted the attention of Michael Love, WB8YKS Southern Ohio Amateur Radio Association (SOARA) PIO. John and Mike decided that there may be interest in an all-state special event celebrating the courthouses in all of Ohio's 88 counties. Scott Yonally, N8SY Ohio Section Manager thought it was a fantastic idea and requested John and Mike to reach out across the state to determine the level of support for the event. The Ohio Section has 117 affiliated clubs of which 48 are Special Service Clubs and there are 29 PIOs. There may not be a club listed in each county by address, but we do have Hams in each county.



Promoting Ham Radio

This may be a first for the ARRL and the Ohio Section. This event has all the opportunities for a FUNFILLED family day engaging the public and our government officials. Additionally, one county's club is partnering with their county commissioners, historical society, EMA, sheriff's office, public library, chamber of commerce, and news media. The club has decided to use a large tent as the event will take place rain or shine. Their PIO will make handouts available about ham radio and promoting the ARRL, ARES, RACES, Ohio Section and their local club. A special focus will be made to spotlight the public awareness of the hobby and the benefits of a Ham radio license, emergency and community service. The public will be invited to talk on the radios under the direct supervision of a licensed operator. Several clubs plan to provide contact QSL cards and/or certificates to capture this historical event.

Fun for Everyone

There may be some folks dressed in period costumes providing history about their courthouse and the early days in their county. Moreover, one club has requested, August 24, 2019, to be declared as Ham Radio Day in their county, and their county commissioners have approved it. Event Details Yes, we are excited and hopefully you are as well, about participating in this historical Ohio Courthouses on the Air Special Event. **We are requesting ALL Ohio Clubs and Hams to consider supporting this special event. The event will take place on, Saturday, August 24, 2019, from 9:00 AM to 4:00 PM. However, the hours can be extended by each club. Additionally, each club will determine the frequencies and modes they will use.**

Another opportunity presents itself as the Ohio QSO Party www.ohqp.org is also on the air, Saturday, August 24th. Therefore, these two events will complement each other providing contacts not only from within Ohio but across the country. All Hams are invited to participate.

Staying in Touch

Please inform the listed contacts that your club will be participating, and the name of the county represented. Additionally, there will be updates provided in the Monday Morning Memo, the PostScript, Ohio Section Journal, and www.arrl-ohio.org. Contacts for additional information: Michael Love, wb8yks@arrl.net or John Levo, W8KIW highlandara@yahoo.com

Hamvention® 2019 Attendance Up



From the ARRL

Dayton Hamvention® 2019 Attendance Approaches All-Time Peak

The Hamvention Executive Team announced July 15 that attendance at [Dayton Hamvention®](#) 2019 was 32,472, the second-largest ever. This marks the highest attendance recorded since Hamvention moved from Hara Arena to the Greene County Fairgrounds and Exposition Center in Xenia, Ohio. This year's attendance also approached an all-time Hamvention high. Attendance at the show peaked in 1993, while Hamvention was still being held at Hara Arena, at 33,669, before the 1996 change in date from April to May.

Last year, Hamvention welcomed 28,417 visitors in its second year in Xenia. Attendance in 2016 for the show's final year at Hara was 25,364. Hamvention hosted the ARRL 2019 National Convention, and both embraced the theme of "Mentoring the Next Generation."



"Our early indications were that 2019 would be a big year, and it lived up to our expectations," Hamvention General Chair Jack Gerbs, WB8SCT, said. "Our more than 700 volunteers worked hard to ensure that we presented a great show for our visitors. It wouldn't have been possible without them. I also want to thank all our vendors and visitors and hope they will all be back next year."

Hamvention officials suggested that a small factor behind the increased attendance might have been the free admission on Sunday, an effort to allow local non-hams to experience Hamvention. Free Sunday admission is expected to be continued next year.

The world's largest Amateur Radio exposition, Dayton Hamvention is sponsored by the Dayton Amateur Radio Association (DARA) every third full weekend in May. Hamvention 2020 will take place on May 15, 16, and 17. Read [more](#).

Previous attendance;

1952: 600
53-90 - no reports
1991: 33,500
1992: 33,000
1993: 33,669 Highest Recorded
1994: 35,000
1995: 33,000
1996: Changed from Late April to May
1997: 28,000

1998: 28,120
1999: 28,176
2000: 28,804
2001: 26,151
2002: 24,832
2003: 22,168
2004: 19,869
2005: 20,411
2006: 20,324
2007: 19,318
2008: 17,250
2009: 18,877
2010: 19,750

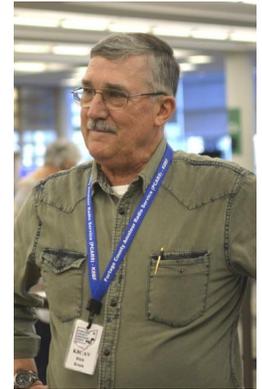
2011: 22,312
2012: 24,483
2013: 24,542
2014: 24,873
2015: 25,621
2016: 25,364 - Last year at Hara
2017: 29,296 - First year at the Greene County Fairgrounds, Xenia
2018: 28,417
2019: 32,472

Headwaters Adventure Race Roundup



Rick, K8CAV

Portage County Coms Unit Commander



On Saturday July 13th the Coms Unit of the Portage County Office of Homeland Security/Emergency Management, and other amateur radio volunteers gathered to support the annual Headwaters Adventure Race in the Mantua-Hiram area. This event raises money for the Portage County Parks District and consists of a two-mile run, a ten-mile bicycle race and five-mile canoe race on the Cuyahoga River. Radio Operators provide communications support to the Race Director and her staff during this event. They staff intersections on the bicycle race course, provide a Radio Operator in the bicycle race Sweep vehicle, and provide two Radio Operators in a sweep canoe on the river.

In past years communications on the course took place either by direct contact with the K8IV 146.895/295 MHz repeater, or contact to that repeater through two VHF/UHF cross-band repeaters located to provide coverage into the river valley and to locations east of Mantua Village where direct contact with the K8IV repeaters was marginal. While this did work, it still had areas where coverage was difficult, especially in the river valley. This year we were fortunate, through the generosity of Dave Dorson, K8PKN who owns a commercial, three hundred foot tower on top of a thirteen hundred foot hill just east of the village of Mantua. Dave allowed K8IV to install a UHF repeater on 444.575/449.575 MHz in his facility to an existing UHF antenna and feedline about half way up this tower. Local coverage throughout the event area and particularly in the river valley was excellent. To quote Amy KD8SKL who has done the canoe sweep for several years now, "I was pleasantly surprised that the UHF frequency worked VERY loud and clear throughout the race course. I had no static which was a big problem in previous years".

All of the Radio Operators did an excellent job in their individual assignments. Communications were well disciplined and everyone understood what they were supposed to be doing, and when and where to do it.

In almost all of these events we simply provide information for the Race Director and their staff, which is good, but there are occasions when we provide more critical help. Towards the end of this event parents of two teenage boys were concerned when our sweep canoe arrived at the finish line and their two boys had not. The Radio Operators that were still active volunteered to stay as needed, the Race Director was immediately notified, and she instituted procedures to locate the two boys. In the end the two boys showed up in their kayaks at the finish line and no assistance from our Radio Operators was needed but had it been necessary we could have provided communications assistance. Being there was appreciated. The Race Director sent a note after the race saying, "Rick, To say thank you is not nearly enough...you and your team were amazing. Thank you so much for your assistance with finding the boys. The fact that you were willing to stay late to make sure we connected says so much. On behalf of the Portage Park District Foundation, we thank you and your team for your professionalism and support. Please let me know if there is anything that you ever need from me. I look forward to working with you in the future. Thank You, Kristi".

I would like to recognize and thank the following Radio Operators for sharing their time and expertise to support this event. Mike KB8TUY, Paul KE8IED, Mike KD8FLZ, Ron W8AHC, Bob N8K BX, Greg KA8TOA, Mike KC8LJO, Andrew KE8BWA, Ian KE8IED, Sandy KD8JCY, Amy KD8SKL, and Terry KB8AMZ.



Kilo Eight **BIG FUN** !

Tom, WB8LCD



If you're reading this issue of The Radiogram, you can see that PCARS is a club that likes to do things and have FUN! After all, that's the main reason we get involved with hobbies – it's something that interests us and looks like fun. Believe me when I tell you: finding a group that meets up to that expectation is like finding the holy grail!

But what do you do if you are a PCARS member who is not able to participate in our activities? What if you're not a PCARS member and you don't have a local club that you can have fun with? What if you're new to ham radio and just want to know about some the things you can do with your hobby? Read on, I've got a couple of ideas for you.

Since the beginning of time, collecting things has been a hobby unto itself!



There are lots of fascinating items in ham radio that are collectable. Let's start with Ham Radio stamps. In 1964, the US Post Office issued a ham radio commemorative stamp. I'll leave it up to you to dig up the history of this stamp, but these are readily available at a reasonable cost and should be displayed in every ham's "shack". You can get these as individual stamps, blocks of 4, sheets of 50, and, as "First Day of Issue" covers of all sorts. If you look closely, you'll also find stamps dedicated to many people who have played a part in ham radio. If you want to go beyond the US, many other countries have issued stamps honoring their Ham Radio Operators.



Maybe hardware interests you more than stamps. Morse code keys are a popular item to collect, so are early microphones. Maybe early equipment: Hallicrafters, Drake, Heathkit, Clegg..... And many, many more! If just having bunch of old stuff laying around isn't enough fun, how about restoring some of these



boat anchors to their original, pristine looking and working condition? This is becoming a lost art, give it a try. It's very satisfying to save a piece of history from the scrap yard.

Try your hand at building new, modern equipment. There are lots of things you can make from kits, and if you're especially adventurous, maybe even make some gear of your own design. Check the QRP groups, these guys like to build stuff.



Speaking of QRP groups, give yourself a new challenge. Anyone who spends enough money can flip a switch and break the pile up. Big deal. Try it with 5 watts or less, on equipment you built yourself – now there's an accomplishment. Put that equipment together in a travel bag that you can carry to the top of the hill (mountain in places other than Ohio), operate from a park bench, or at the beach. You think about it differently when you have to carry everything with you, including power.

What's your ham shack look like? That's one photo I chose not to include here. I could probably spend two or three days getting everything picked up and put into its proper place. That would be time well spent! Right now, I'd be hard pressed to convince anyone of the discipline necessary to be a successful operator. This just got put back on my list of things to get done. I always feel better about operating when I'm in a neat and organized space.

How about visiting other club meetings and events? It's always fun to get to know new people and see new things. I'm sure Scott will tell you that all the miles he's put on his vehicle have been worth it for the personal relationships that have developed from it. One thing about ham radio: it's filled with interesting and hospitable people. Some really smart ones, some well-traveled ones, and lots of really neat stories and experiences. (Once again, if you're reading this, and not a member of PCARS – come out and visit us at any of our meetings or activities. You'll always be welcome and made to feel that you are part of the bigger club– Ham Radio Operators)

Ham radio is the greatest hobby in the world. Lots of interesting things to see and do. Go ahead, name one other hobby where you can spend every night for a week digging a hole, pour a \$1000 worth of concrete into it and in the end look back on it as one of the most fun things you've ever done?

Send me an email at tomsly29@gmail.com (photo too, if you can). Tell me what you like best about ham radio and why, and what activities you like to participate in.



You've Got Mail



There are still a number of PCARS people out there that have not updated their e-mail address.....

Well, this is embarrassing...



Of course then the officers hear from them saying “*Hey - how come I am not getting Club E-Mails?*” Well, if you had your correct e-mail address on file - you would get all of the **important information** that is sent out to PCARS members.

Soooooooooooooooooooo - check your listing on the PCARS web site under the “**MEMBERS**” tab - sign in by clicking the “**Member Site Login**” to get access to the latest and greatest member list.

Yes, there is a login name and a password, and you got that when you joined PCARS.... Can't remember it? Ask **Gene, W8NET** to send you the information.

If you need to make any changes or questions about signing in to the member section on the PCARS web site - send an email to the club Secretary and 'List Master': **Gene Marsh, W8NET at: W8NET@ME.COM**

While you're looking at your e-mail address on file - double check you City, State and Ham Radio License Class on the list. If any corrections are needed - please send the information to Gene.

RSGB Announces New FT4 Contests

From the ARRL



The Radio Society of Great Britain Contest Committee has announced a series of contests using the new digital mode FT4. The three short-duration events on 80 meters (dial frequency 3575 kHz USB) are aimed at offering experience to FT4 newcomers.



“As this series is experimental, there are likely to be changes as we develop experience with this mode, so please check the rules prior to each event,” the announcement said. The objective is to score as many points as possible based on the distance between stations (subject to a maximum score per contact).

The contests will take place on **Monday, September 2, 1900 – 1959 UTC; Monday, October 7, 1900 – 1959 UTC, and Monday, November 4, 2000 – 2059 UTC.** Visit the RSGB Contest Committee website for details. The FT4 protocol is within the WSJT-X 2.1.0 suite and is available for download for several platforms.

PCARS Thursday 2 Meter Nets

Greg, KA8TOA
Net Control Coordinator



Thank you all for helping with this! Anytime you are unable to take the net, please give me as much advance warning as possible! **Check-in using the receiver located in Sugar Bush Knolls ~ 146.895 with a PL tone of 118.8.**

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

Please enjoy the nations birthday weekend. The net control dates will be posted on the Club website. An email will be sent out after the posting. As usual if there are issues please contact me via the roadrunner email address. Thanks to all of you for helping out.

August	
1	KE8BWA
8	KB8UHN
15	WB8LCD
22	WB2DFC
29	N8QE

September	
5	KA8TOA
12	KB8TUY
19	WB8LCD
26	K8IV

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: grgory999@roadrunner.com everyone who is a club member is welcome to have a turn - and have fun being the PCARS Thursday Night Net Control !

Hamfest Calendar

08/03/2019 - Columbus, Ohio Hamfest & Ohio Section Conference - Location: Aladdin Shrine Center - 1801 Gateway Circle - Grove City, OH 43123 - Website: <http://www.columbushamfest.com> - Sponsor: Voice of Aladdin Amateur Radio Club - Public Contact: John Lehman, K8PJ - 7415 Hagerty Road Ashville, OH 43103 - Phone: 614-571-5179 - Email: k8pj.john@gmail.com

08/10/19 - DX Engineering Hamfest with Flea Market - NO Entrance Tickets Needed - it's FREE
Saturday, August 10 - 9 am to Noon inside the Summit Racing Retail Super Store - 8 am to Noon, Free Flea Market in Summit Racing's North Parking Lot - 1200 Southeast Ave., Tallmadge, OH 44278. Featuring a **free** flea market, giveaways, special discounts, a Go-Kit contest, and satellite operation demonstrations. The event will take place in DX Engineering's showroom inside the Summit Racing Retail Super Store in Tallmadge, Ohio near Akron from 9 am to noon. The free flea market will run from 8 am to noon in Summit Racing's paved North parking lot. Ham Radio enthusiasts can meet and mingle with colleagues from the region, sample the latest Amateur Radio gear, and get their technical questions answered by DX Engineering's team of Elmers. Enjoy refreshments and these activities:



DXE HAMFEST!
SATURDAY, AUGUST 10
9am - Noon
DX Engineering Showroom
8am - Noon
FREE Flea Market, North Parking Lot

Expert satellite demos
Open-box gear savings and Hamfest Specials
Enter to win an ICOM IC-9700 Transceiver
Chance to win \$100 DXE Gift Card

ARRL Sanctioned Event

- * Expert demonstrations on how to contact Amateur Radio satellites. Get your questions answered from an experienced satellite operator.

- * Enter to win an ICOM IC-9700 VHF/UHF/1.2 GHz Transceiver.**

- * A \$100 DX Engineering Gift Card will be awarded to the club or individual who brings in the best functional Emergency Go-Kit. Please bring Go-Kits to the DX Engineering Showroom for judging.

- * Big discounts on open-box Amateur Radio equipment.

- * Save with Hamfest Specials on Amateur Radio gear from top manufacturers.

Talk with ARRL representatives who will be hosting a booth at the Hamfest. DXCC Card Checker will be there. Amateur operators are encouraged to check in to the N8DXE Repeater at 146.985 MHz - no PL tone. Questions? Contact DXEngineering@DXEngineering.com.

This is a family event for Amateur Radio enthusiasts. Appropriate behavior and acceptable Flea Market wares, please.

**No purchase necessary. Drawing will be August 10 at Noon. Must be present to win.

09/08/2019 - Findlay Hamfest - Location: Hancock County Fairgrounds - 1017 East Sandusky Street - Findlay, OH 45839 - Website: <http://www.findlayradioclub.org> - Contact: Bill Kelsey, N8ET - 3521 Spring Lake Drive Findlay, OH 45840 - Phone: 419-348-0457 - Email: n8et@woh.rr.com

09/22/2019 - Cleveland Hamfest and Computer Show - Location: Cuyahoga County Fairgrounds - 164 Eastland Road - Berea, OH 44017 - Website: <http://www.hac.org> - Sponsor: Hamfest Association of Cleveland - Public Contact: Glenn Williams, AF8C - 4134 Stoney Ridge Road Avon, OH 44011 - Phone: 440-934-5566 - Email: af8c@arrl.net

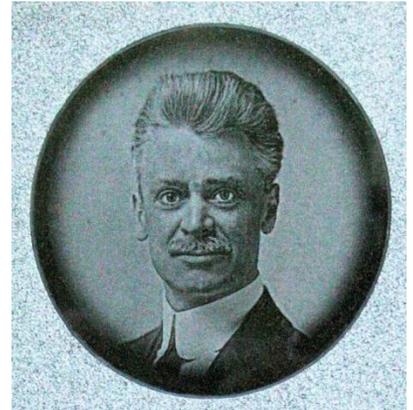
11/03/2019 - Massillon ARC Hamfest - Location: Massillon Boy's & Girls Club - 730 Duncan Street SW - Massillon, OH 44646 - Website: <http://www.w8np.org> - Contact: Terry Russ, N8ATZ - 3420 Briardale Drive NW Massillon, OH 44646 - Phone: 330-837-3091 - Email: truss@sssnet.com

03/14/2020 - Toledo Hamfest, ARRL Great Lakes Division Convention - Location: Owens Community College - 30335 Oregon Road - Perrysburg, OH 43551 - Website: <http://www.tmrahamradio.org> - Contact: Rob Hall, KV8P - 8751 Oak Valley Road Holland, OH 43528 - Phone: 419-345-5759 - Email: kv8p@kv8p.com



Happy 150 - Hiram Percy Maxim

From the ARRL



The ARRL Announces a Birthday Celebration

This year marks the 150th anniversary of the birth of ARRL's first president and cofounder Hiram Percy Maxim (HPM), W1AW, born on September 2, 1869. ARRL will hold an operating event this summer to celebrate HPM's legacy from **0000 UTC on August 31 and continue until 2359 UTC on September 8**. It is open to all radio amateurs.

The event goal is straightforward: Contact as many participating stations as possible. W1AW and *all* ARRL members will append "/150" to their call signs during this event (DX operators who are ARRL members may operate as *<call sign>/150*, if permitted by their country of license.) Participating stations will exchange a signal report and their **ARRL/RAC Section**. DX stations will send a signal report and "DX." Those taking part may use all Amateur Radio bands, excluding 60, 30, 17, and 12 meters.

The event will recognize three mode groups: CW, phone (any voice modes), and digital. Submit Cabrillo log files. ARRL will calculate all final scores based on participant uploads to the ARRL event web app (link not yet active).

There are 84 multipliers, which only count once. These include the 83 ARRL/RAC Sections (RAC sections include the Canadian Northern Territories, encompassing VE8, VY1, and VY0), and DX. The W1AW operating schedule during this period may be adjusted as necessary to accommodate on-air celebration operating activities. Contacts with W1AW/150 will earn 3 points apiece. Contacts with any ARRL member will earn 2 points each. These stations will also identify as *<call sign>/150*. Contacts with nonmembers will earn 1 point each.

Participants can earn 150 bonus points by:

- Contacting W1AW/150 on each band and mode.
- Uploading entries (ARRL members only).
- Using social media to publicize this event and/or participation before, during, and/or after the event.
- Operating with 5 W PEP output or less throughout the event.
- Making at least 20 contacts while operating portable.
- Completing at least 150 contacts.
- Online certificates will be awarded, and available **via download** only. Updates and results will be **publicized**.

This event has no power or operator categories. Participating ARRL members who use Logbook of The World (LoTW) are encouraged to **create a separate LoTW certificate** for uploading *<call sign>/150* contacts. Members should upload their logs for this event using their /150 certificate. This event requires online web app submissions. No email or paper submissions will be accepted.

Editor's Note: Scott, N3FJP has released a new (free) contest program that will help you keep track of your contacts during the HPM 150 event. Scott makes the contest programs we use at PCARS and during Field Day, so you should find this one easy to use as well. See: <http://www.n3fjp.com/hpmaxim.html>

Hiram Percy Maxim

From Wikipedia

Born	September 2, 1869 - Brooklyn, New York
Died	February 17, 1936 (aged 66) - La Junta, Colorado
Resting place	Rose Hill Cemetery
Alma mater	Massachusetts Institute of Technology (1886)
Occupation	Inventor
Spouse(s)	Josephine Hamilton
Children	Hiram Hamilton Maxim, Percy Maxim Lee
Parent(s)	Hiram Stevens Maxim
Relatives	Hudson Maxim (uncle)
Call-sign	W1AW (most notable)



Hiram Percy Maxim (September 2, 1869 – February 17, 1936) was an American radio pioneer and inventor, and co-founder (with [Clarence D. Tuska](#)) of the [American Radio Relay League](#) (ARRL). Hiram Percy Maxim is credited with inventing and selling the first commercially successful firearm silencer, and also with developing mufflers for internal combustion engines.

Early years

He was the son of Sir Hiram Maxim, inventor of the Maxim Machine gun. In addition, he was the nephew of Hudson Maxim, an inventor of explosives and ballistic propellants. He had two sisters, Florence Maxim, who married George Albert Cutter, and Adelaide Maxim, who married Eldon Joubert, Ignace Paderewski's piano tuner. Hiram was a mechanical engineering graduate, class of 1886, of the Massachusetts Institute of Technology (then a two-year course).

Beginning in 1892, Maxim worked at the American Projectile Company of Lynn, Massachusetts, and tinkered nights on his own internal combustion engine. He admitted his ignorance of engine developments in Germany by Maybach, Daimler, and Benz, and he later explained that he "was staggered at the amount of time required to build one small engine." Furthermore, he was appalled once he finally achieved combustion. The engine "shook and trembled and rattled and clattered, spat oil, fire, smoke, and smell, and to a person who disliked machinery naturally, and who had been brought up to the fine elegance and perfection of fine horse carriages, it was revolting."

In early 1895, Maxim visited Colonel Albert Pope in Hartford which led to his being hired for the Motor Vehicle Division of the Pope Manufacturing Company. His vehicle was not ready in time for the Times-Herald race in November, but Maxim was able to get to Chicago and serve as an umpire. He rode with the Morris and Salom entry, the Electrobat II.

In 1899, with Maxim at the controls, the Pope Columbia, a gasoline-powered automobile, won the first closed-circuit automobile race in the U.S. at Branford, Connecticut. Columbia continued to produce gasoline cars until 1913, and was also a major manufacturer of early electric automobiles and trucks.

From 1902 through 1909, Maxim was largely focused on inventing, building, marketing, and selling firearm silencers. He also developed mufflers for internal combustion engines using much the same technology.

Marriage and family

He married Josephine Hamilton, the daughter of the former Maryland Governor William T. Hamilton December 21, 1898, in Hagerstown, Maryland, and had a son, Hiram Hamilton Maxim, and a daughter, Percy Hamilton Maxim, who married John Glessner Lee, the grandson of John J. Glessner. The John J. Glessner House designed by Henry Hobson Richardson is now a Chicago landmark. Percy Maxim Lee (1906-2002) was president of the League of Women Voters from 1950–1958 and was appointed by President Kennedy to the Consumer Advisory Council, which she later chaired. She advocated for debates between presidential candidates and testified in the U.S. Senate against Senator Joseph McCarthy in 1955.

Accomplishments

Hiram Percy Maxim is usually credited with inventing and selling the first commercially successful firearm silencer around 1902, receiving a patent for it on March 30, 1909. Maxim gave his device the trademarked name *Maxim Silencer*, and they were regularly advertised in sporting goods magazines.

The muffler for internal combustion engines was developed in parallel with the firearm silencer by Maxim in the early 20th century, using many of the same techniques to provide quieter-running engines, and in many English-speaking countries automobile mufflers are called silencers.

He created the ARRL in 1914 as a response to the lack of an organized group of "relay" stations to pass messages via amateur radio. Relaying messages allowed them to travel farther than any single station's reach at the time. He originally had the amateur call signs SNY, 1WH, 1ZM, (after World War I) 1AW, and later W1AW, which is now the ARRL Headquarters club station call sign. His rotary spark-gap transmitter "Old Betsy" has a place of honor at the ARRL Headquarters.

Maxim founded the Amateur Cinema League in New York in 1926; he was elected president. The Amateur Cinema League published a monthly journal, *Movie Makers*.

Maxim wrote an amusing account of his youth in the book *A Genius in the Family: Sir Hiram Stevens Maxim Through a Small Son's Eyes*. This book was adapted to the screen as *So Goes My Love*. H. P. Maxim recounted his days as an automobile pioneer in his book *Horseless Carriage Days* and also wrote the book *Life's Place in the Cosmos*, an overview of contemporary science that surmised life existed outside of earth.

Death

Hiram Percy Maxim was returning to his home in Hartford, Connecticut, in February 1936, from a trip to California to visit the Lick Observatory. He fell ill and was taken from the train to a hospital in La Junta, Colorado, where he died the following day, February 17, 1936. Hiram P. Maxim was buried in the Rose Hill Cemetery (Maryland) in Hagerstown, Maryland, in the Hamilton family plot belonging to his wife's family.



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



Swap-N-Shop

For Sale: Collins Antenna / Radio Switch. By Advanced Optics which looks like the Collins S-Line gear. Switching for 5 antennas and 5 radios, 1200 Watts from DC to 500 MHz. The cabinet is the same size as a 312B-4, 312B-5 & 516F-2 - \$550 **Drake B-line (Restored)** Drake R-4B receiver, T-4XB transmitter, AC-4 power supply, MS-4 speaker (1972 very late model), EV-638 dynamic microphone, RED LED digital readout, plus 9 extra range crystals for all WARC bands, including 10 & 160 meters, cooling fan on T-4XB, plus improved A.M. transmit! Restored, aligned using sweep method, full power output & great audio. Many new parts,(filter capacitors, knobs, blue filters, etc) too much to list here. AC-4 re-built. \$1200



GIN POLE 19-Foot Long - A commercial "Gin Pole" from the 70's & 80's. 19 ft length, has 5 ft aircraft aluminum sleeve in the middle for strength. Works great with ROHN 25G/45G/55G. Hangs on the rungs and the "top" hanger is adjustable up to 6 foot from the bottom hanger. Can handle very heavy tower sections and antennas. No longer needed, since I cannot climb any more. \$500 Pick up only



Contact: Jeff, WA8SAJ - (440) 951-6406 [10/02/19]

FOR SALE: IC-735, AT-150 and PS-55. Comes with the HM-12 microphone and power cable. Original Manual and all other associated paperwork included. Asking \$550. Selling as a package. **FOR SALE: Yaesu FT-726R.** With 144, 440 and 50 MHz modules installed. Also installed the Communications Specialist TE-32. Made it easier to switch PL tones. Comes with the YM-48 microphone and power cable. Original Manual and all other associated paperwork included. Asking \$350. Selling as a package.

Contact: Bob Davet, W8RID, davet102@gmail.com 330-425-7313 [10/02/19]

FOR SALE: ICOM 703 QRP rig with built in HF tuner. Radio has the 250 Hz and 500 Hz filters, microphone, power cable and separation kit. Also a Samlex power supply. \$600

Contact: Dave, WV8P - wv8p@roadrunner.com [10/02/19]

FOR SALE: ICOM IC-7610 - Brand New, *still in the box*. Decided to upgrade antennas instead of radio. Un-opened box \$2650. **RC-28 - Remote Encoder** for the IC-7610 to easily operate the second VFO - Brand new - \$225. **8 Switch Memory External Keypad for the IC-7610/7850/7851.** Instant access to the 8 stored outgoing messages. Made in Germany by DM2RM. Brand new - \$65. **Cushcraft Ten-3** Three element **10 meter beam.** Cost new \$299.95 - **Sell for \$150.00.** This beam helped me make 7,651 ten meter contacts on a tripod on my roof. Great shape & ready to use. Had the roof replaced and took down the antennas. Will be putting up tower and Opti-Beam antennas - if the ground ever dries out.....



Contact: Tom "Parky", KB8UUZ - kb8uuz@gmail.com [10/02/19]

FOR SALE: "ChannelMaster" 50' steel telescoping antenna supports - Two (2) each. Good condition, never used, stored in garage. Five 10.5' sections each, with hardware. Guy rings attached. No shipping. U-pick-up. \$50.00 cash for pair. Location: Cuyahoga Falls.

Contact: Bob, NT8K - 330-923-2542 [08/02/19]

FOR SALE: BIRD SLUGS - 5000H (5000 W 2-30 MHz) \$125 **5A** (5 W 25-60 MHz) \$50 **10A** (10 W 25-60 MHz) \$50 **Alpha 77DX Amplifier** with all of the Dick Byrd upgrades. These upgrades include the following; higher voltage plate transformer providing 4300 Volts idle, 7500 Volt rectifiers, 5000 Volt 35 µf filter capacitor, wide spaced loading capacitors like are used in the 77SX, all new step start components, large 10x38mm fuse holders, all new electrolytic capacitors on timer & QSK boards as well as LED lighting for the meters. This amplifier has ZERO HOURS since being upgraded as it was my back-up amplifier. \$4350 with factory Peter W. Dahl transformer or \$5000 with higher voltage after factory transformer. Either transformer is capable of supporting the addition of a second tube. The after factory transformer allows for reduced drive for a given level of output. **Baofeng UV-3R micro HTs**, 4 HTs with 4 chargers, these cover 2m/70cm and receive FM broadcast as well. \$50.00

Contact: James. KD8VT - 330-206-4909 [10/02/19]

For Sale or Want Ad policy reminder: This is a PCARS *members only benefit*. Please don't ask to list items for a friend, relative or SK estate unless they are/were a member of PCARS. Requests come in from all over the USA (and beyond) to list items for sale or wanted items and we just cannot dedicate that much space to non-members. Listings are good for 3 months unless canceled or changed earlier. The date listed after the contact information tells you when the ad expires - example: [11/02/19] indicates the ad will run until Nov 2, 2019.

Mantua Potato Stomp Volunteers Needed

Rick, K8CAV

Portage County Coms Unit Commander



The Mantua Potato Stomp will be holding their annual foot race on **Saturday September 7th** in the Mantua-Hiram area. This event consists of a four-mile and a nine-mile race on various roads in Mantua Village and Township and Hiram Township. Radio operators will be needed to staff the intersections on the course, provide a Shadow to the race director, a NCS, and a sweep.

Ed, K8IV recently installed a UHF repeater at the tower on the hill just east of Mantua Village. It was used for the Headwaters Adventure Race, which is in the same area that the Mantua Potato Stomp race will take place. The coverage of this repeater in the local area is superb and allows Radio Operators to use just a UHF hand-held at almost every location in the area with full quieting coverage. Because of this we will no longer have to rely on establishing cross-band repeaters to get coverage throughout the course.

This is also the date for OSPOTA so I know many of you will be involved with that. But, for those who are not, I would sincerely appreciate your help. If you're new to public service communications support and are reluctant to do it alone, let me know and I'll pair you with an experienced operator so you'll get a chance to observe, learn and participate. Drop me a note at k8cav.coms@gmail.com if you can help with this event. Thanks!

K8IV has a NEW Repeater On The Air

On Saturday July 6th Ed, K8IV, along with Jim, AC8NT and Rick, K8CAV providing help, installed a UHF repeater on a BIG tower on a TALL hill just east of Mantua Village. For those who have Google Earth loaded, go to 41°17'17.50"N, 81°12'07.56"W to get a bird's eye view of the location. At 1305 ft. base elevation, this is one of the highest locations in Portage County and northeast Ohio and we figure the antenna is about 150 ft. up the tower. This gives it great area coverage in Portage and surrounding counties. It also has excellent look-down coverage in the immediate area around the tower for coms support events that take place there a couple of times a year.

The tower owner Dave, K8PKN is also a ham and was very gracious in allowing Ed to put his repeater there. Dave has a number of VHF, UHF, and microwave commercial clients on the tower along with an Amateur UHF DMR repeater and so far, we've noted virtually no interference from them and have received no interference reports to them.

I'd like to encourage all of you to use this repeater! Its frequency is **444.575/449.575 with no PL**. I'm sure Ed would appreciate getting both mobile and fixed base reports from you as to how well the repeater is working. If you can drop him a line with where you were, base, mobile or HT, power/antenna, and signal report. This is a wonderful addition to the existing K8IV VHF repeater for PCARS, and for all area Hams.

Many thanks to Dave, K8PKN and Ed, K8IV for making this happen and for adding to our Ham Radio pleasure!

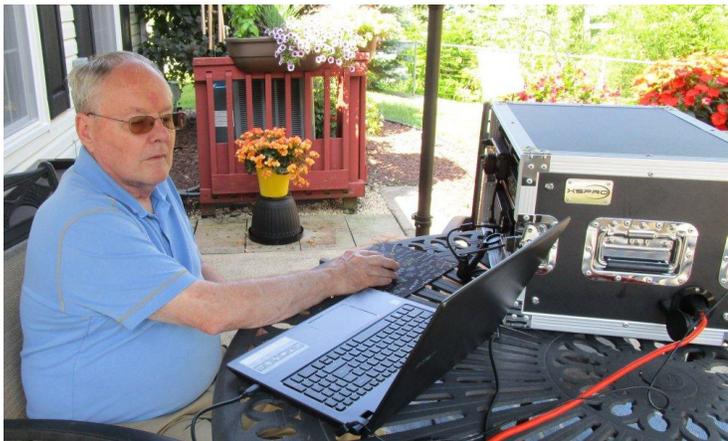
A Portable Ham Station

Jim, AC8NT



A Portable Ham Station – Notes from the Trenches

I have mentioned in past columns, I have been building and testing a portable ham station. It has been a great “learning experience”. At least that is what some of us say when something doesn’t work first time. But I have learned a lot and I thought I would jot down the problems I had and the solutions I put in place.



First, what was I trying to achieve. I wanted a completely mobile station that could work all modes and most of the bands. The center of the project was my ICOM IC-7000. It works all HF and can also work 2 meters and 70 cm. A great package. I added an antenna tuner so I could use a variety antenna solutions and a Signalink to support digital modes. Then I added some support equipment. I included an SWR meter, Powerpole distribution board, power supply and connection panel. I selected a professional mixer case used by almost every moving stage crew as my package.

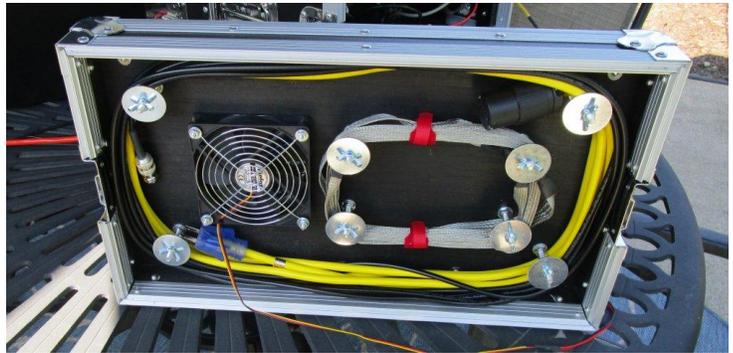
They are not light, but they are built to take a lot of abuse. They are also designed to protect the front and back of equipment with lot of knobs and switches. I purchased a laptop that would be included in the package. This setup had run in my home shack for almost three years without problems.

Problems

1. As you might expect, I had some RF in the box that was messing with my digital modes. I installed ferrites on all lines and still had problems. I decided to bond everything together. I had already bonded the tuner and rig. I added everything else with a metal case. I tested as I added items to the bond. The rig control problem disappeared when I added the Signalink. I think it was the first time I had ever had that kind of problem. Just remember when you are running significant power in a small enclosure, expect some RF issues and build a decent ground system into the enclosure.
2. Wires, wires, everywhere there are wires. There is one rule that always holds. If you tie everything down and make it look pretty, you WILL need to take the whole thing apart. I ended up dressing my wires with Velcro straps for easy disassembly. I also mounted several components using slides to make them very easy to remove. I have had no issues with components designed to be easy to remove. Only components that took hours to mount and dismount. Murphy is always right.



3. It is the little things that get you in the end. If you don't provide storage for all the little stuff, it will be left behind. I added storage into the front and back lids for all the little components including a mouse and all the required connecting cables. I have included a picture of the back lid containing all the cables, coax and grounding system needed to support the station. The front lid contains my SuperAntenna, mouse, microphone and other small items. If I take this one box, I know I have everything to be operational.
4. Antenna issues. We would all love to shrink down a three element beam and 40 foot tower into a small bag to take to the field. Not going to happen in my lifetime. I tested several options and included two in my station's front lid. One was the SuperAntenna. I have worked with this antenna for a year and had great results. I also included a trap 40/20 antenna with a little rope for tree installation. Both solutions have been tested and work great. They are not the greatest antenna system, but good for emergency traffic and a little fun.
5. Power options. Everything in the box can be powered from 12 volts DC. That includes the USB hub and the laptop. The laptop is powered using a buck and boost brick converting the 12 volt supply to the 19 volts needed for the laptop. A similar circuit was used to provide 5 volts for the USB hub. These needed a little engineering to eliminate noise on 160 meters and protect the laptop and hub from RF interference. After two iterations, they work great. I also provided a Power Pole connector to bring 12 volts into the box allowing it to be powered by batteries or solar power.
6. Heat can be a problem. I added a high volume fan to the back cover of my system. This worked great even when the temps were in the 90's. You will need air at any temperature if your box is sealed up. Remember rigs are expensive to repair.
7. Last but not least, use Loctite blue (243) and lock washers on everything and watch out for cold solder joints. I recently setup at a maker event, and had some strange problems. I first thought it was a problem with the IC-7000, but after some trouble shooting, I found the problem was a cold solder connection in the SignalLink. Once fixed, all was well. We joke about MFJ having loose parts, but we can have our share as well. Everything is mounted using lock washer and Loctite blue (243). NOTE: Loctite red (263) is designed to be almost permanent. Using red will almost guarantee a nasty tear down.
8. Remember to test the station frequently. This will make sure the computer and all software are up to date and allow time to fix hardware issues. I will enjoy testing my system on the patio with a cold drink.



I still love my light LD-5 go box that is a great packable QRP solution. But for emergencies, Maker Faires and other events where we need more modes and more power, my portable station is great. I will never need to remember all the little stuff necessary to get on the air at an event, or take hours to prepare.



PCARS K8BF

The Club that puts the FUN in Ham Radio!



PCARS Flex Net - August 14th

Deron, N8XTH



Flex Net in AUGUST will be **Wednesday, August 14, 2019 at 8:00 pm ET.**

This month's net will be on 40 meters SSB. We will announce the frequency via a QST e-mail to go out prior to the net. Also, we will have someone on the 146.895 repeater to help anyone find the net.

After the net, we ask that you please send a QSL card to each and every person you contact. You can use the **Squirrel Buro QSL box** that is located at the club site and at club meetings to exchange cards. Please remember to use *UTC time/date on all of your QSL's.*

If you would be interested in being a Net Control station for the Flex Net please e-mail Deron, N8XTH at deronmb@gmail.com

Below is the net schedule, (*subject to change*):

14-Aug-2019	40m	13-Nov-2019	10m
11-Sep-2019	20m	11-Dec-2019	20m
9-Oct-2019	15m		

There will be two parts to the net. The first is a quick check in (This net is **not** designed to take the place of the weekly Thursday night nets on 146.895). The second part will be devoted to the PCARS A-to-Z Award where you will be given the chance to work different PCARS members in order to earn the award. (Information on the award is in the April 2019 PCARS newsletter.)

If you are a PCARS member participating in the A-to-Z net, the only requirement is that you provide a QSL card to each and every member that requests a QSL card from you. The new PCARS “**Squirrel Buro**” will hopefully help to defray the cost of exchanging cards by providing members a free way to exchange QSL cards at their convenience.

More than anything, this net is hopefully going to get more people on the air more consistently, help other members earn their first HF or SSB wallpaper, and help to put more **FUN** into amateur radio!

PCARS
ARRL Volunteer Examiners:
serving the Amateur Radio community
First Saturdays 10:00 am
at the club site in Ravenna
February, April, June, August,
October, December

AMATEUR RADIO
ARRL
VEC
VOLUNTEER EXAMINER

Charlie the Tuner's HF High-Lites

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



Greetings to all DXers:

I hope that you all survived the heat wave we had in July. It's not like we haven't had 90+ degree days before, but the humidity was really, really bad. Given that we had a bizzilion people under the threat of heat stroke, flash floods, zombies, giant ants, Godzilla, etc, etc, etc. Al Roker and the rest of the weather prophets need to stop telling us how many millions of people are under some kind of threat and simply get the local WX forecast correct. I have to say, they got the heat wave right this time around.

I tried to work outside in the heat. I was shoveling gravel into the tower holes for the two new towers. I got about 2 inches in the bottom of one hole (need about 6 inches in each) and I had to stop. It took 3 wheelbarrows to do this but I had to quit and go inside to cool down. I am really glad that the heat wave is over for now. Maybe those of us who have outdoor work to do, will be able to get something done. Still aiming for completion in September. Once the concrete is in the holes, things should go a little faster.

I want to start working DX and contests again from my own QTH. So here's hoping that the job will be completed before the snow flies. And speaking of DX, there are some events that you all need to know about, so let's get to it.

As always, thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, the AB5K's AR Cluster Networks, NJ1Q & W1AW, NG3K & ADXO, W3UR & The Daily DX, K4ZW, WB6RSE, N7NG, K8GG, K8GI, K8YSE, W8GEX & 60m DX News, W9ILY, CX3ZAN, DL1SBF, DL7UXG & The DX News Letter, DxCoffee.com, DXNews.com, DX-World.Net, F5NQL, F6AJA & Les Nouvelles DX, I1JQJ/IK1ADH & 425 DX News, OZ6OM & 50 MHz DX News, Sixitalia Weekly, and VA3RJ & ICPO for the following DX information.

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

PLEASE NOTE: *The fact that donation requests, from various DXpeditions, are at times included in this column does not mean that PCARS or this HAM approves or disapproves of donating to the DXpeditions listed. I am only providing information for you to make up your own minds as to whether or not to donate.*

4L, GEORGIA. Peter, G4ENL (ex-9X9PJ), has moved to Tblisi for the next few years and is expected to be active as 4L/G4ENL. Activity will be on various HF bands using SSB. QSL via his home callsign direct using the Switzerland address [Peter Jewitt, Fluckenstrasse 9, 5616 Meisterschwanden, Switzerland] or via N4GMR.

5H, TANZANIA. Fabian, DF3XY, is now or expected to be active as 5H1XY from Zanzibar Island (AF-032). The length of his stay is unknown. Activity will be on various HF bands. QSL via his home callsign, direct or by the Bureau.

5H, TANZANIA. Operators Alex/K2BB, Pavel/UU0JR and possibly others will be active as 5H3EME and 5H3UA, respectively, from Zanzibar Island (AF-032), approx. November 15-30th. Activity will be on various HF and VHF bands using CW, SSB, the Digital modes and EME. EME will be on 6m, 2m and possibly 70cm. Also, look for them to be in the CQWW DX CW Contest (November 23-24th). Look for more details to be forthcoming as well as a Web page.

5R, MADAGASCAR. (Reminder) Giovanni, IZ2DPX, will be active as 5R8PX from Nosy Be Island (AF-057), Madagascar, between, August 3-17th. Activity will be on various HF bands using SSB and the Digital modes. Equipment is an IC-706 (w/100w) into a vertical. QSL via IK2DUW/HE9ERA, direct, by the Bureau, Clublog or LoTW. For updates: <https://iz2dpx.jimdo.com>

5W, SAMOA. Operators Hrane/YT1AD and Dusko/ZL3WW are currently active as 5W7A from Upolu Island (OC-097). The length of their stay is unknown at this time, but they are there preparing for the ZK3A DXpedition which takes place between October 2-11th (See ZK3 below). QSL 5W7A via YT1AD.

6O, SOMALIA. Ken, LA7GIA, will return to Somalia and be active as 6O7O in September. His last activity was in January 2018 as 6O6O. He announced the following on his Web page (<https://www.la7gia.com/where-next>): [edited] For a long time I have been planning where to go next. This time I decided to return to Somalia which I also activated in 2018. I really look forward to this trip! Planning a trip to Somalia involves many limitations and challenges wrt obtaining permissions, logistics, operation as well safety & security wise. I have obtained the license 6O7O, and LoTW is already received by ARRL. I will be using my upgraded Elecraft K3, 1 kW amplifier and various TX/RX antennas. QSL via M0OXO. Log will be uploaded to ClubLog. Donations are very much appreciated to PayPal (kenneth@opskar.no). Anyone donating upfront will receive direct QSL and express LoTW!

6Y, JAMAICA (SAT Op). Philippe, EA4NF, will be active as 6Y4NF from Montego Bay (NA-097, WW Loc. FK18) on a Satellite DXpedition between August 12-19th. Activity will be on the FM and SSB Satellites. QSL via LoTW. Passes will be announced on Twitter at: https://twitter.com/EA4NF_SAT

8Q, MALDIVES. Gil, IZ2DLV, will once again be active from as 8Q7GB Nika Island in the Maldives between August 6-18th. Activity will be holiday style on 80-15 meters using CW, SSB and FT8. QSL via LoTW.

9G, GHANA. A group of Slovenian ops will be active as 9G5W from Kokrobite between Nov 16-27th. Ops mentioned are Tine/S50A, Leo/S50R, Marko/S51DS, Tone/S51TC, Sergej/S51ZJ, Peter/S54W and Renato/S57UN. Activity on 160-10 m using CW, SSB and RTTY. They plan to be in the CQWW DX CW Contest (November 23-24th). Their equipment contains 3x Kenwood TS-590SG with various verticals for 160/80/40/30m, and two SpiderBeams for 20-10m. QSL via S59ZZ or ClubLog's OQRS. Log will be uploaded to LoTW (usually 6 months later). For more details and updates, see: <https://www.ghana.si>

9X, RWANDA. Harald, DF2WO, will once again be active as 9X2AW from Kigali between November 4-16th. He is currently preparing his 160m antenna and will build a Hexbeam with Bamboo Sticks for working on 20/17/15/12/10 meters using mainly Digital modes (FT8, PSK31, JT65 and RTTY), CW and SSB. QSL via M0OXO or his OQRS. See QRZ.com for pictures.

9U, BURUNDI. Francesco, IV3TMM, active as 9U3TMM from Bujumbura (WW Loc. KI46QP) between Aug 31st and Sep 17th. Activity will be on 60-6 meters using SSB, RTTY and FT8. QSL via IV3TMM, by the A.R.I. Italian Bureau, ClubLog or LoTW.

CY0C SABLE ISLAND DXPEDITION (Update). Operators Dan/WA4DAN, Jay/K4ZLE, Will/AA4NC, Lee/WW2DX, Pat/N2IEN, Lou/N2TU, Bill/K5DHY and possibly more "To Be Determined" (TBD) will be active as CY0C from Sable Island (NA-063) between October 5-12th, 2020. Activity will be on 160-6 meters using CW, SSB, FT8, EME and the Satellites. QSL via WA4DAN or ClubLog. For more details and updates, watch: <http://cy9c.com/sable-2020.html>

CY9C ST. PAUL ISLAND (Update). Ops Murray/WA4DAN, Pat/N2IEN, Lee/WW2DX, Will/AA4NC, Bill/K5DHY, Dan/W4DKS and Phil/VA3QR active as CY9C from St. Paul Is (NA-094) until Aug 7th. Activity on 160-6 m using CW, SSB, FT8, EME and the Satellites. QSL via WA4DAN or ClubLog. For more details and updates, watch: <http://www.CY9C.com>

D6, COMOROS [edited] D68CCC COMORES 2019 THE NEW ADVENTURE OF MDXC GUYS -- On the road again, and also this time on the road to Africa to reach their next QTH not far from Moroni. As a matter of fact, the leader Antonio, IZ8CCW, and the co-leader Gabriele, I2VGV, are happy to announce to the DXer Community the new adventure with the international MDXC team: Comores Islands 2019. The license is already in the leader's hands as D68CCC and they planned to be on air from October 20th to November 1st. According to the evaluations that they have done, they are confident to give to a lot of DXers the possibility to work this country on the Low Bands, WARC and especially on the Digital modes. At the moment the team is already built by experienced operators: 20 people coming from 8 (eight) Countries. On the air will be five stations, any mode, around the clock. For any further news and updates please stay tune: the official web site of this new great adventure is coming.

E4, PALESTINE (Update). Janusz, SP9FIH, will once again (for the 4th time) be active as E44WE from Bethlehem (KM71OQ) until August 6th. Activity this time will be on 80/30/20/6 meters using SSB, some RTTY and possibly FT8 (F/H). QSL via his home callsign or ClubLog's OQRS. For more details and updates, see: <http://www.e4.dxpeditons.org>

FT8DMC ANNIVERSARY ACTIVITY WEEKS 2019. To commemorate the 2nd anniversary, eight special event stations will be on air during the "FT8DMC Activity Days" between August 10-24th. All stations will bear the FTDMC or FTDM suffix, referring to the second anniversary of the "FT8 Digital Mode Club". Special QSL-cards will confirm all QSOs and all logs will be uploaded to LoTW and eQSL. The following stations will be active:

A91FTDMC (Bahrain, Operator A92AA, QSL via A92AA)
II8FTDM (Italy, Operator IK8YFU, QSL via IK8YFU)
LX8FTDM (Luxembourg, Operators LX1TI, LX1JH, LX1HD, QSL via LX1TI)
OD5FTDMC (Lebanon, Operator OD5TE, QSL via K3IRV)
OE19FTDMC (Austria, Operators OE1SGU and OE4VIE, QSL via OE1SGU)

TM8FTDM (France, Operators F1ULQ and F4ESV, QSL via F1ULQ)

TO8FTDM (Guadeloupe, Operator FG8OJ, QSL via F1ULQ)

ZL6FTDMC (New Zealand, Operator ZL1MVL, QSL via F1ULQ)

An FTDMC Anniversary Award can be earned by working the FTDMC and FTDM stations and collecting points applicable for various award classes: Bronze: 10 QSOs with at least 3 different special 'FTDMC/FTDM' stations. Silver: 15 QSOs with at least 4 different special 'FTDMC/FTDM' stations. Gold: 20 QSOs with at least 5 different special 'FTDMC/FTDM' stations. Platinum: 30 QSO's with all activated 'FTDMC/FTDM' stations. For more details, see the FT8DMC Web page at: <https://www.ft8dmc.eu>

HL, REPUBLIC OF KOREA, Special event station HL18FINA will be QRV until August 18 to celebrate the Federation Internationale de Natation's 18th World Championships and World Masters Championships. QSL via HL4CCM.

LZ, BULGARIA (LH and WFF Op). Dmitry/R2ATP and Evgeny/ex-RV3ATT will be on a 25 day expedition on the Bulgarian coastline to activate several lighthouses and Bulgarian Flora Fauna sites as LZ/R2ATP/MM starting September 1st, finishing approximately on October 20th. QSL via R2ATP or see QRZ.com for more details. Schedule is in two parts as follows:

PART 1 -- September 1-14th and PART 2 -- September 16-24th

1-2nd -- OLD Nessebar (BUL 033, LZFF-0593)

2-3rd -- Cape Galata (BUL 015, LZFF-0213)

4-5th -- Yevksinogradskiy (BUL 006)

5-6th -- Nos Kaliakra (BUL 016, LZFF-0042) Bakarlaka (LZFF-0215)

7-10th -- Balchik (LZFF-0591)

10-11th -- Kompleks Kalikatra (BUL 008, LZFF-0249) Bakarlaka (LZFF-0215)

12-13th -- Kamen (LZFF-0591)

13-14th -- Yailata (LZFF-0503)

14-15th -- Shabla (BUL 017, LZFF-0591)

16-17th -- Pomorie Reef (BUL 018)

17-18th -- Burgas East (BUL 002)

18-19th -- St. Anastasiya (BUL 021)

19-20th -- Sozopol (BUL 034)

20-21st -- Primorsko Pier (BUL 019, LZFF-0583)

21-22nd -- Tazarevo Breakwater Head (BUL 011)

22-23rd -- Akhtopol (BUL 001) Strandja (LZFF-0028)

OH0, ALAND ISLANDS. Bert, DK3BK, will be active as OH0UDG from the Aland Islands (EU-002) between August 3-17th. Activity will be on various HF bands and modes. QSL via M0OXO or OQRS.

T6, AFGHANISTAN. Robert, S53R, will once again be in Kabul starting June 24th, and will be there for two years working with the UN World Food Program. Activity will be limited to his free time, but he plans to be on 160-6 meters using CW, SSB and the Digital modes. His callsign is not known at this time, but he was active in 2002 from Afghanistan as YA5T. Since then, the prefix YA was abandoned in 2005.

IOTA NEWS...

AF-053. Jean-Philippe, F1TMY, plans to be active as J28PJ/P from **Moucha Is, Djibouti**, between Sept-Oct. Activity will be on various HF bands using SSB and FT8. QSL via F1TMY or ClubLog. For more details, see: <http://www.j28pj.ovh/html>

AF-064. A group of 6 operators from South Africa will once again activate Robben Island, in the Western Cape Province South West Group, as ZS9V between August 15-20th (This is the weekend of ILLW). Activity will be on 160-10 meters, including 30/17/12m using CW, SSB and FT8. QSL via M0OXO or OQRS. For more details, see: <http://zs9v.org.za>

NA-068. Mikhail, VE7ACN, will be active as VE7ACN/VE9 from **Miscou Island** between August 11-18th. Activity will be on various HF bands. QSL via VE7ACN, direct, by the Bureau, ClubLog's OQRS or LoTW. For more details and updates, watch: <https://www.ve7acn.com>

There is still a lot of carry over from last month's DX listings, so we still have a lot of opportunities in the next several months to work DX. Let me remind you to turn on your rigs and get those ether wobblers working and work some DX. **Well, until next month, 73 and Gud DX!!**



DX and Contest Special Interest Group

Chuck, W8PT

At our recent SIG meeting, we reviewed our performance in the ARRL North American QSO Party RTTY mode contest that took place on July 20th. (A full report by George, K3GP, is located elsewhere in this newsletter.) I thanked those present who operated during the contest and extend my appreciation to those not in attendance at the meeting but who did operate and helped us to the best score we have had so far. We still have a long way to go to top our main competition, KB8O, the contest station from Elyria. But we are closing in and I have confidence as we get more attuned to working RTTY and we eliminate those pesky hiccups that continue to plague us, we will best them in the near future.



We also discussed the upcoming Ohio QSO Party. This takes place August 23rd. It begins at Noon local time and goes until Midnight. That's 12 hours of **Big Fun**. So if you want to join us and add to the fun, please come on out. There will be more announcements as we get closed to the contest. A special plea for CW ops since we will be trying to run at least 2 CW stations during the contest.

I do have to remind you that this is also the event where we have our annual BBQ. So when you come to operate, bring your appetite and any snacks you want to share.

That's it for now. Keep in mind that the DX/Contest SIG meetings take place at the club site every 4th Tuesday at 7 pm. See you there.

CW/QRP & Linux Special Interest Groups

Terry, KB8AMZ

CW & QRP SIG

August 13th will be our next meeting at the club site. The group has been making QRP CW mode contacts on the air. I've set both transceivers to run full power in this mode. If someone wants to try QRPP I can set up a 3rd transceiver at 1 watt output.

Bring a straight key if have problems with a club iambic key. With the IC-7300 (and many other radios) to use a Straight key you use the tip and Ground on a Stereo 1/4" connector. The ring is unused. We have adaptors that might work.

I hope you will come and try to make contacts with QRP power. You only need to be licensed and show up at 7 pm for the SIG.

Linux for Hams SIG

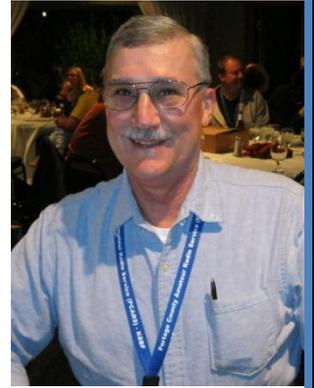
The next meeting of the group will be Tuesday October 29th at 7 pm. Please bring your Raspberry Pi and peripherals. More stuff to learn.



Digital Special Interest Group

Rick, K8CAV

The Digital Special Interest Group for August has been cancelled. Stay tuned to the next issue of The RADIOGRAM for details on the September Digital Special Interest group meeting.



Smithsonian Institution Station NN3SI

Gene, W8NET

I found this interesting article. It was in the 3905 Century Club news letter:

The Smithsonian Institution station NN3SI was in continuous operation from the bicentennial 1976 to 2008. The station was shut down and dismantled in 2008 after a building renovation.

Now in 2019 we have renewed the callsign as the Smithsonian Institution Amateur Radio Group. We have a small number of members and will operate as an employee radio club for now. We do not have a station or equipment yet, but we hope to build up slowly and someday return to a museum. NN3SI will be back on the air this year for most radio events and we will be sending a special QSL card. Please listen out for us! The best way to show your interest is to work NN3SI on the air. The Smithsonian is interested to see how many people we reach on the air and the demand for the QSL card.



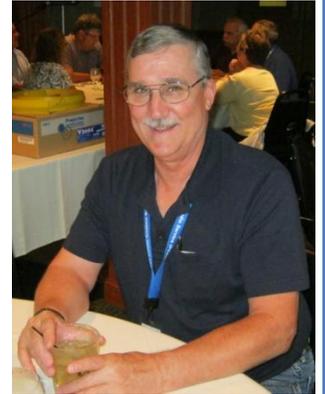
We are not equipped to accept donations for now, it will be a while before we get there. We will be on HF from 6-40 phone and digital, but a large amount of activity will be 20 meter digital FT8/ PSK31/RTTY due to limited equipment for now. For more information email us at nn3si@si.edu

Photo: National Museum of History and Technology, now the National Museum of American History, volunteer John Swafford demonstrates ham radio station NN3SI to visitors of the exhibit "A Nation of Nations." Contained within Smithsonian Institution Archives, Record Unit 371, Box 2, Folder: March 1978



PCARS "Help Desk"

Rick, K8CAV



One of the things among many that I enjoy about being part of PCARS, is the willingness of members to help each other with most anything a fellow Ham might need. This help takes many forms, from the Special Interest Groups, to the Build Days and other activities, to individual Hams helping other Hams.

PCARS members are never shy about offering help but I think sometimes those who need help are shy asking. Don't be! Whether it's a question or problem involving something technical or operational, to getting help shooting an antenna, or anything else, just ask and you'll most likely be overwhelmed with PCARS members offering to help. You don't know where to start? Well, talk to a friend in PCARS. Approach one of the officers or trustees. Don't forget the **PCARS IO Group** - you can post info there and ask other PCARS members for help or just get some answers when you need them. But if you don't ask, no one's ever going to know you need some help, so DON'T BE SHY asking!

Another very important place we can help is presenting Amateur Radio to the public through events such as the Maker Faires, and associations with schools and libraries. PCARS has been involved with local Maker Faires for several years now and have recently been able to begin an association with some of the Portage County Libraries. These venues give us the opportunity to present ham radio to the public, and more importantly usually have a substantial number of youths attending. In the near future you're going to see information about these events and requests for help to support them. When you do, please give your utmost consideration in supporting them.

To all of the wonderful PCARS members who help out other Hams, a huge **thank you!** You not only help get an issue or problem solved, you help cement a stronger relationship with our club. That's a great benefit but when and where you can we also like to extend that Hams outside of PCARS. Let's keep the PCARS "Help Desk" running strong!

PCARS IO Group

Members are reminded that PCARS has a IO Group site dedicated to PCARS. It's a great site to sign up for and get on the mailing list for important PCARS information.

Check out the PCARS IO Group at: <https://groups.io/g/PCARS>

Two things every member should do.

1. Check the PCARS web site every day, maybe a couple of times a day, to see new info that's posted.
2. Join the PCARS IO Group. That's a great place to post message when you are looking for information or have a question about something. Try it - you just may like it!!



Paper Chase - Shoot for the Moon

Joe, W8KNO



Last month we featured the Lunar Landing and this month we continue with the space theme.

We will seek to communicate with the **Deep Space Exploration Society, K0PRT**.



They are hosting an Open House from August 9th through August 11th at the Plishner antenna site in Haswell, Colorado. Solar Telescopes will be available to view the sun. Other optical telescopes will be available during the evening hours. The annual Perseid meteor showers occur on the August 11th weekend. Meteors may be seen at a rate of 60-70 per hour that night, sky conditions permitting.

Hot dogs will be served for lunch starting at noon and Brunswick stew and jalapeno corn bread will be served after 5 pm. Ice water and lemonade will be available for all throughout the day. Make sure to drop in if you are in the vicinity.

Since most of us will not be so lucky, we can still contact them on 14.253 MHz between 2 to 7 pm our local time. In addition to twenty meters, you might find them on other frequencies as conditions permit.

If you contact them and would like to receive a QSL card, please send a Stamped Self-Addressed (SASE) envelope, one that can hold a 4 inch x 6 inch card to:

DEEP SPACE EXPLORATION SOCIETY, K0PRT
4164 AUSTIN BLUFFS PKWY 562
COLORADO SPRINGS, CO 81918-2928

Please include your QSL card, or the QSO information for verifying the contact. The society also uploads their logs to ARRL Logbook of the World and eQSL.



Hope to hear you on the air.



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



Kid or Grandkid - A Rainy Day Project

Jim, AC8NT



We all love having fun with our kids and grandkids. It can be fun to build something with them that they may not have seen before. One such project is building a homopolar motor. These are easy, inexpensive, educational and of course fun to build. There are some websites you can use as building guides. I will give instructions for a simple version in this article. Websites will follow.

What you will need:

- AA battery
- 12 mm x 3 mm chrome plated magnets. Search for ELECFIND Magnets on Amazon
- About 10" of 18 gauge bare copper wire
- Ruler, pliers, sharpie and cuts
- One or more curious kids or some alone time to build one yourself.

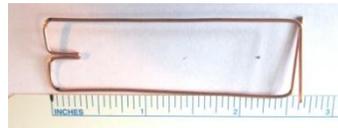
Assembly:

1. Fold wire in half with a tight bend.



2. Mark from the bend end points at $\frac{1}{4}$ ", $\frac{5}{8}$ ", $3 \frac{1}{8}$ ", and $3 \frac{7}{8}$ ".
3. Cut the bent wire at the $3 \frac{7}{8}$ " point.

4. Bend the wire as shown at the marked points.



5. Assemble battery and magnets as shown. Three to five magnets work best.



6. You will need to bend the base contact points as shown. The little bends keep the contacts from spinning off the magnets.



7. Place wire assembly on battery as shown. If the motor does not spin, fiddle with it until it works. It would not be any fun if it worked first time.



Here are some cool websites on these motors. As usual Google can be your friend to find more.

Video of options: <https://www.youtube.com/watch?v=voHz6sxxwQ2Q>

How do they work: https://en.wikipedia.org/wiki/Homopolar_motor

<https://www.youtube.com/watch?v=xbCN3EnYfWU>

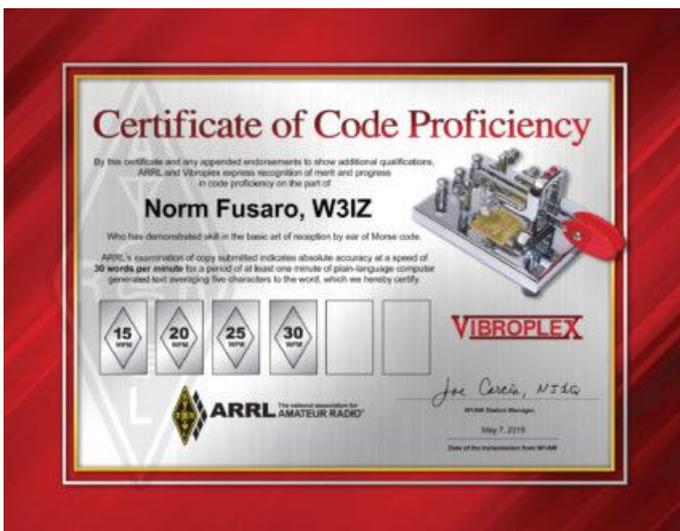
Enjoy this simple project that demonstrates the magnetic fields so necessary on ham radio.

ARRL Code Proficiency Award Updated

Norm, W3IZ
ARRL Director of Operations



I have some exciting news that I want to share with you! The ARRL has reinvigorated the W1AW Code Proficiency Certificate program. Several things have changed beginning with our new sponsor, Vibroplex, a legend in Morse telegraphy equipment. If you see Scott Robbins W4PA and the Vibroplex team at a hamfest or convention please be sure to thank him for his support. The Vibroplex logo will appear on the newly designed certificates (see below) and in the award recipient page that will appear every month in QST.



That's right, each month in QST we will publish the most recent recipients of the W1AW Code Proficiency Certificate, beginning with all the 2019 recipients. As a bonus, we are sending all the 2019 CPC holders a new certificate at no cost to replace their older style award.

The award is available to anyone who copies one solid minute of code during the qualifying runs. Complete program details can be found on the web at <http://www.arrl.org/code-proficiency-certificate>.

And to make the award available to more people we will double the number of opportunities to copy the CW text. Beginning September 2019, the qualifying runs will increase from twice per week to four times per week.

I am sharing this advanced notice with the Morse code clubs so that you can share it with your members. I have attached PDF files of the new certificate and the announcement that will appear in August QST, available in digital format July 8. I hope you are as excited about this as I am.

In closing, I want personally thank all of you who promote the use and proficiency of Morse code on the air waves and ask that you challenge your club members to submit their copy for the W1AW Code Proficiency Certificate.



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



PCARS Ham Radio License Plates Wanted !!! PLEASE !!

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

We have 71 PCARS member's ham plates now, **but we can use more**. Don't have ham radio call plates on your vehicle? Well for those of you in Ohio, you can get the plates sent to you by going to any License Bureau office and filling out the special plate registration form. Have a copy of your current FCC license when you apply. The official form to obtain your Ohio Amateur Radio license plates is on the PCARS IO Group site. Then you'll have an old plate to bring in to get hung up as a **permanent part of PCARS history**.



From the Ohio BMV:

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

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

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

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

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

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

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

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

PCARS is on YouTube

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

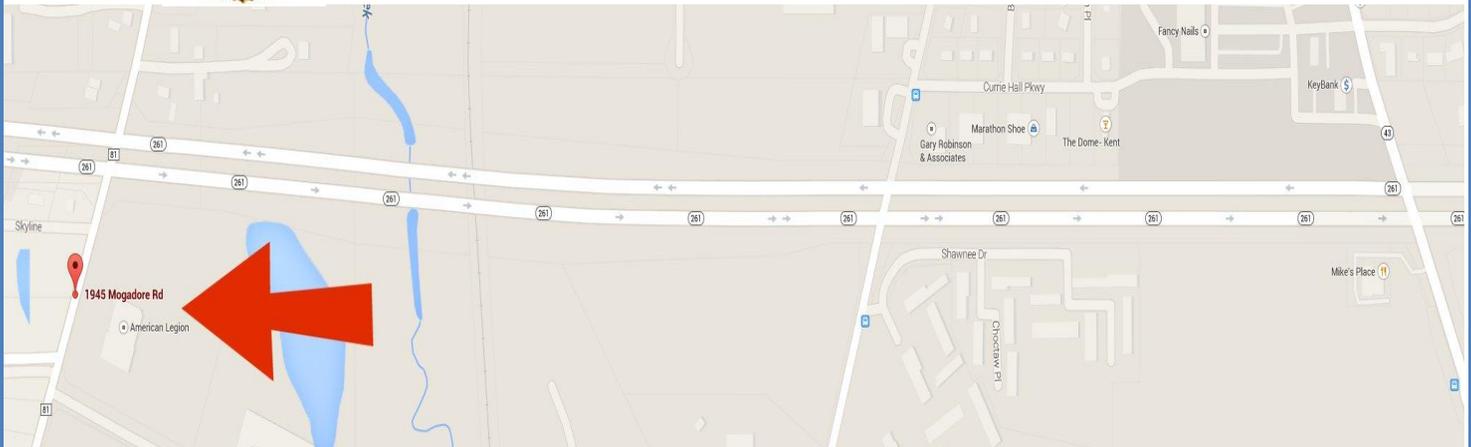


PCARS Meetings

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



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



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



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

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

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

Photos from the PCARS July Meeting



PCARS - 8 July 2019



PCARS - 8 July 2019





10th Annual Mobile Cruise-In 2019

So you think that you have one of the best amateur radio mobile installations to be found? Well here is your chance to show off that mobile rig and have the opportunity to compare it to dozens of others: HF, VHF, UHF, you name it.

Thursday, August 15, 2019, 6:00 - 8:00 pm

The Portage County Amateur Radio Service (PCARS) will be sponsoring the 10th Annual

Amateur Radio Mobile Cruise-In Night at the

A&W Restaurant - 769 East Main Street in Ravenna.

Hams from all over Northeast Ohio will be cruising in to check out the wide variety of mobile radio setups and get some ideas for their own vehicles.

Prizes awarded for:
1st Neatest Installation
2nd Most Bands Covered

Enjoy an evening of ham radio fellowship and fun and get to know other hams from throughout the area.



More information contact
Jim, AC8NT, at
jawilson@j3solutions.com





You've heard of the **Ohio QSO Party**



Well, join us at the **PCARS** club site for the

Ohio BBQSO Party Club Picnic & Open House

Mark your calendars for **Saturday, August 24th 2019**, the date for this year's **Ohio QSO Party**. PCARS is going to put **K8BF** on the air and we are inviting all PCARS members to come on out for some special **Big Fun**.



It's a **BBQSO Party, Open House, PCARS Picnic** all rolled into one

Tom, WB8LCD and Mike, KB8TUY will be the chefs for the **Ohio-BBQSO Party!**

That's right, we'll be chasing two kinds of "Q's": on the air contacts and great food fresh off the grill.



Contest set up starts at 10 AM - Contest starts at Noon and ops will continue until midnight (12 hour contest)

Burgers & Brats will be served at around 2:00 pm and **everyone is invited to bring snacks or side dishes.**

The Portage County Amateur Radio Service, Inc. (PCARS) announces the 12th annual

Ohio State Parks On The Air



12th annual **Ohio State Parks On The Air** contest

Saturday, September 7, 2019, from 1400 UTC to 2200 UTC
(10 am to 6 pm Eastern Time)

There are **75** Ohio State Parks
Make a day of it and join us in the **FUN!**

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



Rules? Entry Forms? Log Sheets? Ohio State Park Information?
Check out **all** the details at: www.OSPOTA.org

Also, visit the OSPOTA IO Group at: <https://groups.io/g/OSPOTA>
While you're at it, check out the PCARS web site at: www.portcars.org

Jan 2019

South Mill - K8JLY Tour in September

Gary, WD8ICX

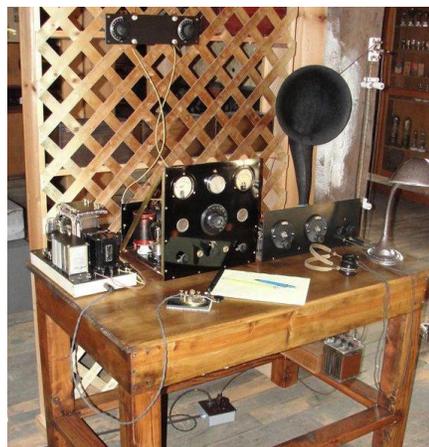
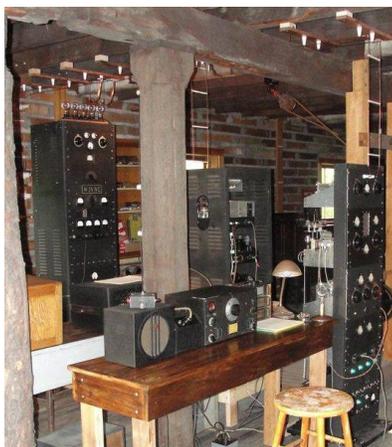


Plan to attend a tour of **ARS K8JLY**, a museum of antique amateur radio's and related equipment in the historic Smith Mill located in Jackson Township just north of Massillon. Constructed in 1925, the building features radio's from the 1920 and 30's plus amateur radio's built by Johnson Viking, Globe Electronics, Hallicrafters, Allied Radio Knight kits, military radio's, Thordarson , National, photographs of amateur stations, and just about every Heathkit radio made plus a radio repair shop for antique radio's. The museum is owned by Cid Vance, K8JLY , and you can see some pictures and read about his museum on his QRZ web page.

The date for the club tour will be **Saturday, September 14, 2019 at 10AM**. The museum is located at 4442 Erie Ave. N.W. , Massillon.



Directions from the north: go south on Route 21 to Massillon, turn east (left) at the first traffic light onto Lake Ave. then at the first traffic light on Lake Ave. turn north (left) onto Rt. 236 (Erie Ave.). Drive north on Erie Ave. and just past Smithview Ave. on your right is the museum also on your right. On Google Maps the museum is called: Towpath Treasures & Crafts. There is limited parking so car pooling is recommended. If you have any questions, contact me at: gmarks@neo.rr.com



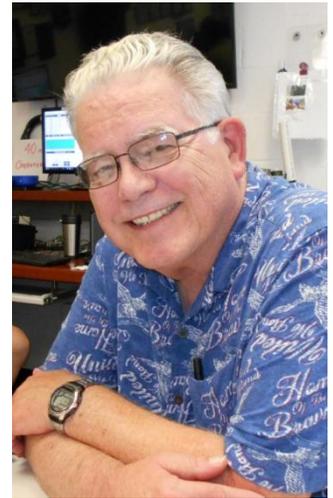
32 Strange Things to Get Your Mind Off Politics

1. A rat can last longer without water than a camel.
2. Your stomach has to produce a new layer of mucus every two weeks or it will digest itself.
3. The dot over the letter "i" is called a tittle.
4. A raisin dropped in a glass of fresh champagne will bounce up and down continuously from the bottom of the glass to the top.
5. A female ferret will die if it goes into heat and cannot find a mate.
6. A duck's quack doesn't echo. No one knows why.
7. A "2 by 4" is really 1-1/2" by 3-1/2".
8. During the chariot scene in "Ben Hur," a small red car can be seen in the distance (and Heston's wearing a watch).
9. On average, 12 newborns will be given to the wrong parents daily! (That explains a few mysteries...)
10. Donald Duck comics were banned from Finland because he doesn't wear pants.
11. Because metal was scarce, the Oscars given out during World War II were made of wood
12. The number of possible ways of playing the first four moves per side in a game of chess is 318,979,564,000.
13. There are no words in the dictionary that rhyme with orange, purple and silver.
14. The name Wendy was made up for the book Peter Pan. There was never a recorded Wendy before.
15. The very first bomb dropped by the Allies on Berlin in World War II killed the only elephant in the Berlin Zoo.
16. If one places a tiny amount of liquor on a scorpion, it will instantly go mad and sting itself to death. (Who was the sadist who discovered this?)
17. Bruce Lee was so fast that they actually had to s-l-o-w film down so you could see his moves. That's the opposite of the norm.
18. The first CD pressed in the US was Bruce Springsteen's "Born in the USA"
19. The original name for butterfly was "flutterby."
20. The phrase "rule of thumb" is derived from an old English law which stated that you couldn't beat your wife with anything wider than your thumb.
21. The first product Motorola started to develop was a record player for automobiles. At that time, the most known player on the market was Victrola, so they called themselves Motorola.
22. Roses may be red, but violets are indeed violet.
23. By raising your legs slowly and lying on your back, you cannot sink into quicksand.
24. Celery has negative calories. It takes more calories to eat a piece of celery than the celery has in it to begin with.
25. Charlie Chaplin once won third prize in a Charlie Chaplin look-alike contest.
26. Chewing gum while peeling onions will keep you from crying.
27. Sherlock Holmes NEVER said, "Elementary, my dear Watson."
28. An old law in Bellingham, Washington, made it illegal for a woman to take more than three steps backwards while dancing!
29. The glue on Israeli postage is certified kosher.
30. The Guinness Book of Records holds the record for being the book most often stolen from public libraries.
31. Astronauts are not allowed to eat beans before they go into space because passing wind in a spacesuit damages them.
32. Bats always turn left when exiting a cave!

SEE? NOW WASN'T THAT CALMING AND NICE FOR A CHANGE?

... not to mention how much smarter you've now become!

Thanks & 73



Parky, KB8UUZ
PCARS Newsletter Editor



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

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

AC8NT, AC8QG, WB8LCD, KB8UUZ, NO8D, WA8UWV, K3GP, N8SY, K8CAV, KA8TOA, N8XTH, W8PT, KB8AMZ, W8NET, W8KNO, W3IZ, WD8ICX, The ARRL, VOA Bethany, Ohio Section Newsletter, Wikipedia and the World-Wide Web.

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



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

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

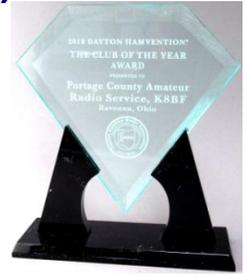


PCARS meets the second Monday of each month at the **Kent American Legion Post 496**, 1945 Mogadore Rd. - just South of Rt. 261 - enter the rear of the building for the meeting room.

Meeting starts at 7:00 pm - All are welcome to attend ~ Stop in and say hello!

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

Check PCARS out on the web: www.PORTCARS.ORG -or- www.K8BF.ORG



~ 2019 Officers ~	2019 PCARS Appointments & Committees	
President - Jim Wilson - AC8NT Vice President - Nick Wagner - AC8QG Treasurer - Paul Hyland - KE8EGF 3 Year Trustee - Terry Morris - KB8AMZ 2 Year Trustee - Ed Polack - K8IV 1 Year Trustee - Tom Parkinson - KB8UUZ Past President - Rick Kruis - K8CAV	ARRL Awards - DXCC WAS, VUCC, WAC	W8KNO Joe Wehner
	Club Site Manager/Liaison	K8CAV Rick Kruis
	Contest Coordinator	W8PT Chuck Patellis
	EchoLink & Web Guru	K8SRR Steve Randlett
	Field Day Chairman, 2019	WA8AR Tony Romito
	FYAO Chairman	W8PT Chuck Patellis
	Historian	KB8SZI Peggy Parkinson
	K8BF Callsign Trustee	KD8SKL Amy Leggiero
	K8BF QSL Manager	KD8SKL Amy Leggiero
	Membership Chairman	WB8LCD Tom Sly
	Net Control Manager	KA8TOA Greg Ash
	Net Night - Club Manager	WB8LCD Tom Sly
	Newsletter Editor	KB8UUZ Tom Parkinson
~ Meetings & Net ~	OSPOTA Chairman	KB8UUZ Tom Parkinson
2nd Monday of each month. 7pm Thursday night Club Net at 8 pm on 146.895	Public Information Officer	WB8LCD Tom Sly
	Secretary	W8NET Gene Marsh
	Tech, Gen & Extra Class Manager	AC8NT Jim Wilson
	Volunteer Examiner Liaison	KB8UUZ Tom Parkinson
	Webmasters	KD8MQ John Myers K8SRR Steve Randlett



PCARS Active Volunteer Examiner Team Members

KB8UUZ	Tom Parkinson
WB8LCD	Tom Sly
N8XTH	Deron Boring
N8PXW	Jim Korenz
N8QE	Bob Hajdak
K8IV	Ed Polack
W8RID	Robert Davet
WA8CCU	Al Nagy
W8EZT	Frank Tompkins
AC8NT	Jim Wilson
K8MSH	Mark Haverstock
KA8TOA	Greg Ash
W8PT	Chuck Patellis
AC8QG	Nick Wagner
N8FUM	Dan Torchia
W8GWI	Dave Seckel



THE RADIOGRAM

PCARS Incorporated
Nov. 1, 2005

First Meeting
Nov. 14, 2005



ARRL Affiliation
April 20, 2006



Special Service Club
March 22, 2010

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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. Send your newsletter inputs (in .TXT format) along with in-focus pictures (not small 50 kb photos) to the newsletter editor: KB8UUZ@gmail.com



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