

Year Trustee - Sandra Getty - KD8JCY Year Trustee - Robert Gurney - N8RLG 1 Year Trustee - Ed Pollack - N8EQJ

2 Year Trustee -

Vice President - Tom Sly - WB8LCD Treasurer - Bill Fraedrich - WB9LBI

President - Jim Aylward - KC8PD

The When All Else Fails ~ Amateur Radio Works

July 2011 ~ Official Newsletter of the Portage County Amateur Radio Service, Inc. (PCARS) ~ Vol. 6 No. 7

~ 2011 Officers ~

From the President

With this edition of the newsletter we are into the second half of 2011 and with all the PCARS activity scheduled in the meantime it is bound to go by fast. This is being written a couple days before Field Day (the biggest and best in the country!) which will be followed a week later by the club picnic on July 2nd.



The annual PCARS Cruise-In at the Ravenna A&W will be in August and the club station will be on the air for the Ohio QSO party later that same month. A few weeks later it will be time for the Ohio State Parks On The Air contest on September 10th and if there is enough interest the Two Meter Simplex Sprint will return in October.

During that same time, of course, there will be the monthly club meetings with their programs, Special Interest Groups on Tuesdays and Net Nites on the fourth Thursday of each month. Plus, we can count on VP Tom, WB8LCD, to come up with some additional activities or workshops during the rest of the year and there will be work to be done on the club shack.

~ Meetings & Nets ~

each month. 7pm Monday of

Thursday nights Nets at 8 pm on 146.895

PCARS Incorporated Nov. 1, 2005 First Meeting

Nov. 14, 2005



ARRL Affiliated April 20, 2006



SPECIAL SERVICES CLUB

Special Services Club March 22, 2010

Jim, KC8PD

One of our primary goals at PCARS has been to provide as many ways as possible for the club's members to get to know each other and participate together in as many facets of the hobby as possible. With a lot of planning and preparation behind the scenes (and a bit of luck) all these activities happen.

We have also made every effort to involve club members in that planning and preparation as well as being the hands-on staff of the teams that make the events happen. The Field Day crew is probably the best example of this. That way more people get to be a part of the process of creating and designing those activities and events and to have a sense of accomplishment for their efforts.

It also gives them a better idea of what it takes to manage a club the size of and as busy as PCARS. This is really important because not only is it their club but they are its future leaders and we have a responsibility to them and the rest of the club members to ensure that they are up to the task.

When we ask for your assistance it is because we truly need it and count on you to help PCARS succeed. It cannot be said too often: PCARS is the sum of all of its members and their contributions. You are the club.

Continued on Page 2

In This Issue of The RADISGRAM

Charlie the Tuner - HF High Lites	13
Contest Calendar	10
EmComm	8
Ham License Plates Wanted	13
Happy Birthday	16
Mark Your Calendars	4
Meetings, PCARS	11
Net (Thursday) Information & NCS Schedule	6
Ohio QSO Party	11
Paper Chase	16
Patches & Stickers, PCARS	7

PCARS EchoLink Information	7
PCARS Picnic	10
Pictures from the June PCARS Meeting	17
President, From the	1
Swap-N-Shop	12
Thanks & 73	14
The Way It Was: Hams Ruled the Airwaves	5
VE Test Sessions	4
Vice President, From the	2
Wooden Tower	9
Yahoo Group	4

Visit the PCARS Website at: http://www.portcars.org











From the President - Continued from Page 1

When the second half of 2011 comes to an end it will be a time of transition for PCARS. What got us here will soon be forgotten but the challenge of continuing the club's success will be fresh every day. We are counting on you.

73, **Jim, KC8PD**





From the Vice President

Last month I was early to the club site for a meeting and had about an hour to kill. Over in the book case are a handful of 73 magazines. When I was younger, this was one of my favorite Ham Radio magazines, so I pulled one out at random and sat down with it. It was the January, 1982 edition. Like I did way back when, I immediately looked for the editorial by Wayne Green, W2NSD. They were always titled: "*Never Say Die*".

Wayne Green is known for being somewhat of a contrarian at the time, and I was hoping to see some of that, and I did. What really made it interesting was how right on he was about most issues, and how I've come to see many of the things he said come to fruition in PCARS! In a long and rambling statement about the way the ARRL was in the midst of a change of leadership he said: "One of the last things we need is a stuffed shirt who is pompous and self



important, complete with jacket and tie. Amateur radio is a hobby... it's for fun, despite our ability to provide many services." We've said all along that for PCARS to be successful, it had to be fun. Almost everything we do is aimed at having a good time with our hobby. Our club call says it best – Kilo 8 Big Fun (K8BF)!



Wayne Green, W2NSD

He goes on to talk about clubs by saying the following (I've condensed this down from many paragraphs): "On of the major problems with ham clubs is that so few hams know how to run them." "The main strength of amateur radio lies in the clubs, so we all have a vested interest in keeping our clubs alive and well." "One word of guidance... remember that the club meeting is show business, not club business. Keep as much of the club business in the board of directors as you can and this will make the general meetings a lot more fun." "...keep an eye out for any newcomers to your meetings. Make it a point to get acquainted with them and keep them busy talking about themselves for the first two or three meetings. You won't be able to chase them away with a stick." "If you are saddled with a bunch of hoary old-timers who sit by themselves at the back of the meeting room, figure out a way to get them up front where they can get in on what is happening."

Several paragraphs later (after talking about bad language on repeaters in Southern CA (some things never change) he hits a big one: **SYNERGISM**. "If you're not familiar with the term, it has to do with two or more things which, when mixed together, provide more than the sum of the parts. In the case of radio, we have just such a result when we mix in computers. Only a few people have yet grasped the magnitude of the communications mix which is coming up...... computers are the key to faster, lower cost, and more accurate communications, so our needs for communications facilities are going to grow along with computers." Once again – dead on.

So, I want to encourage you all to have fun with your Ham Radio hobby! That's why we all got involved with it. Sure, we do other types of things too, but if it ever gets to where it's just not fun anymore, then you need to go back the basics. Back to why you were interested in the first place. Our club needs to always be a place where we can come and get along with each other and push each other into middle of the fun. Don't let anyone come to a PCARS function and not have a good time. Striking up a conversation with someone you don't know, or maybe don't know all that well is a difficult thing to do, but the rewards are worth it – for both of you! And lastly, looking at the past is important to know from where we came and what our struggles were in getting to this place. But also look to the future. What is there that "could be" that we don't have now? With a little creative thinking, you could possible come up with the next "Big Thing" in our world, how cool would that be?

If you get a chance, read through some of the old magazines we have at the club site. And if you happen to pick up a 73 Magazine, be sure to look for the item titled "*Never Say Die*" and I promise you will be not only be entertained but prompted to look at things and think about things from just a little different point of view. Wayne Green is still around. If you get a chance, send him an email and tell him that PCARS is his kind of club. w2nsd@waynegreen.com You might also want to check out his website at www.waynegreen.com and you'll see that he's still looking to the future!

Best 73 to all,

Tom, WB8LCD

Mark Your Calendars

On the calendar for upcoming meeting topics and activities are:



- July 2nd **PCARS Annual Picnic** at the Ravenna VFW New Milford Road, in Ravenna
- July 11th **PCARS Meeting Frank Tompkins, W8EZT** Station Grounding, plus we'll have another *Special Visitor*!
- August 8th **PCARS Meeting Jim Stahl, K8MR** Contesting & the Ohio QSO Party
- August Date not set yet **PCARS Cruise In** at the Ravenna A&W



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

- First Tuesday **Digital** Special Interest Group
- Second Tuesday QRP/CW Special Interest Group
- Third Tuesday MARS Special Interest Group and the Antenna Special Interest Group
- Fourth Tuesday DX & Contest Special Interest Group
- Fourth Thursday Net Nite at the club site 6:30 pm

PCARS Yahoo Site

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



Check out the PCARS Yahoo Group at: http://groups.yahoo.com/group/PCARS/.

PCARS VE Test Sessions

PCARS VE sessions are scheduled for the first Saturday of every even numbered month.



August 6 ~ October 1 ~ December 3

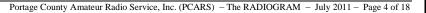
VE sessions for Technician, General & Amateur Extra start at 10:00 am at the Center of Hope: 1034 West Main Street in Ravenna. Walk-ins are always welcome.

If you are going for your Technician license: bring a picture ID and \$15 in cash or check made out to "ARRL-VEC". If you are upgrading: bring the original and a copy of your amateur radio license, the original and copy of any current CSCE, a picture ID and \$15 in cash or check made out to "ARRL-VEC".

We look forward to seeing you there,

Robert, N8RLG
PCARS VE Team Liaison





The Way It Was: When 'Hams' Ruled the Airwaves

In high school, I studied chemistry, science, biology and physics and about the time I graduated in 1935 I learned there were many ways to use what I had learned.

I began to experiment with chemistry by making my own hydrogen to inflate balloons, as well as developing and printing photographs. I dabbled in astronomy and learned the names of some of the constellations. Radio was still very new and I got interested in it, too. Short wave radio was new and I learned the Morse code with the idea of maybe getting a ham radio license. To do that, one needed to pass a test and be able to transmit and receive at the rate of at least 10 words per minute. Just as I felt I might be able to do that, the requirement was raised to 12 words per minute and I gave up.

We had a radio that was about 10 inches wide, 8 inches high, and 18 inches long. It was powered by large radio tubes about the size of light bulbs. I learned that in the wee hours of the night, radio reception changed and it was possible to hear stations that were not heard in daytime. Sometimes I'd stay up late just to hear Bohemian music from Nebraska. It was quite a thrill to turn the tuning dial and suddenly hear a voice from some far away place like that.

When newer models of living room radios came out, some had three bands of different frequencies that meant they could receive short wave signals from places as far away as Europe and Australia. They also could tune in on police radio and airline frequencies. There seldom was anything of interest on the police stations, but I did listen in on the airplanes as pilots called the airport to report their position. When I would hear "United 437 over Goshen" (New York), I knew just how many minutes it would take before a DC3 would roar over our house on the way to Cleveland airport. If it was after dark, I would go outside with a flashlight and shine it up at the plane and the pilot would respond by flashing his landing lights. Can you imagine the trouble one would get into by doing that today?

I remember listening to the sound of Big Ben coming directly from London. There was a station in Czechoslovakia that would send greetings over the air to listeners in the U.S. who had written letters to the station.

I spent many hours listening to amateur radio operators. Some of them were my classmates who had earned their licenses and built their own transmitters. One guy who lived just about two blocks from me had built a transmitter that was more powerful than most and when he turned his set on, he really came in "loud and clear." He tended to boast about his setup and wasn't very popular with other ham operators.

One day I was browsing the band looking for someone interesting to listen to when the voice of a very pleasant sounding young lady came over the air. Not only was it unusual for women to be on short wave amateur radio, this one was transmitting from Nova Scotia, which was unusual for that frequency. Very quickly all other radio traffic stopped and all amateurs in the area were calling her. They were all asking for verification cards.

Anyone listening to a radio broadcast, especially from overseas or on amateur radio, could write to a station and describe what they heard and the station would send a card to verify that that person had indeed received a signal from that station. It was a popular hobby to see how many cards one could collect. The stations did it gladly because it gave them information about where their signals were being heard. Some amateurs with lots of time and a good transmitter could collect a whole bunch of those cards.

One day I was on a bus on my way home from work and the bus driver was having a conversation with a lady passenger. I had never seen the lady in my life but there was something about her, about the way she talked

that seemed very familiar. As she was getting off the bus, the driver said something like, "See you again soon, Molly," and at that moment, I knew. Molly was a local ham operator who would talk to other hams while doing her cooking and other housework in her kitchen. I found her very interesting to listen to and evidently the bus driver did too.

Radio has come a long way since those early days. Those old radio tubes were replaced by "peanut tubes," which were much smaller, almost as small as peanuts and made of metal instead of glass. When transistors were invented, the size of a radio transmitter was reduced from a room full of equipment to what today fits into a tiny fob that unlocks a car door, or a cell phone smaller than a pack of cigarettes that sends a signal to some nearby tower.

I recently tried to show some school children how Morse code works and they said it was too hard to do. It takes a lot more study and experience to send a Morse code message than it does to push a few buttons and talk to just about anybody anywhere in the world on a cell phone.

We tend to think of a telephone in terms of a land line that sends signals through a wire, but more and more phone conversations are being sent at least part way by way of radio waves. Next time you make a cell phone call, remember the early "ham" radio operators and be glad you don't have to do at least 10 words per minute in Morse code.

John Straka

Reprinted from the Gateway News - Streetsboro, OH: http://www.thegatewaynews.com/news/article/5042928



PCARS Thursday Net Control



July			
7	N8QE		
14	WB2DFC		
21	KC8PD		
28	KB8UUZ		

	August			
4	4	WB8LCD		
1	1	open*		
1	8	open*		
2	25	open*		



The PCARS net is *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 shot, please contact me at: <u>WB8LCD@portcars.org</u>. Everyone who is a club member is welcome to have a turn!

* I need more Net Control Ops! You can do this, and it's a great way to get to know all the other names and call signs together. Call me or email me and I'll put you in the rotation!

One of the things that holds our club together, and keeps us all up to date on each other as well as the activities of the club, is our weekly social net. We really hope you'll be a regular check in for us, as it's always a lot more fun when there's more participation. January thru May of 2011 we had a total of 21 nets. The most check ins for any one net was on Thursday, March 31st. Bob, N8QE, as net control had a roster of 51 total check ins – *Nice job Bob*! Over that period we had a total of 823 check ins, with an average of 39.2 per week.

Now I don't know who the .2's are, but could you try to be a little more regular??? There were 11 different stations that acted as NCS (Net Control Station).

You'll notice that I have a few slots open for NCS in the month of August. If you've never been an NCS, but would like to give it a try, send me an email and we'll get you in one of those slots. It's fun for the other stations in the net to hear a new voice and a new style running the net. If you do it a few times, you'll notice that you start to get better at it and recognize all of the calls and the names that go with them – definitely a plus if you want to get to know all of the PCARS members better.

A special congratulations to the following stations who were logged into every net over the 5 month period:

KB8UHN, KC8PD, N8ATV and WB8LCD

Hope to hear you on the net,

Tom, WB8LCD PCARS Net Control Coordinator



PCARS logo patches & stickers are now available!! Put the patch on your hat, your shirt, your jacket and show off that PCARS logo!! The patch is approximately 3".



The embroidery on the white patch is in Red, Black and Blue. Cost for a patch is \$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! If you would like to order by mail contact the club Treasurer: Bill, WB9LBI at: WB9LBI@portcars.org





PCARS EchoLink Information

First off - a big **THANK YOU** to **Jim, KC8RKV** for being the EchoLink guru and running the EchoLink that PCARS has become familiar with over the years.

Jim's closet set up (yes, it was located in a real closet!) had been through a lot of ups and downs and Jim asked that someone else take over the EchoLink function.

Steve, K8SRR jumped in there and now the Echolink node is under his call sign: **K8SRR**. After a few hiccups, the system seems to be working good and those of you using EchoLink should be able to get in.

EchoLink being used during a PCARS net by Randy, N6TL in Antelope CA

So, with that, we'll be listening for you during the Thursday night nets as well as other times and days. If you run into other EchoLink users, please let them know that PCARS (and the N8EQJ repeater in Kent/Ravenna) is now located on the K8SRR node.

EmComm

WE NEED YOUR HELP! There, I can't think of any other way to put it and I hope that it gets your attention.

One of the primary purposes for the amateur radio service is to provide emergency communications to the public when traditional systems have been compromised, overwhelmed, damaged or destroyed. For as much as many of us train for those incidents we hope that they never occur.



But another facet of that purpose is to provide supportive communications to public service events for which there is no readily available commercial communication system. This can be done by any group of hams, whether on an informal basis, or sponsored by a club, or even as an ARES[®] activity.

There were a number of hams locally who actively sought to have ARES[®] reinvigorated in Portage County. Well, that has happened and we now have work to do and we need your assistance! Plus, there are other public service events that you can help with, here and in other counties, no matter who is organizing the effort.

You can trust the event organizers to match your assignment to your experience and skills. You do not need to worry about finding yourself being assigned a task that you are unprepared for.

What is important is that you get involved and volunteer some of your time for these worthwhile events.

Here are some for you to consider:

- Tree City Kids Triathlon July 9th, Jim, KC8PD
- Headwaters Adventure Race July 9th, Jim, KC8PD
- Kent Triathlon August 6th, Gay, WB8VNO and the Bellefaire Biathlon, August 28th, Gay, WB8VNO
- Ravenna Parks and Recreation, Balloon A-Fair Chase 10 Mile Race, Sept. 17th, Sandy, KD8JCY
- Mantua Potato Stomp Sept. 10th, Jim, KC8PD
- Ravenna Parks & Recreation, 50/25/10 mile bike ride October 2nd, Jim, KC8PD and Mike, KD8FLZ

Contact the person listed with each event if you are interested in volunteering. You can send him or her a note at [callsign]@portcars.org.

As was mentioned in last month's column, public service events are not only a terrific way to gain experience that can be extremely beneficial in disaster relief and other emergency situations, they are also a lot of fun and are ham radio's best PR tool. There is no better way to demonstrate ham radio's value and capabilities to the general public.

73,

Jim, KC8PD/AAM5EOH

Radio Officer, Portage County EMA/RACES EC, ARES® of Portage County Emergency Operations Officer, Ohio Army MARS



Wooden Tower



We have a couple of acres of land down in Guernsey county near Salt Fork State Park that we like to go to get away from the city whenever we can. Ham radio is a part of the get away when we have time for it. We have had a G5RV antenna for HF but nothing for



VHF. There are also a couple of two meter repeaters in the surrounding area but it is difficult to hit them from where we are with a handie talkie.

My good friend and fellow ham, Mike, NQ8D told me about a wooden tower he was building out of 2x4s, which is somewhat based on ideas from the ARRL antenna book. I'm not much of a wood worker but the simplicity and low cost couldn't be ignored. I decided to design my own using some 2x4s I had around the house.



The base is made of three pressure treated 2x4s by eight foot long, with a length of 2x4 spaced between them. Lag bolted together, it looks like a big clevis at the top. Next I dug a hole three feet deep and concreted the base into the ground. The center section is made of two 14 foot 2x4s with 2x4 spacers so it will fit into the clevis and leave a space at the top for the single 16 foot 2x4. I drilled a hole through the base clevis and center section and

inserted a 1/2 inch aluminum rod. This made a perfect

hinge.

After adding all of the hardware I needed at the top of the tower, I was concerned about getting it up in the air. How heavy was it going to be? A couple pounds at the end of a 25 foot pole can feel like a ton at the other end. With Coletta pulling a rope that was attached to the middle of the tower, and myself walking it up, we got it in place without so much as even a grunt. The hinge worked perfectly. It was so easy I might have been able to do it myself! Coletta held it in place while I screwed in the lag bolts to secure the tower to the base.

At this time the tower has a ten meter dipole made of hamsticks so Coletta can get her 10M Worked All States. Close to the top are two eye bolts on either side. Ropes are attached to these eye bolts and secured to the base section. I believe this will give it stability similar to guy wires.



A quick reminder on the WAS comment. The award is earned by working all 50 states with your transmitter being within a 50 mile radius. Since our campsite is 100 miles away, we have separate logbooks for down there.

The tower added up to 32 feet tall and is self supporting. Since I had some of the supplies already, the total cost to me was around 25 bucks. We will soon be adding a copper two meter j-pole for VHF. There is also a lanyard at the top just in case I want to hang an inverted vee.

Eventually, the pressure treated lumber in the ground will rot out and the tower will come crashing down, but I think it will last eight or ten years. Hopefully that will be long enough to save up for a 100 foot tower, StepIR antenna, rotator, heliax, Elecraft K3.... Uhhh, maybe I should have put better preservative on the lumber.

John, KB8UHN & Coletta, W8CDL



July Contest Calendar

July 2011			
RAC Canada Day Contest	0000Z-2359Z, Jul 1		
10-10 Int. Spirit of 76 QSO Party	0001Z, Jul 4 to 2400Z, Jul 10		
MI QRP July 4th CW Sprint	2300Z, Jul 4 to 0300Z, Jul 5		
IARU HF World Championship	1200Z, Jul 9 to 1200Z, Jul 10		
CQ Worldwide VHF Contest	1800Z, Jul 16 to 2100Z, Jul 17		
North American QSO Party, RTTY	1800Z, Jul 16 to 0600Z, Jul 17		
RSGB IOTA Contest	1200Z, Jul 30 to 1200Z, Jul 31		

Yes - there are more than what are listed here. Check the internet for contest activity from around the world.



PCARS Picnic

On July 2nd, the club picnic will be returning to the Ravenna V.F.W. Post on New Milford Road. It is a great location that has lots of parking, plenty of room inside the building, a huge grill and plenty of space for outdoor activities. There is even a baseball field if you are so inclined.

The picnic will start around 4:00 p.m. with dinner around six o'clock. Just like last year, the club will be providing hamburgers and hot dogs and all the condiments. We are asking that you bring a side dish, dessert, beverages or snacks. If you can bring a cooler for the beverages, that would also be a big help.

The picnic is a fun, relaxing, social event. You are more than welcome to set up a portable station if you like, but there won't be any club radio operations. We will all need a breather after Field Day. This is a "come and hang out and have a good time with your PCARS friends" event.

So come on out and start your Fourth of July weekend having some Big Fun with the PCARS crew. It helps us plan for the event if we have a rough idea how many folks are going to be attending. Reservations are not necessary since we know that plans can change in the meantime, so it is not critical if you respond, otherwise send a note to kc8pd@portcars.org and let us know if you plan to attend and how many guests you are bringing.

We hope to see you there!

73,

Jim, KC8PD

PCARS Meetings

The Portage County Amateur Radio Service (PCARS)meetings are held the second Monday of each month. Meetings are at the:

On Tap Grille, - 4396 Kent Rd. (State Route 59), in Stow.

The On Tap Grille is on the south side of Route 59, about a mile west of the Kent city limits.

PCARS meeting - 7:00 pm Second Monday of Every Month

Meetings are held at the On
Tap Grille January November.
The December meeting is the
PCARS Christmas Party and
is usually at another location.



Ohio QSO Party

The Ohio QSO Party is scheduled for August 27th this year and the club station, K8BF, is going to be on the air for the contest. Dave, WB2DFC, our club station coordinator, will be pulling the event together.

Watch for more information, both in the August edition of the newsletter and e-mails that will be sent out in the meantime. Contact Dave if you have any questions but get your calendar marked for that Saturday and make some plans to come out to the club shack and operate, log, or stand around offer helpful suggestions!

hio QSO Party
hio QSO Party
The Ohio QSO Party
Mad River Radio Club
Mark your Calendar
Me Hope to see you

We'll see you there!

73, **Jim, KC8PD**

Swap-N-Shop

FOR SALE: Icom SP-23 Speaker Brand New in the box! Matches all newer Icom rigs. Four filters, front panel headphone jack. Cost new \$220. Will sell for \$160 [11/2/11]

Contact: Ed - N8EQJ#portcars.org

WANTED: USED TOWER - Looking for 30ft but 25ft would be ok. At 30ft I could have a beam and also a dipole for MARS. [9/2/11] Contact: **Jeff** - KD8DQT@portcars.org or call: 330-760-5555

FOR SALE: Yaesu FT-1000 HF Rig, \$1,500.00 in excellent condition. [9/2/11]

FOR SALE: MFJ-989C Tuner, \$100.00 in excellent condition. [9/2/11]

Contact: Al - KD8LEB@portcars.org or call 330-842-7640

FOR SALE: ALS-600, 600 watt solid state, no tune amplifier. With 10 meter kit and linear power supply - \$800 [7/2/11]

FOR SALE: QSK 5, PIN diode QSK switch. Handles 2500 watts PEP and 2000 watts CW - \$200 [7/2/11]

FOR SALE: MFJ -994B, 600 watt auto tuner Perfect match for the ALS-600 - \$200 [7/2/11]

Contact: Bob - KD8CGH@portcars.org

FOR SALE: Samlex 23 Amp Switching Power Supply - \$80.00 [7/2/11]

FOR SALE - Books:

ARRL Operating Manual - 8th edition - \$10.00 [7/2/11]

Now You're Talking - 2nd edition - \$5.00 [7/2/11]

Now You're Talking - 5th edition - \$7.00 [7/2/11]

ARRL General Class License Manual - 5th edition - \$5.00 [7/2/11]

Radio Shack Listening to Shortwave - \$2.00 [7/2/11]

FOR SALE: Audio CD - ARRL "Your Introduction to Morse Code" - this is a two audio cd set with pouch and instruction

booklet. - \$10.00 [7/2/11] Contact: **Mark** - <u>markAB8SX@gmail.com</u>

FOR SALE: The MFJ-976 Tuner. 1500 Watt full legal limit fully balanced antenna tuner. Very wide matching ranges (12-2000 ohms) and continuous 1.8-30 MHz coverage including all WARC bands! It handles a full 1500 Watts SSB and CW. \$479 new, will sell for \$350.00. Used only a few times. Do not need with a 4 element SteppIR. . [7/2/11]

Contact: Chuck - W8PT@portcars.org

FOR SALE: Cushcraft 10-3 ten meter 3 element beam. I've dry fit it and it seems that the only piece missing is a 6" x 6" aluminum mast plate. \$299 new, I'd like to get \$100 plus shipping (should be around \$16.00 to ship). [10/2/11]

Contact **Randy** - N6TL@portcars.org

FOR SALE: GAP Titan DX Vertical 80m through 10m - Good condition with manual \$150.00 [7/2/11]

FOR SALE: Hamstick Antennas - Two, 75 meter Hamstick style antennas, \$20.00 each. [7/2/11]

FOR SALE: Hamstick Antennas - Two, 40 meter Hamstick style antennas, \$20.00 each. [7/2/11]

Contact **Rick**: K8CAV@portcars.org

FOR SALE: Used Leviton 430C12W 125/250 Volt 30 Ampere watertight pin and sleeve connector in excellent condition \$90.00 s. 553 Feet of NEW 1-1/4" RFS Heliax. \$1000.00 [7/2/11]

FOR SALE: Ceramic Insulators – set of six (6) 4" long by 3/4" diameter insulators with holes for attaching wire or rope on each end, rated to 1500 Watts \$10.00 per set. [7/2/11]

FOR SALE: Ceramic Insulators – set of three (3) includes one (1) 4" long by $\frac{3}{4}$ " diameter center insulator and two smaller end insulators, rated to 200 Watts \$5.00 per set $\frac{7}{2}$

FOR SALE: Andrew 22' Superflex FSJ4-50B jumpers with N-male & DIN-male connectors. Also includes an extra N-male for building a custom length N-male to N-male connector - \$20.00 each. [7/2/11]

FOR SALE: Andrew 22' Superflex FSJ4-50B jumpers with N-male & DIN-male connectors. - \$15.00 each. [7/2/11]

FOR SALE: N-female to N-female New adapters \$5.00 each [7/2/11]

FOR SALE: N-male to N-male New adapters \$5.00 each [7/2/11]

Contact James - KD8VT@portcars.org or call 330-206-4909

Editor's Note: Ads run for 3 months then are dropped from the listing **UNLESS** you send it in again. Each ad will have an expiration date that looks like: [07/15/11] when they will be removed. This will help keep the listings current.



Ham License Plates Wanted

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

We have 38 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.

It costs about \$20 the first time for the bureau fee, mailing fee, and Amateur Radio plate fee. When renewal time comes around for your Amateur Radio, you can get NEW plates issued (same call sign).

Then you'll have an old plate to bring in to get hung up as a **permanent part of PCARS history!!** The official form for obtaining your Ohio Amateur Radio license plates is on the PCARS Yahoo Group site.

4

Charlie the Tuner - HF High Lites

By the time you read this, Field Day will be taking place. I'm sure that Parky will try to get this issue completed before Field Day weekend. So I hope to see ALL PCARS members at some time during K8BF's Field Day event.

DX has been very good during June. I even worked a new one for me – EK3GM, Boris, from Armenia. He is not on much so I was very fortunate to catch him at 01:11 UTC. So you can see that the 20 M has been very co-operative during the evening hours. Here are some other DX contacts that were worked after 9 PM local time: Oman, Bulgaria, Serbia, Israel, Ukraine, Lebanon and Estonia. Lebanon and Estonia were worked after 11 PM local time.

All I can say, is get on in the evening after 9 PM local time and you should be able to work several DX stations on 20 M.

There promised to be some good DX on during July, if my reports are accurate.



Chuck, W8PT

I really want to thank the following for the forecast reports for this month and beyond: the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn Packet Cluster Network (especially Tedd Mirgliotta, KB8NW for the following DX and IOTA information. Please remember that this report could contain "Pirate/SLIM" operations or busted call signs. Please do yourself a favor and adhere to the old adage of "Work First Worry Later" (WFWL).

DX

- **2M, SCOTLAND** (Satellite Op). Paul, 2E1EUB, will once again be active as 2M1EUB starting July 2nd, for two weeks (depending on the WX). He states that he will be operating from the van again and activating some rare new grid squares. Activity will be from the islands of Harris and Lewis (These islands are located off the coast of western Scotland). Most of the operations will be on the AO-7 bird. Paul states that he will be mobile all over northern Scotland and on the Island of Skye. Watch QRZ.com for updates, as well as the AMSAT BB mailing list. A new QSL card will be printed.
- **5H, TANZANIA**. (Reminder) Dave, W0FBI, will be active as 5H2DCL for the next two months. He is there as a medical doctor. Activity will be mostly on 20 meters CW, usually after 1300z. QSL via W0WOI.
- **5W, SAMOA** (6m EME Op). Lance, W7GJ, plans to be active as 5W0GJ from the northeast corner of Savai'i Island (Grid AH36un), Samoa, on a 6 meter EME DXpedition during the final week of August. He reports that license and airline tickets are now in hand. Operations will take place between August 23-31st. QSL direct to W7GJ.
- **7Q, MALAWAI**. Malcolm, GM3TAL, will be active as 7Q7MH during July as part of the "Explorer Scouts" that will go on a "Scottish Scout New Horizons Expedition" and will also be carrying out practical development work at the Malawi National Scout Campsite near Zomba. Although this is not a "DXpedition", look for activity on the upper HF bands (and possibly 6 meters), using CW and SSB. This will be a month long "field day" operation under canvas no towers or comfy resort style shacks and no Internet!
- **9J, ZAMBIA**. (Reminder) Chris, ZS6RI (ex-ZD9IR, 5H9IR, EL8RI), will be active as 9J2RI from Zambia for a year or two. However, operations will be on a "6 week on/6 week off" due to his work schedule (6 weeks off he will return home to South Africa). Activity will be on all HF bands using CW, SSB and the Digital modes. QSL via LoTW or direct to: Chris J de Beer, Box 333, Bethlehem, GA 30620 (w/SASE [USA] or SAE w/return postage for other countries). Bureau QSLs are OK, but very slow. LoTW will be uploaded at least once every 6 week rotation, and probably even weekly. Bureau cards will be sent annually.
- **9Q5, DEM. REPUBLIC OF CONGO** Reminder: CX2CC, is now active as 9Q5OAR from the City of Goma, near the Rwanda border and is there working for the United Nations for one year. He hopes to be active on CW (slow), SSB and the Digital modes. He is using a TS430 transceiver into a Log Periodic or wire dipole. QSL via his home call sign CX2CC: Christian Cardarello, Avenida Italia 3319, CP11600 Montevideo, Uruguay, South America. QSLs will not be answered until his return in December 2011. Please, direct QSL send a SAE with 2 USDs or a new IRC.
- **EF8, CANARY ISLANDS**. Look for EF8M from Santa Maria de Guia, Las Palmas Gran Canaria (AF-004, DIE S-005, WLOTA L 0969), to be on the air during the RSGB IOTA Contest (July 30-31st) as a Multi-Op/All-Band/High-Power entry. Operators mentioned are Valery/RD3A, Juan/EA8CAC and Alex/UA5C. QSL via UA3DX.
- **FR8, REUNION ISLAND** Reminder: Frederic, ex-F5INL, will be active as FR8NE from Reunion Island (AF-016) until July 2012. Activity will be on 20/17/15/12/10 meters using mostly CW. QSL direct to Frederic Bossu, 2 Chemin des Grenadiers, 97490 Sainte Clotilde, Reunion Island or by the Bureau.
- **HG15, HUNGARY** (Special Event). Look for special event station HG15IPA to be active through December 31st. Activity is to celebrate the 15th anniversary jubilee call sign of the International Police Association. The station is expected to be on 160-10 meters using CW, SSB, RTTY, PSK31 and SSTV. QSOs with this station are valid for the HA-IPARC Award. QSL via HA3JB.

IOTA News

AS-066. Members of the Vladivostok Contest Club will be active as RW0MM/p from Reyneke Island during the RSGB IOTA Contest (July 30-31st) as a Multi-Op/Island/DXpedition entry. QSL via RW0MM.

EU-007. Operators Adam/EI5JQ, Bronel/EI4JZ, Ark/EI9KC and Jerzy/SQ7JT will be active as EJ0PL from Great Blasket Island during the RSGB IOTA Contest (July 30-31st). QSL via EI5JQ.

EU-017. Alex, IK8YFU, will be active as ID9/IK8YFU from Stromboli Island between July 23-30th. Activity will be on 40-6 meters. QSL via IK8YFU. Logs will be uploaded to LoTW.

EU-055 – (Reminder) Helge, LA1QDA, will once again be active from his summer QTH on Sotra Island between July 11-31st. Activity will be on 80-6 meters using mainly SSB and CW. QSL via his home call sign, direct or by the Bureau.

EU-140. Jari, OH1JO, will once agin be active as OH1K from Kaunissaari Island between July 27th and August 4th. Activity will be be 20 meters, but other bands will also be used too. For more details see QRZ.com. QSL via OH1JO.

EU-170. Operators Ivo/9A1AA, 9A3BMR, Alen/9A3MA, Rolando/9A3MR and Zrinko/DK8ZZ will be active as 9A1CKL from Zirje Island during the RSGB IOTA Contest (July 30-31st) as a Multi-Op entry. QSL via DK8ZZ direct.

NA-029. Gregg, VE3ZZ, will once again be active as VE3ZZ/VY2 on Prince Edward Island (CISA PE-001, WLOTA 0523, WW Loc: FN76vs) between July 25th and August 1st, from the VY2TT superstation. In the RSGB IOTA Contest (July 30-31st), he will operate as a Single-Op/Mix-Mode/24HRS/High-Power. QSL via his home callsign, direct or by the Bureau.

NA-232. (New IOTA!) Look for Yuri, N3QQ, and other Russian Robinson Club members to be active as KL7RRC from St. Matthew Island, Alaska, between July 29th and August 5th. They are currently awaiting final permission by USFWS. For more details and updates, visit: http://www.na-234.com

KH9, WAKE ISLAND – (Reminder) WA2YUN, will once again be active as KH9/WA2YUN from Wake Island (OC-053, USI OI-012S, WLOTA LH-2293) for about one year while on work assignment. Activity will be limited to his spare time. QSL via K2PF

OC-142. Operators Andrew/VK4NM and Peter/VK4LAT will be active as VK4MM/P from Fraser Island, Queensland, Australia, between July 29th and August 1st. Activity will include the RSGB IOTA Contest (July 30-31st). QSL via M0OXO direct.

OC-156. Dmitriy, RW6AML, will be active as 3D2ML from Waya Island, Fiji, between July 6-17th. Activity will be on the HF bands using CW and SSB. QSL via his home callsign.

OC-239. (Reminder) Joni, YB9WZJ, will be active as YB9WZJ/p from Doom Island during the RSGB IOTA Contest (July 30-31st) as a Single-Op entry. QSL only direct to YB9WZJ.

PY0F, FERNANDO DE NORONHA. Marcelo, PY2FN, will be active as PY0FO from Fernando de Noronha (SA-003) between July 2-9th. Activity will be on 160-6 meters CW only. Suggested frequencies are: 1814, 3514, 7014, 10114, 14014, 18084, 21014, 24894, 28014 and 50094 kHz. QSL via his home callsign, direct or by the Bureau.

I hope that you all get on the air and work some very interesting DX. Make some HAM friends on the other side of the world. We have a great hobby and I hope that you take advantage of our unique hobby. Until next issue – gud DX and 73.

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



Paper Chase

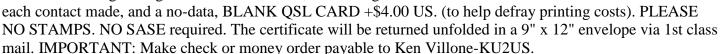
July has our country's birthday on the fourth. For the last couple of years, a special event has occurred to celebrate the founding of the US. It is the Original 13 Colonies event. It will be held again this year from the 1st

till the 5th of July. You have an extra day to make contact with all the states because the 4th is a Monday.

The stations will have calls K2A through K2M in the order of their ratification of the Declaration of Independence.

You can see by the picture of the certificate, it is a keeper and worth the effort to get. Living just west of the original colonies, 40 and 80 meters will probably be the best bands to achieve the award.

This is how you get your certificate: Each operator is to send a contact log stating the Date, UTC, Band, & Call Sign of



13

The blank QSL card is requested because sometimes the hand writing looks like it was written in Klingon but the info on your card will insure you will get the certificate in short order. All award requests and payment to be sent and made out to the award manager-KU2US - Ken Villone - P.O. Box 185 - Conesus, NY 14435

> Hope to hear you in the pile-up. Joe, W8KNO

73

:T* K2E-A* K2H-

THE US. ORIGINAL 13 COLONIES GROUP PRESENTS THE 3RD ANNUAL-

4th Of July Week-The Original 13 Colonies Special Event In CONGRESS Jeer a con



PCARS members having a birthday in July:

			, ,
W8PT	Chuck Patellis	N8JLC	Raymond Hyer
N8FTP	Larry Cole	AK8U	Wayne Schaefer
KB8JFF	Dick Ward	G0BPS	Dick Pascoe
N4PKW	Rod Thompson	AB8IE	Westy Westover
WB9LBI	Bill Fraedrich	KD8EPA	Dan Porcase
N8HUC	Karen Andrews		

Thanks & 73

I really appreciate your help in getting material for this newsletter. All of our members (and others) look forward to getting this newsletter every month, so keep sending those inputs!

Thanks goes out to this month's contributors: KC8PD, WB8LCD, N8RLG, KB8UUZ, KB8UHN, W8CDL, W8PT, W8KNO, John Straka, The ARRL and the World Wide Web.

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

Tom, KB8UUZ **PCARS Newsletter Editor**



Pictures from the June PCARS Meeting





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

Meetings: 2nd Monday of each month at 7:00 PM at the **On Tap Grille**, 4396 Kent Road (SR 59) in Stow

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



"When All Else Fails - Amateur Radio Works"

PCARS uses the N8EQJ Repeater: 146.895 MHz PL 110.9 ~ Rootstown, Oh or PL 114.8 ~ Kent, Oh ~ Echolink Node: K8SRR

PCARS thanks N8EQJ for making the repeater available to area hams and for PCARS activities.

PCARS Appointments & Committees 2011

ARRL Awards - VUCC	W8KNO	Joe Wehner
ARRL Awards - WAS	KB8UUZ	Tom Parkinson
Club Callsign Trustee	KB8VJL	Al Atkins, Sr.
Club Site	KC8PD	Jim Aylward
Contest	W8KNO	Joe Wehner
Coordinators	W8PT	Chuck Patellis
EchoLink	K8SRR	Steve Randlett
E' 11D 2011	K8CAV	Rick Kruis
Field Day 2011	N8HUC	Karen Andrews
F.Y.A.O.	WB8LCD	Tom Sly
Historian	KB8SZI	Peggy Parkinson
K8BF QSL Mgr.	KB8VJL	Al Atkins, Sr.
Net Coordinator	WB8LCD	Tom Sly
Newsletter	KB8UUZ	Tom Parkinson
OSPOTA 2011	W8PT	Chuck Patellis
P.I.O.	KC8PD	Jim Aylward
Secretary	KD8GGZ	Mary Jo Loveland
VE Liaison	N8RLG	Robert Gurney
Web Master	K8SRR	Steve Randlett





KB8UUZ Tom Parkinson KB8DPN Russ Anderson, Sr. N4IT Carl Capps WB8LCD Tom Sly N8XTH Deron Boring N8PXW Jim Korenz N8QE Bob Hajdak W8PT Chuck Patellis N8EQJ Ed Polack K8QF Russ Conklin K8GI Rick Patterson WB8VNO Gay Wands WD8CVH Ted Wands NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green KD8LEB Al Zielinski		KC8PD	Jim	Aylward
NAIT Carl Capps WB8LCD Tom Sly N8XTH Deron Boring N8PXW Jim Korenz N8PXW Jim Korenz N8QE Bob Hajdak W8PT Chuck Patellis N8EQJ Ed Polack K8QF Russ Conklin K8GI Rick Patterson WB8VNO Gay Wands WD8CVH Ted Wands NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green		KB8UUZ	Tom	Parkinson
WB8LCD Tom Sly N8XTH Deron Boring N8PXW Jim Korenz N8QE Bob Hajdak W8PT Chuck Patellis N8EQJ Ed Polack K8QF Russ Conklin K8GI Rick Patterson WB8VNO Gay Wands WD8CVH Ted Wands NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green		KB8DPN	Russ	Anderson, Sr.
N8XTH Deron Boring N8PXW Jim Korenz N8QE Bob Hajdak W8PT Chuck Patellis N8EQJ Ed Polack K8QF Russ Conklin K8GI Rick Patterson WB8VNO Gay Wands WD8CVH Ted Wands NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KBJAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green		N4IT	Carl	Capps
NSPXW Jim Korenz NSQE Bob Hajdak WSPT Chuck Patellis NSEQJ Ed Polack KSQF Russ Conklin KSGI Rick Patterson WBSVNO Gay Wands WDSCVH Ted Wands NXSG Rex Simmons NSRLG Robert Gurney ABSAA Allan Avnet KSJAA Jane Avnet KDSFLZ Mike DiCarro KESG Jim Blanca WSRID Bob Davet KSMSF Bud Green		WB8LCD	Tom	Sly
N8QE Bob Hajdak W8PT Chuck Patellis N8EQJ Ed Polack K8QF Russ Conklin K8GI Rick Patterson WB8VNO Gay Wands WD8CVH Ted Wands NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green		N8XTH	Deron	Boring
WSPT Chuck Patellis NSEQJ Ed Polack KSQF Russ Conklin KSGI Rick Patterson WBSVNO Gay Wands WDSCVH Ted Wands NXSG Rex Simmons NSRLG Robert Gurney ABSAA Allan Avnet KSJAA Jane Avnet KDSFLZ Mike DiCarro KESG Jim Blanca WSRID Bob Davet KSMSF Bud Green	MATEUR RAD	N8PXW	Jim	Korenz
PCARS VE Team W8PT Chuck Patellis N8EQJ Ed Polack K8QF Russ Conklin K8GI Rick Patterson WB8VNO Gay Wands WD8CVH Ted Wands NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green	AARRI	N8QE	Bob	Hajdak
RSQF Russ Conklin KSGI Rick Patterson WB8VNO Gay Wands WD8CVH Ted Wands NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green	VEC	W8PT	Chuck	Patellis
PCARS VE Team RSGI Rick Patterson WB8VNO Gay Wands WD8CVH Ted Wands NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green	OF THE	N8EQJ	Ed	Polack
PCARS VE Team WB8VNO Gay Wands WD8CVH Ted Wands NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green	WIEER EXAM	K8QF	Russ	Conklin
PCARS VE Team WD8CVH Ted Wands NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green		K8GI	Rick	Patterson
PCARS VE Team NX8G Rex Simmons N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green		WB8VNO	Gay	Wands
VE Team N8RLG Robert Gurney AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green	DCADC	WD8CVH	Ted	Wands
AB8AA Allan Avnet K8JAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green		NX8G	Rex	Simmons
KSJAA Jane Avnet KD8FLZ Mike DiCarro KE8G Jim Blanca W8RID Bob Davet K8MSF Bud Green	VE Team	N8RLG	Robert	Gurney
KD8FLZMikeDiCarroKE8GJimBlancaW8RIDBobDavetK8MSFBudGreen		AB8AA	Allan	Avnet
KE8GJim BlancaW8RIDBob DavetK8MSFBud Green		K8JAA		
W8RID Bob Davet K8MSF Bud Green		KD8FLZ		
K8MSF Bud Green		KE8G	Jim	Blanca
		W8RID	Bob	Davet
KD8LEB Al Zielinski				
		_		
WA8CCU Al Nagy		WA8CCU	Al	Nagy



The RADIOGRAM is the official newsletter of the Portage County Amateur Radio Service, Inc. - copyright©2011. Articles are the opinion of the authors and not necessarily those of Portage County Amateur Radio Service, Inc. (PCARS). Or, better yet, let me express it this way: "These are my opinions and only my opinions, unless you share them as well, which would make them our opinions, but I am not of the opinion that I can express your opinion as my opinion without your prior expression of said opinion, and then my re-utterance of that opinion would, in my opinion, be foolish unless I were expressing agreement to your opinion, and then it wouldn't be my opinion but your opinion to which I only agree." *GO AHEAD - STEAL THIS NEWSLETTER!* You have our permission to post, e-mail, copy, print, or reproduce this newsletter as many times as you like, but please do not modify it. If you use material in this newsletter, all we ask is you give credit to PCARS along with the author of the article. The RADIOGRAM comes out the first day of each month (usually), please have inputs submitted by 8 pm ET on the last Friday of each month - newsletter contact: KB8UUZ@portcars.org. ARES® (Amateur Radio Emergency Service®) is a program of, and both logos are registered trademarks (used with permission) of the American Radio Relay League, Inc. ARRL, the national association for Amateur RadioTM. Why the Black Squirrel in our logo? For those of you not familiar with it: the Black Squirrel is commonly seen around Portage County, Ohio. Seems that some of these little guys & gals got loose from Kent State University back in 1961 and have migrated and thrived throughout our county. Kent State University even has an annual Black Squirrel Festival. So when you spot a black squirrel – think PCARS!

This is the *Electronic E-Mail* version of the PCARS Newsletter, the RADIOGRAM. The advantages to receiving this way are: You get COLOR pictures, NO postage needed, and delivered right to YOUR e-mail box! If you know of anyone else that would like to receive this newsletter, please have them send me an e-mail. Are you interested in getting news emailed directly to you? Send an email to news-subscribe@portcars.org to join our news emailing list. The RADIOGRAM is published every month and is sent only 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.

Portage County Amateur Radio Service, Inc. (PCARS) Tom Parkinson - KB8UUZ - Newsletter Editor 9992 State Route 700 Mantua. OH 44255



