



~ Officers ~

President - Tom Sly - WB8LCD
 Vice President - Jim Aylward - KC8PD
 Sec/Treasurer - Tom Parkinson - KB8UJZ
 3 Year Trustee - Al Atkins - KB8VJL
 2 Year Trustee - Joe Wehner - W8KNO
 1 Year Trustee - Russ Anderson - KB8DPN

~ Meetings ~

2nd Monday of
 every month. 7pm
 at
 Mike's Place
 Routes 43 and
 261 in Kent

~ Nets ~

Thursday nights
 8 PM
 on 146.895
 PL Tones
 110.9 Rootstown
 114.8 Kent

PCARS
 Application for
ARRL affiliation
 was submitted
 November 29th



From the President

I can hear what you're thinking when I stand up in front of the group: "Now there's a guy who must like to eat!" Well, it's true. I do like to eat. There is so much good food to choose from, sometimes I just don't know when to stop. I love grilled food, pizza, Chinese, Mexican, Italian, why I even enjoy a bowl of oatmeal once in a while, or the occasional peanut butter and Jelly sandwich. Without the variety, I'd be bored. No way could I survive on a steady diet of beanie weenies.

Ham radio has just as much variety to offer as food, yet I know lots of hams who never venture past a 2-meter repeater contact! If you've fallen into a rut, if your excitement level for ham radio has waned in the last few years, PCARS is here to shake you up! The key is to learn a new skill, try something new. How about echo-link? Fox hunting? Work a satellite or the International Space Station (ISS). CW? Why not? PSK-31, APRS, fast scan TV, slow scan TV, QRP, Dxpedition, HF Pack, HSMM, there must be something that sounds interesting to you. Ham radio is an activity, get active and have some fun! After you try something new, be sure to tell the club about it - no matter what you try, someone else is probably interested in it too.

Another idea that most of us don't apply to a hobby, like ham radio, but a business couldn't operate without is goal setting. Put your ham radio goals down on paper, be sure to set a completion date for each one. Then create an action plan to take you towards each goal.

We're fast approaching the bottom of solar cycle 23. The years 2010 through 2014 should take us over the peak of the next cycle. What kind of action plan



could you put into place so you're ready to take advantage of what will be the best conditions you may ever experience as a ham? New antennas? New rigs? License upgrade? Build your CW proficiency? Get it done and be ready, it's gonna be great! The whole idea here is that Ham radio is a great hobby! Don't miss out on all the fun it has to offer. Lots of hams don't try new things because they're afraid of looking like a novice.

We all start new things without the benefit of experience, but the key is to give it a try. It may be cumbersome at first, but with a little practice, you'll be Awesome! Be an active member of the club and inspire someone else to be active. We've got a great thing started here, lets keep the momentum going.

Tom - WB8LCD

PS: I've just heard from Jim Weaver, K8JE, ARRL Great Lakes Division Director. He has approved our application for ARRL affiliation and has forwarded it to ARRL Headquarters for processing! We'll keep you posted when we get the final confirmation.

From the Vice President

Well, we had a good turnout at the March meeting with nearly two dozen members attending. We had an outstanding presentation from Gay Wands - WB8VNO, and Jim Korenz - N8PXW, on transmitter hunting, aka fox hunting or t-hunting.

Gay and Jim shared some great stories of their past experiences in fox hunting events. They are both members of the Cuyahoga Falls Amateur Radio Club (CFARC) which has a history of sponsoring t-hunts. In fact, CFARC holds fox hunts on the first and third Wednesdays of each month beginning in April and running into the Fall. They will normally start at 7:00 p.m. and start from the parking lot at the Scout House behind the Church in Silver Lake.

However, this Spring's first hunt will be on April 5th starting at 6:30 p.m. from the Kent Masonic Temple, 409 West Main Street in Kent. All are invited to attend. There may be the opportunity to do ride-alongs with CFARC members for first-timers who want to learn the ropes.

Although these are fun events, they can provide training for some serious public service. Jim and Gay described a recent incident where they were able to track down a stray RF signal that was interfering with communications at the Cleveland Airport. In addition, as more individuals make use of personal emergency beacons t-hunting skills may be vital for finding lost campers or children. Jim had one heck of a display of a wide variety of homebrew antennas and attenuators that he has accumulated over the years. No one who was there will forget the helmet mounted antenna! We continue to wait to hear from the IRS about the status of our application for tax-exempt status.

From the Vice President – Continued from page 1

They must be too busy processing all your tax returns! Remember, once that status has been granted anyone making a donation to PCARS can take the value of the donation as a deduction on their income tax return.



As of this writing, our application to the ARRL to be an affiliated club has been approved by Jim Weaver, K8JE, the Great Lakes Division director, and he will be submitting it to the ARRL board for final approval. Details of the process will be discussed at the April meeting.

On the calendar for upcoming meeting topics and activities are:

- ▶ April 8th – Antenna Day – A practice run for Field Day, bring your gear and join us at the Cunningham Shelter in Ravenna City Park at 10:00 a.m. to hoist some antennas and get on the air. Refreshments will be available.
- ▶ April 10th club meeting – EmComm turn out kits; what should be in yours, plus a variety of gear that you may find useful for portable and EmComm use.
- ▶ May 8th club meeting – “Bring Your Rig”, bring an HT, mobile or even desk top rig and tell us all about, pluses and minuses, or get your questions answered about features that may be perplexing you
- ▶ May 13th – Fox hunt strategies and homebrew antenna construction, details to be announced later.
- ▶ May 27th – The ‘Blind Squirrel’ fox hunt!
- ▶ June 12th club meeting – ‘Working the Satellites’ is the tentative topic
- ▶ June 24th – 25th – Field Day, Cunningham Shelter, Ravenna City Park

I am serving as the chair of the Field Day committee and so far we have Russ - KB8DPN, Tom - WB8LCD, Bobby - WB8FEW, and Chuck - K8CMP, on board. The committee has met and begun its planning but we can always use more help so drop me an e-mail or give me a call if you would like to help.

Some of you may have participated in the Field Day event held at Ravenna City Park a few years ago. This is a great facility with plenty of space for antennas, a shelter with lots of tables, AC available for lights, etc., parking, restrooms, and even the Ravenna Police Department for security! We want to be both a competitive station as well as a great public relations event to demonstrate to the community what amateur radio is all about. There are extra points available for Get On The Air stations this year and maybe we can use this to get some recruits or rookies on the air. We'll have lots of food and beverages available and lots of fun, too.

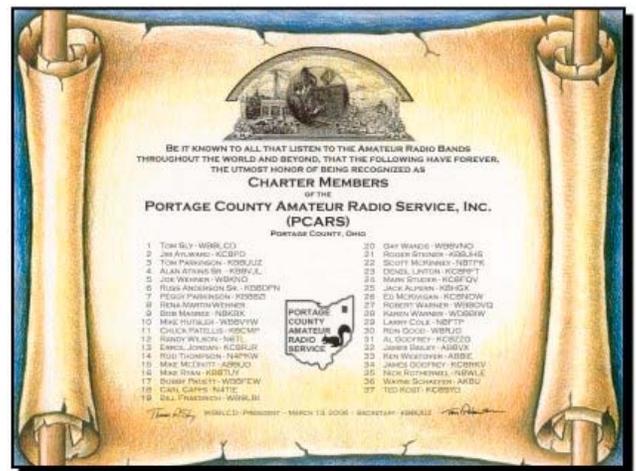
As always, we want to make sure that we are planning far enough in advance to give you plenty of notice about future events and programs. More importantly, we want to be sure that we are providing activities and information that YOU want. We had a good response on the surveys that were distributed at the last meeting and have already incorporated your recommendations into our upcoming events. If you have

any ideas or suggestions please send them to me at kc8pd@portcars.org. 73

Jim - KC8PD

Charter Members

Charter Membership was open from January 1st - March 13th and there were 37 people that will forever have the honor of being known as a Charter Member in the Portage County Amateur Radio Service, Inc. Your membership in PCARS will help this organization grow, provide assistance to our community, and expand your knowledge of this great hobby of ours. And, we're going to have fun all along the way! As a special token of recognition, each Charter Member will receive a beautiful (suitable for framing) certificate:



Skywarn

Well PCARS members, it's that time of the year again for Skywarn training! I attended the training this year put on by the Warren ARA group at the Kent State University - Trumbull Branch Facility. Gary Garnet did the training again and I have to say: he does an outstanding job! He posed a question to the group present... "With 7,000 weather spotters in his area why is it that never more than 50

spotters ever call in or make any weather report for the severe weather events?" That is a good question. His point is that with all the trained spotters, there should be many reports to the NWS...not the very few they receive! He pointed out that they want to know of all hail...not just larger sized that we wait for before we make a report. Another point was the estimating of hail size...he told us to stop using "Marble size" ..use coin

size due to the many different marble sizes everyone seems to have. Another reporting method to the NWS he showed us was the Email e-spotter method. He said they get the email in just seconds...and it's a great tool for those who don't call in or

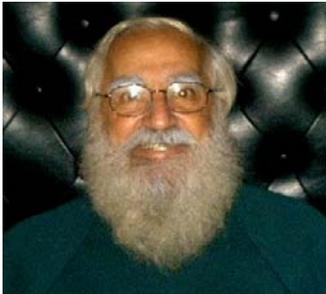


go the Ham Radio route. One must be Skywarn trained and register to use the e-spotter method. So, after he completed the training he again told all of us that they (the NWS) should be flooded with reports into them from us!!!!!! It was a good class! I must point out to those who will be attending his training, he starts the class at the posted time!!!!!! DON'T BE LATE!!!! I took a quick count of the folks present...and there were about 75 people there for the training!!!!!!!!!! The room was packed!!!!

AI - KB8VJL

Paper Chase

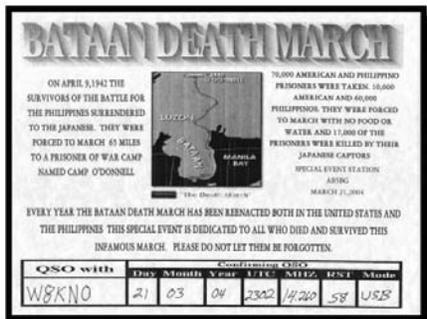
In wondering what I might write on, I noticed that we have ARRL members, non-ARRL members and an associate member as part our organization. Therefore, I will take time to relate some of the information in the April edition of QST, the ARRL monthly magazine. On page 13, it reads in part: "60th Anniversary of Project Diana In a wooden building a group of scientists and technicians watch and wait.



Soon the target would be in range. Then the command was given and the signal is sent. Now the small group watches its instruments for a faint signal to appear. After two and one half seconds, the time it takes a radio signal to reach the Moon and return to Earth, the signal is heard and recorded. It's 11:58 AM local time January 10, 1946, and new era has dawned. Project Diana (named after the Roman Goddess of the moon) had been a success. With this first successful Earth-Moon-Earth (EME) attempt, the beginning of the space race had begun."

Historical events are one the criteria that I collect. Others collect countries, counties, islands, grid squares, lighthouses or Navy ships for a few. Some paper chasers collect more than one of these. In this months QST, there are two historical special events I would like to share with you. One provides a QSL card and the other a certificate.

The first provides a certificate. It is for the 64th Anniversary of the infamous Bataan Death March. The event happens from 0000Z April 8th till 2359Z April 9th. AB5BG will be active on 10, 15, 20, and 40 meters. Send a certificate sized envelope with your QSL card to Don Goff, AB5BG, 1210 Ardmore, San Angelo, TX 76905. Each year Don attempts to have a survivor of the march autograph the certificate but in Some years he is unable to do so.



The second provides a QSL card. It will be available from the



Titanic Historical Society, W1MGY honoring the 94th Anniversary of the Titanic voyage. In addition to a QSL card they provide a brochure titled, "R.M.S. TITANIC REMEMBERED."

You will find W1MGY on 7.033, 7.260, 14.033 and 14.260 between 1330Z April 9th till 2100Z April 15th. Send your QSL and SASE to Titanic Historical Society QSL, PO Box 51053, 208 Main St., Indian Orchard, MA 01151-0053. Additional info can be found at www.hcra.org/titanic.htm. Hear you in the pile ups!

Joe - W8KNO

Charlie the Tuner's HF High Lites

I might be getting ahead of things, but the WX is starting to look pretty good. I don't know about the rest of you, but I've got an antenna / tower project that I can't wait to get completed. (If there's anyone that would like to help when I start, let me know.) Anyway, I thought that since there is a lot coming up in April, I'd separate the DX from the IOTA news and make it easier for those who are only interested in straight-forward DX versus those of us who like to hunt out rare islands. So let's get started:



DX News

5T - Fernando, EA1BT active on all bands as 5T6BT from Mauritania on April 7-16. QSL via EA4URE.

5Z - Riccardo, IZ1GDB on 20, 15 and 17 meters SSB as 5Z4/IZ1GDB from Kenya from April 20 to May 1.

9Q - Luc, ON7KEC in the Democratic Republic of Congo - early April until end of July. Listen for 9Q/ON7KEC. QSL via home call.

S0 - Ten ops will be on as S01R from Western Sahara on 11-16 April. 4 stations active on 10-160 meters. QSL via EA5RM

SV - Special event SY05AIA from March 15 to June 15 to celebrate the 5th anniversary of Athen's Int'l Airport "Eleftherios Venizelos". QSL via SV2FWV

UA - Special call R45G will on from the radio club station (RK3DZB) at the Cosmonauts Training Center on Zvyozdny Gorodok on April 10-16 to commemorate the 45th anniversary of Yuri A. Gagarin's first human flight in space (12 April 1961). QSL direct only via RW6HS.

TA - Eric, SM1TDE as TA4/SM1TDE from Kemer, Turkey on April 9-16. Will also try to operate as TA0/SA1A from a couple of IOTA groups (AS-099 and AS-115). QSL via bureau to homecall.

YU - Raffaele, IV3NVB & Roberto, IV3SRD as YU8/IV3NVB and YU8/IV3SRD from Kosovo until August 3. QSL via home calls (bureau).

Charlie's Island News

3B9 - Jose, ON4LAC (3B8/ON4LAC) will operate from Rodrigues for April 18-29, and maybe through May 14.

8Q - Simon, M0BOX active as 8Q7BO from Kuredu Is., Maldives (AS-013) on April 7-20. 40-10 meters SSB and on PSK31 and RTTY, plus SSTV if requested. QSL via home call.

9A - Frans, ON6KN will operate as 9A/ON6KN from Losinj (EU-136) on May 21-26.

I - IK2DUW, IK2GPQ, IK2WFE, IK8UHA and IW2OAZ will operate on 160, 80, 40, 20, 15, 6 and 2 meters as IB0/IQ2LB from Ventotene Is. (EU-045, IIA LT-001) on April 22-24. QSL via bureau.

JD1 - Hide, JM1LJS (<http://radio-dream.com/jd1blk/e/>) will operate as either JD1BLK or JM1LJS/JD1 from Chichijima and Hahajima, Ogasawara (AS-031) from April 30 to May 6. QSL via JM1LJS, direct or bureau.

P2 - Johan, PA3EXX will operate on 10, 15, 20, 30 and 40 meters CW and SSB as P29VV from the Witu Is. (OC-181) on June 16-19. Also active from New Britain (OC-008) for a few days before and after the ops from OC-181.

TA - Six members of the OK DX Foundation to be active from at least one Turkish island for about 4 days - April 24 - May 5. On 40, 30, 20, 17 and 15 meters. QSL via OK2GZ, direct or bureau.

TA - Berkin, TA3J as TA3J/0 from Sican Is. (AS-115) - April 1 to 22. QSL via TA3YJ, direct (SAE plus 1 IRC. No green stamps please) or bureau.

VK9 - The Oceania Amateur Radio DX Group Inc (<http://odxg.org/>) operate on 160-6 meters as VI9NI from Norfolk Is. (OC-005) May 25 - June 20 as part of the commemoration of the 150th anniversary of the landing of the HMS Bounty mutineers.

VU4 - Frank, DL4KQ (VU3FRK) from the Andaman Is. during and after their Hamfest event (www.niar.org/hamfest_vu4/intro.html) will take place April 18-25.

YB - Kardi, YB1TC "Low Band Krakatau QSO Party" from Krakatau Is. (OC-262) April 9-10.

YV0 - Ops from the Association of Radio Amateurs of Venezuela and the Grupo DX Caracas active as YX0A from Aves Is. (NA-020) in April 17-19.

Extra Goodies From the Grabbag: (Note: These are really interesting.)

CENTRAL AMERICA TOUR --->Marcos, EA1APV will be visiting Central and N. America in March-April. Will operate as V31SF from Belize - March 29 - April 2. On April 4-14 in Honduras (including Roatan Island, NA-057, from the 7th - 14th), April 15-20 in Florida (expect activity from various lighthouses). QSL via home call, direct or bureau. All QSOs will be uploaded to LoTW. [This one has something for everyone: DX, IOTA, ARLHS]

Annual ARLHS Spring Lites QSO Party - The Amateur Radio Lighthouse Society will be holding it's annual QSO party starting 0001 UTC on April 15 through 2359 UTC on April 23. For all who like to collect QSOs from Lighthouses and Lightship Stations, this is a must. All modes 160-10 meters.

As you can see, a lot is going on in April. Hope you all have a chance to get on the air and work some exotic locale. That's it for this month's Tuner HighLites. See you down the log.

Chuck - K8CMP



PCARS Meetings - Mike's Place

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



meets on the second Monday of every month at Mike's Place - 1700 S. Water St. - Kent. Meetings start at 7 PM sharp and all are invited to attend. You can find out a whole lot more about Mike's Place on

the web at: www.mikesplacereastaurant.com

You can look over their entire menu and see some interesting stuff on the web site. Check it out!

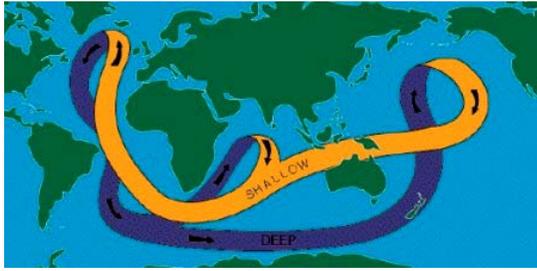
Solar Storm Warning

March 10, 2006: It's official: Solar minimum has arrived. Sunspots have all but vanished. Solar flares are nonexistent. The sun is utterly quiet. Like the quiet before a storm. This week researchers announced that a storm is coming--the most intense solar maximum in fifty years. The prediction comes from a team led by Mausumi Dikpati of the National Center for Atmospheric Research (NCAR). "The next sunspot cycle will be 30% to 50% stronger than the previous one," she says. If correct, the years ahead could produce a burst of solar activity second only to the historic Solar Max of 1958. That was a solar maximum. The Space Age was just beginning: Sputnik was launched in Oct. 1957 and Explorer 1 (the first US satellite) in Jan. 1958. In 1958 you couldn't tell that a solar storm was underway by looking at the bars on your cell phone; cell phones didn't exist. Even so, people knew something big was happening when Northern Lights were sighted three times in Mexico. A similar maximum now would be noticed by its effect on cell phones, GPS, weather satellites and many other modern technologies.

Right: Intense auroras over Fairbanks, Alaska, in 1958.



Dikpati's prediction is unprecedented. In nearly-two centuries since the 11-year sunspot cycle was discovered, scientists have struggled to predict the size of future maxima—and failed. Solar maxima can be intense, as in 1958, or barely detectable, as in 1805, obeying no obvious pattern. The key to the mystery, Dikpati realized years ago, is a conveyor belt on the sun. We have something similar here on Earth—the Great Ocean Conveyor Belt, popularized in the sci-fi movie *The Day After Tomorrow*. It is a network of currents that carry water and heat from ocean to ocean--see the diagram below. In the movie, the Conveyor Belt stopped and threw the world's weather into chaos. The sun's conveyor belt is a current, not of water, but of electrically-conducting gas. It flows in a loop from the sun's equator to the poles and back again. Just as the Great Ocean Conveyor Belt controls weather on Earth, this



Above: Earth's "Great Ocean Conveyor Belt."

solar conveyor belt controls weather on the sun. Specifically, it controls the sunspot cycle. Solar physicist David Hathaway of the National Space Science & Technology Center (NSSTC) explains: "First, remember what sunspots are--tangled knots of magnetism generated by the sun's inner dynamo. A typical sunspot exists for just a few weeks. Then it decays, leaving behind a 'corpse' of weak magnetic fields." Enter the conveyor belt. "The top of the conveyor belt skims the surface of the sun, sweeping up the magnetic fields of old, dead sunspots. The 'corpses' are dragged down at the poles to a depth of 200,000 km where the sun's magnetic dynamo can amplify them. Once the corpses (magnetic knots) are reincarnated (amplified), they become buoyant and float back to the surface." Presto—new sunspots! All this happens with massive slowness. "It takes about 40 years for the belt to complete one loop," says Hathaway. The speed varies "anywhere from a 50-year pace (slow) to a 30-year pace (fast)." When the belt is turning "fast," it means that lots of magnetic fields are being swept up, and that a future sunspot cycle is going to be intense. This is a basis for forecasting: "The belt was turning fast in 1986-1996," says Hathaway. "Old magnetic fields swept up then should re-appear as big sunspots in 2010-2011." Like most experts in the field, Hathaway has confidence in the conveyor belt model and agrees with Dikpati that the next solar maximum should be a doozy. But he disagrees with one point. Dikpati's forecast puts Solar Max at 2012. Hathaway believes it will arrive sooner, in 2010 or 2011. "History shows that big sunspot cycles 'ramp up' faster than small ones," he says. "I expect to see the first sunspots of the next cycle appear in late 2006 or 2007—and Solar Max to be underway by 2010 or 2011." Who's right? Time will tell. Either way, a storm is coming.

From Science @ NASA - 10 March 2006

Editor's Note: Let's all hope this will be a doozy! Get those antennas up and let's have some REAL fun on the airwaves again!!

April Contest Calendar

April, 2006	
Kids Roundup	1400Z, Apr 1 - 2200Z, Apr 2
Missouri QSO Party	1800Z, Apr 1 - 0500Z, Apr 2 & 1800Z-2400Z, Apr 2
Georgia QSO Party	1800Z, Apr 8 - 0359Z, Apr 9 & 1400Z-2359Z, Apr 9
Montana QSO Party	2300Z, Apr 8 - 2300Z, Apr 9
Michigan QSO Party	1600Z, Apr 15 - 0400Z, Apr 16
Ontario QSO Party	1800Z, Apr 15 - 1800Z, Apr 16
Run for the Bacon QRP	0100Z-0300Z, Apr 17
Florida QSO Party	1600Z, Apr 22 - 0159Z, Apr 23 & 1200Z-2159Z, Apr 23

Swap-N-Shop

DRAKE TR-7 transceiver (Serial #11002) w/ matching power supply and speaker, cooling fan, all filters except for AM, wired for 17 meters and other bands. Ready to put on the air. In very good condition. For digital photo, email ep4usa@adelphia.net. Price = \$650.00 + shipping. Call Jack, K8HGX, at 330-995-4887

Editors Note to PCARS members: Have you got some ham related item for sale? Or, maybe your looking for some ham related gear? Send me an e-mail and we'll put it in the Swap-N-Shop column.

NIMS/ICS Training Essential

The Department of Homeland Security is requiring all first responders, including volunteers, to complete training in the National Incident Management System (NIMS) by 2007. This sounds formidable, but in reality there is an Independent Study course from FEMA that covers it. The course is IS-700 - go to

<<http://www.training.fema.gov/EMIweb/IS/crslist.asp>> and find the course list. Follow directions and you will get to IS-700. Readers can take the course on line or download the material and do it at their own pace. It shouldn't take more than three hours in any case. There's a final exam on line, but it isn't going to cost much sweat (or any money - courses are all free). After passing the final, the student will get notification by e-mail or regular mail. Readers are encouraged to look at the rest of the course offerings on the FEMA training Web site. They represent a wealth of knowledge, organized so that us real people can get through them and actually learn something. They aren't rocket science, just good stuff we need to know!

From the ARRL ARES Newsletter

HAMFEST CALENDAR

2 Apr 2006 - 52nd Annual Hamfest/Electronics & Computer Show - Cuyahoga Falls ARC - www.cfarc.org - Talk-In: 147.27 - Contact: Ted Sarah, W8TTS - 239 Bermont Ave. - Munroe Falls, OH 44262 - Phone: 330-688-2013 - Email: w8tts@w8tts.com - Cuyahoga Falls, OH - Emidio & Sons Party Center - 48 East Bath Rd.

19-21 May 2006- **Dayton Hamvention** / ARRL EXPO 2006 - Dayton ARA - <http://www.hamvention.org/> - Talk-In: 146.94 Contact: see web site for all details. - Hara Arena - 1001 Shiloh Springs Rd. - ARRL EXPO info: www.arrl.org/expo

4 Jun 2006 - 52nd Annual Hamfest & Computer Show - Breezeshooters ARC - <http://www.breezeshooters.net> - Talk-In: 147.96 - Contact: Bob Benna, N3LWP - 1010 Willow Dr. - Pittsburgh, PA 15237 - Phone: 412-366-0488 - Email: hamfest2006@breezeshooters.com - Butler (Pittsburgh), PA - Butler Farm Showgrounds - Route 68 (East of Butler)

Upgrade Congratulations

Congratulations goes out to PCARS member James Bailey who upgraded from General to Amateur Extra. He also changed his call sign from KC8JGJ to AB8VX.

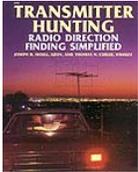
First QSL Card

Just came in the mail from K5SVC. This contact (20 meters SSB) was the first on the log sheet Joe handed me from the PCARS Freeze Your Acorns Off day held in February. K5SVC was running an IC-756 Pro II, Alpha 78 - 1 Kw amp. with a 265 ft Windom Antenna. Not bad on our part, considering our low antenna and power with the radio running off some 6 Volt batteries from a old Daisy Duke jeep???

Al – KB8VJL – PCARS QSL Manager

Fox Hunts

Fox hunts are held on the 1st, 3rd, and if there is one, the 5th Wednesday of the month during daylight savings time. We start at 6:30 during April and October, and at 7:00 May through September. We will be starting from the Kent Masonic Temple, 409 West Main Street, Kent. There may be meetings going on there so please use the North West corner of the parking lot. You



can access the lot from either Main Street (on the South side of the property) or Pioneer St., (on the North side of the property). There will be a big meeting there on Apr. 5th, but after that there should not be any problem. If you don't have direction finding equipment you are welcome to ride along with our regular hunters on a space available basis. There MAY be some loaner equipment available, but bring along an antenna adapter if needed. We look forward to having you join us in the fun.



Gay – WB8VNO

Welcome to the Ohio Section

Joe – K8QOE, the Ohio ARRL Section Manager visited the last PCARS meeting. During the meeting he spoke about the Ohio Section:

Actually you are already a member if you live in Ohio, hold a Federal Amateur Radio license and are a member of the American Radio Relay League. We ask you to not only understand what the Ohio Section is but to participate where you can. This participation is the basis of ARRL in Ohio and you can be an active part of it. First there are 71 Sections in the United States and the Ohio Section is the largest both in number of hams and number of ARRL members. Basically this is because Ohio is the largest state in the US not partitioned. Every state bigger than Ohio has from two to nine (California) sections in it. Here are some areas you can participate and remember every one listed here



is a volunteer dedicated to Ham Radio and the American Radio Relay League.

Emergency Communications (ARES): Our most popular appointment is those who serve the Amateur Radio Emergency Service. Each of our 88 counties have an Emergency Coordinator appointed to operate ARES programs in that county. The Section Emergency Coordinator (SEC) runs this program.

Message Handling: Traffic Nets Even in the days of E-mail and other electronic means of communication, the National Traffic System (sending messages by radio) continues to operate. Ohio has one statewide phone net - the Ohio SingleSide Band Net (OSSBN) and three CW statewide nets. These are listed in each month's edition of Section News. In addition all our major metropolitan areas have nets on VHF and UHF repeaters. Ohio's traffic nets are among the best in the US.

Newsletters: Public relations First rule of the Public Relations Manuel is to have our own people know what is going on. Club newsletters are a key here. Public Information Officers not only are in charge of newsletters but also informing public media outlets about ham radio news. The Public Information Coordinator (PIC) runs this program.

Official Observers: The Official Observers (Amateur Auxiliary) is Ohio's fastest growing program. Official Observers are hams to monitor frequencies (HF and VHF/UHF repeaters) to advise hams of poor operating practices and write "Good Guy Reports" to outstanding radio operators where they find them. The Official Observer Coordinator (OOC) runs this program.

Technical Specialists: Hams in this program are electronic specialists who stand ready to assist hams and non-hams when thorny interference problems arise. The Technical Coordinator (TC) runs this program.

Government Liaisons: With a myriad of city councils, county commissions, boards of zoning appeals and school boards across Ohio, Local Government Liaisons monitor the activities of these civic boards to see if any actions affect ham radio directly. The State Government Liaison (SGL) operates this program and officially monitors the Ohio Legislature, Governor and State Supreme Court.

Affiliated Clubs: Basically for qualified ham radio clubs who obtain and maintain Special Service Club and/or Affiliated Club status in the ARRL. The Affiliated Clubs Coordinator (ACC) runs this program.

The above sketches are just some of what's happening in the Ohio Section. For more information on any ARRL program, please contact the Ohio Section person running that program. You'll find these dedicated hams in the Ohio Section Cabinet listing. Beside these programs, the Ohio Section has three jewels which distinguishes it from the other 70 Sections. We offer the Ohio Section Journal, a 12 to 16 page quarterly publication which explains current Section activities; an Annual Ohio Ham Radio Newsletter Competition to honor excellence in ham radio reporting and the annual Ohio Section Conference (usually in September) where Ohio hams holding appointments can gather and exchange ideas for improving our work. No other section in the United States does even two of these things. The Ohio Section also features five Assistant Section Managers. One from each of the five areas of Ohio -

Northwest Ohio, Northeast Ohio, Central Ohio, Southwest Ohio and Southeast Ohio - to insure all parts of our large and diverse state are represented. Thank you for being a part of the ARRL's biggest and finest Section.

Joe - K8QOE – ARRL Ohio SM

Radio Celebrates 100 Years of Voices

"Hello!" - the first spoken word to be heard over the radio a century ago. The ARRL, the national association for Amateur Radio, is celebrating 100 years of voice over the airwaves in 2006. As a boy, Reginald Fessenden heard his uncle describe Alexander Graham Bell's telephone. The 10 year-old asked, "Why do they need wires?" He then spent much of his life trying to figure it out. His early attempts at voice transmission were unintelligible. Then, on December 23, 1900, he was able to pass a voice message by radio to his assistant. His first word was "Hello." Later, while working to improve wireless Morse code type communication between land stations and ships at sea, he continued his voice experiments.

Working in secrecy, he planned a surprise for a 9 p.m. broadcast on Christmas Eve in 1906. Shipboard radio operators had been tipped to listen for something special during the December 24 transmission, but no one could have anticipated what happened. At the appointed hour, radio operators across the North Atlantic were surprised to hear, not the expected Morse code tapping, but a voice coming from their radios, calling "CQ, CQ". It was Fessenden beginning the very first "radio program." After a brief introduction, he played music. The planned Bible readings by Mrs. Fessenden and his secretary had to be quickly covered by the inventor as the first cases of microphone fright occurred when both women froze. While commercial broadcasting didn't begin for another 14 years after Fessenden's historic first broadcast in 1906, thousands of inquisitive amateur hobbyists began to experiment with this new fangled technology. They were, and are still, called "Amateur Radio" operators. They labored in attics, barns, garages and cellars to perfect what we now call radio. In the USA, they formed the American Radio Relay League (ARRL). These Amateur Radio operators, also known as "hams", continue to be at the forefront of developing technologies years in advance of when they are rolled out to the public. FM, television, and even our small mobile telephones were all used by Amateur Radio operators many years ahead of the public. You can find Amateur Radio groups in your area at <http://www.helloradio.org>.



Al – WIAGP – ARRL Media & Public Relations Mgr.

EmComm

Last month we took a general look at the primary EmComm leaders in the Amateur Radio Emergency Service (ARES)® organization. This month we want to focus on the position that has the most direct impact on local emergency communications: the Emergency Coordinator (EC). The members of PCARS are from at least four different counties

so you want to be sure that you know who the EC is for your county. All of the material in *italics* in this column are direct quotes from the ARRL Amateur Radio Emergency Communications Course Level III course materials. The ARECC courses are excellent and we recommend that you take at least the Level I course if you want to be actively involved in ARES activities. The EC is the *key team leader in ARES on the local (usually county) level*. It is the EC who *prepares for, and engages in management of communications needs in disaster situations*. How is the EC to accomplish this task? *To be effective, the EC must hold periodic meetings with his team to meet the needs of the group*. Some of the EC's organizational duties that help achieve this goal are:

- *Maintaining a current roster of team members with notes about skills and equipment.*
- *Developing a notification system for drills and emergencies, with backup methods.*
- *Developing an emergency communication planning committee of all local agencies that would be involved in a disaster with special emphasis on agencies with which ARRL has agreements (i.e., American Red Cross, Salvation Army, APCO, NCS, NWS, FEMA), and including other communication response groups such as REACT.*
- *Providing served agencies with contact information to allow for activation, and for general communications between the agency and ARES.*
- *Providing prompt "after-action" reports to affected agencies and the SEC and DEC after incidents and drills.*

Planning is vitally important and the EC is responsible for developing all emergency communications plan for his area. But even the best plan won't work without trained volunteers. One of the EC's most critical jobs is recruiting and then training a team of effective emergency communicators. It is impossible to overstate the importance of a well-trained, dedicated, and involved team. What kind of training should you expect from your EC? Training begins with a comprehensive course...but must



include realistic drills and simulations, regular training nets for traffic handling, and occasional classroom sessions and workshops to develop specific skills to make the plan work. It is the job of the EC to build the organization that makes all these things possible. Certainly one of the most important documents for all ARES volunteers is the local emergency communications plan. This is the document that sets out in detail the operational aspects of the plan and the only way for you to be fully prepared as an ARES volunteer is to familiarize yourself with the plan. Contact your local EC and request a copy for your information and records. If there are questions that you cannot get answered or issues that are unresolved at the local level, don't hesitate to take your concerns to the Section EC who should be prepared to assist you. **"When all else fails...amateur radio"** only means something if competent leadership ensures that all local ARES volunteers are trained and prepared and that is the responsibility of the EC.

Jim – KC8PD

Mark Your Calendars

April 4 - **Skywarn Training** - Lake County 6:30 PM at the Lakeland Community College Bldg T-129 7700 Clocktower Drive Kirtland, OH

April 8 - **PCARS Antenna Day** – Dry run & test for Field Day at the Ravenna City Park – 10 am.

April 10 - **PCARS Meeting** – EmComm turn out kits; what should be in yours.

April 18 - **Skywarn Training** – Summit County - 6:00PM O'Casek Government Bldg O'Casek Government Building - 161 South High St. Akron

April 25 - **Skywarn Training** - Cuyahoga County - 7:00 PM Dimitri's Restraunt 1830 Snow Rd.- Parma

April 26 - **Skywarn Training** - Portage County - 6:30 PM Maplewood Career Center 7075 State Route 88.- Ravenna

PCARS Simplex

Well, looks like we may have the 2 meter simplex frequency choice narrowed down to two finalists:

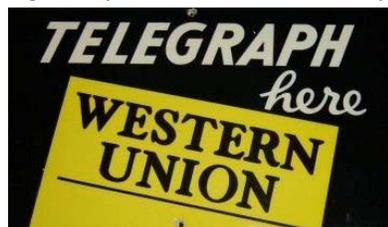
146.535 and 147.520

We went back and forth on various choices, and after researching both the ARRL Repeater guide and the repeater info on the web posted at: www.artscipub.com/repeaters/ (Which, by the way, is great source of information for all kinds of good stuff!!) Anyway - we looked at all the possible simplex frequencies and then at all the repeaters listed - especially since there are many repeaters out here with non-standard inputs/outputs which really encroach on the simplex area. Some of these can be heard here in Portage County coming from Pennsylvania. So, we're asking you to join us, and listen in on those two frequencies - so far all seems clear. Hope all this hasn't confused you. We never thought it would be this involved.

AI – KB8VJL

Western Union & the Rail Telegraphers

Last month, a briefly worded press release went nearly unnoticed. It simply read: "Effective January 27, 2006, Western Union will discontinue all Telegram and Commercial Messaging Services. We regret any inconvenience this may cause you, and we thank you for your loyal patronage." After 155 years, and millions of telegrams and Telex messages, a major part of American history quietly slipped into obscurity. For more than 100 years, Socorro was part of that history. With today's telephones, cell phones and e-mail, we can contact almost anyone we wish immediately and cheaply. This wasn't always the case. In Socorro's early days, and throughout the West, the mail was the only means of long-distance communications — and very slow mail at that. With the mail being carried on stage lines and military supply trains,



it was not unusual for a letter from Socorro to take three or four weeks to reach St. Louis or Chicago. That means if you were lucky, you might get a reply in only two months. That all changed in 1830, when Samuel Morse invented his telegraphic code. Within a few years, regional telegraph companies were springing up everywhere along the East Coast. Many of the railroads were installing their own lines as well. Converted to "dits and dahs," messages could be sent to cities hundreds or thousands of miles away; and now it would be delivered in hours, not weeks. This was a tremendous leap in technology. In 1851, the New York & Mississippi River Printing Telegraph Company was formed, with lines from New York to Boston and St. Louis. With a true vision for the future, the company began to purchase the smaller, local companies to form a single, consolidated telegraph system. In 1856, they changed their name to the Western Union Telegraph Company, or simply, Western Union. With their own lines, and those leased from the railroads, Western Union suddenly controlled almost the entire telegraphic industry from the Atlantic Ocean to beyond the Mississippi River. Thousands of telegrams a day were now buzzing along their lines, earning the company record profits. Determined to become the dominant telegraph company in the country, Western Union built a telegraph line from their western terminus at Omaha, Neb., to Carson City, Nev. By 1861, the line extended to Sacramento, Calif. This was eight years before the completion of the transcontinental railroad. For the first time in human history, people on opposite sides of a continent could quickly communicate. The first message tapped out in morse code over Western Union's transcontinental telegraph line was from Stephen Field, the California Chief Justice, to President Abraham Lincoln, declaring California's loyalty to the Union. After all, the Civil War had just begun, and Western Union now controlled 90 percent of all telegraphic communications. This became a huge asset to the Union Army. The secret Telegraphic Corps was formed, accompanying the major armies with telegraphic equipment and operators. For the first time in warfare, troop movements could be tracked, supplies ordered, sightings of the enemy reported and details of engagements immediately transmitted to the president. Also for the first time, telegraphic news reports from the field allowed newspapers to carry stories literally hours after a battle, creating yet another industry — telegraphic news services. The Confederacy was quick to develop their own telegraph system, but without the huge network of the Western Union in the north, communications were spotty and poorly developed.

Telegraph Arrives in Socorro

After the Civil War, the railroads made their push to the west, entering New Mexico over Raton Pass to Las Vegas by the end of 1880. The following year, the railroad tracks arrived in Socorro — and with it, the telegraph lines and Western Union. Socorroans could now send a 30-cent telegram to San Francisco or Chicago ordering a piano, a new stove or ceiling tiles, and know it would arrive at the Socorro depot a few days later. In 1880s Socorro, this was absolutely astounding. How quickly Socorro must have changed. And who sent and received these telegrams? It was the railroad telegrapher. While the movies always portray the telegrapher as an old, white-haired man wearing a visor, the truth is, most

telegraphers were very young men (although they did wear visors). It was the fastest growing occupation in America. The railroads and Western Union recruited thousands of young men for the lines — as young as 16. And, it was a good occupation, paying good wages. In order to retain telegraph operators, Western Union and the railroads offered incentives, such as paid vacations, annual bonuses and health care — unheard of perks at the time.

Telegrapher Sam Zimmerly

The first native to become a Socorro telegrapher was Sam Zimmerly, hired by the Santa Fe Railroad, in 1917, in the heyday of steam locomotives. As the station telegraph operator, and later agent-telegrapher, it was a busy job. The first priority was handling the railroad traffic. All train movements were carefully ordered and reported along the line. The telegraph circuit that serviced Socorro ran from Albuquerque to El Paso, Texas, and east to Clovis. All messages to every station along this circuit were "heard" by all stations at once, such that the clicking of the telegraph sounder droned on almost continuously. Every railroad depot and siding along the line had a station number. Albuquerque was No. 1340, Socorro was 1416, and El Paso 1594, to name a few. As Zimmerly helped the customers, sold tickets and processed freight, he was always listening to the click-click-clack of the telegraph to sound out "1416" — signifying a message for Socorro. If that wasn't bad enough, the Socorro railroad telegrapher was also the Western Union operator. This was a separate circuit, and a separate telegraph sounder clacking away. As Zimmerly conducted his daily business, his finely tuned ear was constantly listening to two different sounders with a message for Socorro. The skill of talking to a customer, drinking a cup of coffee, sending a Western Union message on one circuit, while copying a train order on another, became second nature. It was a skill that made the railroad telegrapher legendary. And, Sam Zimmerly was one of the best. Able to send and receive morse code messages at 50 words-per-minute, he was considered the "best fist" in the district, a telegraphers term that his code was easy to copy and flawless. In the mid-1960s, Sam Zimmerly had a most memorable experience. It was a particularly busy day when a passenger train arrived at Socorro. The station filled with passengers as Zimmerly had a full "weigh bill" of freight to load on the train. Suddenly, both telegraph circuits came alive with traffic for Socorro. Just as Zimmerly reached for his key to inform the Western Union circuit to wait, a passenger grabbed a piece of paper from the counter and said, "I'll get it for you." As Zimmerly copied the message on one circuit, the stranger held the paper against the wall and began writing down the other message. When the sounder quit clattering, the stranger handed the perfectly copied message to Zimmerly and introduced himself. The stranger was Gene Autry, an old railroad telegrapher before his movie days, claiming that was the first telegram he had copied in more than 20 years. Zimmerly gave his telegraph sign, a cartoon of a telegrapher busily at work, to Autry as a memento. Zimmerly retired from the Socorro depot, in 1967, after 50 years of service with AT&SF. Two of Sam's brothers were also railroad telegraphers: Joe worked most of his life at the Bernalillo station, while brother Charlie worked at Engle. Everyone loved receiving a telegram, except for one. Receiving a telegram during World War II usually meant only

one thing. Even in Socorro, every mother and wife dreaded the knock on the door from the Western Union delivery boy. Through the 1960s, telegrams continued to be a popular and inexpensive means to communicate across the country.

Telegrapher Roy Carrejo

In the early 1950s, Roy Carrejo was assigned to the Tiffany station (north of San Marcial). In those days, Tiffany had a small station building and a siding, servicing the freights and passenger trains as they entered or left the 90-mile run through the Jornada del Muerto. Keeping track of all train movements was an important job for the railroad and the telegrapher. Simply put, if a train failed to show or was late, there was a problem, or there would soon be one. Very few accidents or train wrecks occurred on the AT&SF line due to the diligent actions of the telegraphers and dispatchers. Train wrecks were expensive, often closing a line for days as the debris was cleared. This cost the railroad thousands of dollars in lost revenues. Knowing the exact position of every train at all times was paramount in preventing a deadly train wreck or mishap. After Tiffany, Carrejo was transferred to Socorro, where he worked for the next 34 years as telegraph operator, agent-telegrapher and station manager. During most of this time, all telegrams continued to be sent across the country in dits and dahs. Morse code was used on the AT&SF line in New Mexico for nearly 100 years. Carrejo copied the last morse code message in 1976, when the old trusty telegraph sounders were replaced with teletype machines. Socorro was the last AT&SF depot to cease using morse code. The final dit-and-dah to travel down a telegraph line in New Mexico was sent by Roy Carrejo. Asked if he ever delivered a singing telegram, Carrejo said, "only once." One day, he delivered a telegram to radio station KSRC. Owner Walter Shrode, surrounded by several other people, insisted Carrejo sing the telegram. Finally, Carrejo submitted. He opened the telegram and in the most melodious voice he could muster, sang out: "Your order can not be processed until you pay your \$300 past due bill." Carrejo's face wasn't nearly as red as Walter Shrode's. Roy Carrejo faithfully served the railroad, and the people of Socorro for years. He retired Nov. 30, 1988 — the same day the AT&SF permanently closed the Socorro depot. He and his wife, Dolores, still live in Socorro; and every once in awhile, Roy will pull out his code key, a 12-volt battery and old morse code sounder to hear the sounds of an age now gone.

Telegrapher Sam Padilla

Socorroan Sam Padilla was another AT&SF telegrapher. Padilla worked for the Albuquerque District, which controlled all train traffic from Albuquerque to Needles, Calif., and Phoenix to the Grand Canyon. Socorro was in a different district. Upon graduation from telegraphers school in Pueblo, Colo., the AT&SF gave him a choice to work in Wisconsin or the Grand Canyon in Arizona. He and his wife discussed it, deciding it was a no-brainer. As a result, Padilla spent his entire career working the main line between Albuquerque and Kingman, Ariz. More than 30 AT&SF freight trains, and two AmTrak passenger trains, rumble over these tracks everyday, still making it one of the busiest sections of track in the country. In his younger days, Padilla worked as the telegraph operator at Williams Junction (west of Flagstaff) and at the Grand Canyon station. In those days, the hotels at the Grand

Canyon were owned by the railroad. As a result, all reservations for lodging, dining, transportation and even the mule rides into the canyon were railroad telegraphic messages. Plus, all the Western Union traffic to and from the guests. All of these messages and telegrams would arrive at Williams, where they were relayed to the Grand Canyon, making these two stations among the busiest on the AT&SF line. At this time, Padilla and wife, Susie, lived in Williams. He worked two days a week at Williams Junction and three days a week at the Grand Canyon station, traveling back and forth on the train. At least he got to ride the famous Grand Canyon train for free! Since the passenger cars were often full, he usually rode in the forward engine (where it was nice and warm in the winter). After 11 years in Arizona, Padilla transferred back to New Mexico, working at the Gallup station for the next 25 years. Morse code was replaced by teletype machines along this mainline track in the early 1970s, several years ahead of Socorro. Padilla completed his career in Gallup as the assistant train master, retiring Dec. 13, 1993. After 36 years with the railroad, the Padilla's returned to Socorro. And like Roy Carrejo, Sam Padilla still keeps his old morse code keys and sounder in working condition. They were the tools of the trade. No true telegrapher could ever part with them.

The Age of Wireless

When one thinks of "wireless," cell phones come to mind, or perhaps your television remote control. However, wireless was actually invented by Guglielmo Marconi in the 1890s. As a young man, Marconi began experimenting with transmitting energy long distances through the air. Building powerful transmitters, Marconi successfully sent the first morse code message across the Atlantic Ocean in 1901. America and Europe were now connected, not through wires, but through what Marconi termed "wire-less." In short, Marconi invented radio. In 1902, he formed the Marconi Wireless Telegraph Company, hiring railroad telegraphers to send the morse code messages between the two continents. Soon, Marconi's "spark gap" transmitters were placed onboard ships. For the first time, ships could communicate with land, using morse code to report their position, receive weather reports, and messages to and from the passengers — This revolutionized the maritime industry almost overnight. To add the new-fangled wireless station to a ship, a small wooden room was built behind the bridge, from which the term "radio shack" originated. Within a few years, hundreds of ships at sea were outfitted with radio shacks. One of the first new passenger ships to be built with a dedicated radio room was the H.M.S. Titanic. Marconi received the Nobel Prize for Physics, in 1909, for his invention. And rightfully so, as wireless communications transformed the 20th century, with no signs of slowing down in the 21st.

Telegraphy and the Titanic

When the Titanic set out to sea on its maiden voyage, two Marconi wireless telegraphers manned the radio room: Jack Philips and Harold Bride. Hundreds of messages to and from the passengers, using the new, novel wireless, kept the two busy. One message received was the infamous iceberg report — the very iceberg the Titanic struck around midnight on April 15, 1912. Immediately, the two telegraphers began sending out distress calls. They alternated between sending the then common "CQD" and the newly adopted "SOS." As water

began to enter the radio room, Philips ordered Bride to leave for the lifeboats. Phillips told Bride that he would send a couple more distress signals and join him shortly. Harold Bride survived the disaster; Jack Philips remained at his post as telegrapher and went down with the ship, along with 1,300 others. Numerous ships listened as Philips' transmissions went silent. To this day, a telegrapher who passes away is known as a "silent key." In 1985, Dr. Robert Ballard used Phillips' last message, a final position report, to help locate the wreckage of the Titanic. The ship Carpathia rescued the 700 lifeboat survivors. Immediately, Carpathia's telegrapher, Harold Cottam, and the surviving Harold Bride, informed New York of the disaster over the wireless. The two worked tirelessly sending the names of the survivors as they became known, messages to family, and answering the incoming inquiries, some of which were from the press. Young David Sarnoff was the New York telegrapher on duty who received the first messages of the Titanic disaster. For the next 72 hours, Sarnoff was in constant communications with Cottam and Bride. Furnished by Sarnoff, the names of the survivors were printed in the New York Times, giving the young telegraphers, and the Marconi Company, instant national fame — and the world an instant look at the disaster. When the Carpathia pulled into New York harbor on April 18, the two telegraphers, Cottam and Bride, were met on the dock by none other than Guglielmo Marconi. He put the two men up in the Astoria Hotel with "anything they wanted" to repay their tireless and faithful service. Marconi then sent a heartfelt telegram to the father of Jack Philips, the Marconi telegrapher lost on the Titanic. David Sarnoff went on to form the Radio Corporation of America and is often credited as the father of television. At the time, investors wondered who would watch wireless broadcasts of moving images. Sarnoff served as the CEO of RCA until 1970.

The Telegraph Industry

Following the Titanic disaster, the value of wireless telegraphy was clearly established. Wireless stations began cropping up everywhere and, for the first time, Western Union had competition to its "land line" telegraph service. However, both industries flourished and made record profits. The demand for telegraphers exploded. There never seemed to be enough telegraphers to fill the jobs. Schools around the country trained thousands of young men, all of whom were assured a job upon graduation. It was the fastest growing industry in America, with telegraphers needed for the railroad, Western Union, the ocean-cable circuits, newspaper news rooms, wireless stations and as ship operators. Even during the 1930s depression, telegraphers were seldom unemployed. The Socorro Chieftain employed a news telegrapher from about 1890 to 1920, and printed the messages in the newspaper under the heading "Telegraphic News." As the telegraph industry grew, the demand often exceeded the capacity of the lines, creating a push to find ways to send the morse code messages faster to process more messages per day.

The familiar morse code key allows an operator to send a message about 20 words-per-minute, or about as fast as the receiving operator can write with pencil and paper. Around 1910, several semi-automatic keys were invented that allowed an operator to send morse code in excess of 35 words-per-minute. With names like Vibroplex and the McElroy, these

"speed keys" became instantly popular. Messages could now be sent so fast that only a trained operator using a typewriter could keep up. Soon, this became the norm and by the 1920s, telegraph and wireless offices were filled with speed keys and typewriters, doubling the number of messages an operator could process in an eight-hour shift. Since then, there has hardly been a railroad telegrapher, radio telegrapher or amateur radio operator using morse code that doesn't own a "bug," as the mechanical contraptions are called. They are prized possessions, finely tuned and adjusted until they feel "just right" to the operator. Today, the Vibroplex Company is still in business, selling their famous speed keys for about \$200.

The Death of Morse Code

Thousands of former telegraphers shudder when they hear about the "death of morse code." However, it is not entirely dead. Some ship-to-shore stations still use CW (as morse code is called in the radio world), and by many amateur radio operators (or hams). Thousands of hams around the world still communicate exclusively in morse code by choice. Dave Finley, N1IRZ, Paul Harden, NA5N, and Jan Harden, NOQT, are three of the active morse code hams in Socorro. There is a "romance" to communicating with another person in morse code that is hard to explain. Only an old telegrapher can explain it to you. The next time you see Roy Carrejo or Sam Padilla, ask them. Although morse code is nearly obsolete, it does not mean it is not still efficient. Like the railroads, the old telegraphers and the Western Union delivery boys are now part of an era gone by — never to return. It is a shame this era came to end last month with hardly a notice. So the next time you send an e-mail across the country, think of the old railroad and wireless telegraphers that started it all.



Some of the references used in this article: AT&SF Railfans Web site; "Marconi Calling" online museum; a special thanks to railroad photographer Evan Werkema; "Western Union" Web site; interviews with Chuck and Albert Zimmerly, Roy Carrejo and Sam Padilla; and El Defensor Chieftain archives.

**From the El Defensor Chieftain
Socorro County, New Mexico**

Happy Birthday PCARS Member

Only one PCARS member has a birthday in April:

KC8FQV - Mark

Hamfest Report - Madison

The Madison Hamfest marks the one more month point of winter around here. Unlike last year...this year's was missing the winter snow storm. I had other things to do so I hit the road for the hamfest late. I was still able to find what I wanted when I arrived... so that made my day. My "find" that morning were a couple of HV capacitors I needed for some traps I want to build for a trap dipole antenna that I plan to string up out in

the yard once it warms up to the point where I don't need to wear Gloves, a winter hat, and three pairs of socks and rubber boots and/or snow shoes anymore. Crossed paths with PCARS members Tom-KB8UUZ, Mark-KC8FQV, Roger-KB8JHS and Sharon-KB8JHR. Mark told me I was late and missed everyone and they came-and -went! I had to pause for a moment to select the appropriate reply for being told I was late by him..... HA HA HA HA HA HA Oh well, The fact was...yes I was late but, I did see some hold-out club members waiting for the last drawings and found what I went up there for!!!!!! So It was a great day for me!!!!!!!



AI - KB8VJL

Voice Traffic Nets

Handling written message is perhaps the oldest tradition in amateur radio. The original purpose of the American Radio Relay League, back in the spark gap days, was to organize hams for passing written message from any point in the country to any other point, and do it reliably. That's the "radio relay" in the League's name. In January 2006, the venerable Western Union Company gave up the telegram business after 150 years. In this age of cellphones and internet, some ask why bother with am radio messaging at all? One of the most intelligent discussions on www.eham.net last year was a very spirited debate on the future direction of the National Traffic System, the League's structure for message handling. The answer is: emergency communication. As the 2005 hurricane season proved so well, the need to get health and welfare messages in and out of disaster areas is critical to those affected by the disaster. It's not just the served agencies that need to communicate, it's the regular folks affected by the emergency, too. As our experience during Katrina taught us, its the hams who are trained who can provide an effective response when the chips are down. Untrained personnel tend to get in the way. For this reason, NTS practices with routine traffic, every day of the year. Amateur radio messages are individually known as Radiograms, and collectively as traffic. The messages that we pass are modeled on the old Western Union telegram format. The unofficial limit to messages is 25 words, not including address or signature. As with everything in ham radio, the content must be non-commercial. Even though the concept is about 80 years old, it incorporates most of the same features that you find in modern email or communication systems:

- Error correction
- Data compression
- Prioritization
- Store-and-forward capability
- Dynamic routing
- Dynamic Network configuration
- Route trace-back

That's pretty sophisticated stuff for a bunch of amateurs in their basements with headphones and pajamas!

RADIOGRAM form shows a typical Radiogram. Radiograms are formatted in four parts: preamble address, text, and signature. Notice that the printed form has five lines of five words each. This makes the number of words easy to count. The word count, or check count, is shown in the preamble at the top and is one of the error-correction features.

THE AMERICAN RADIO RELAY LEAGUE RADIOGRAM VIA AMATEUR RADIO							
NUMBER	PRECEDENCE	PK	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE
347	R	E	K7ABT	25	PHOENIX, AZ		Dec 4
TO ALBERT M COUSINS 337 W 38TH ST BRIDGEPORT CT 06645 TELEPHONE NUMBER (203) 334-5678							
PREAMBLE							
ADDRESS							
TEXT							
DEAR	DAD	ARRIVED	SAFELY	339TH			
COMPOSITE	BOMB	GROUP	FLAGSTAFF	DECEMBER			
2ND	X	TELL	SHERRY	IM			
OK	X	PHONE	602	345			
9876	SEND	FLAK	JACKET	LOVE			
REC'D	FROM	DATE	TIME	SENT TO	TIME		
	BILLY	043	89	9078			
SIGNATURE							
<small>THIS MESSAGE WAS HANDLED FREE OF CHARGE BY LICENSED AMATEUR RADIO OPERATOR. IF YOU ARE NOT A LICENSED AMATEUR RADIO OPERATOR, YOU MAY BE ABLE TO RECEIVE THIS MESSAGE BY CONTACTING THE LOCAL SECTION OF THE AMERICAN RADIO RELAY LEAGUE. IF YOU ARE A LICENSED AMATEUR RADIO OPERATOR, YOU MAY BE ABLE TO RECEIVE THIS MESSAGE BY CONTACTING THE LOCAL SECTION OF THE AMERICAN RADIO RELAY LEAGUE. IF YOU ARE A LICENSED AMATEUR RADIO OPERATOR, YOU MAY BE ABLE TO RECEIVE THIS MESSAGE BY CONTACTING THE LOCAL SECTION OF THE AMERICAN RADIO RELAY LEAGUE. IF YOU ARE A LICENSED AMATEUR RADIO OPERATOR, YOU MAY BE ABLE TO RECEIVE THIS MESSAGE BY CONTACTING THE LOCAL SECTION OF THE AMERICAN RADIO RELAY LEAGUE.</small>							

The Preamble at the top is the most interesting part of the Radiogram form. It contains: Message Number, a serial number of all the message each station has originated. As I write this, I'm up to about number 20 for the year. Precedence, which is the importance of the message. Most messages are coded Routine, but you will hear Priority and Welfare traffic during emergencies. There is also an Emergency precedence, but I've yet to hear one message on the ham bands. Callsign of the originating station, along with city and state. Check Count, the number of words in the text. If the number of words in the text disagrees with the check count, the transmitting and receiving stations must resolve the problem before the message is acknowledged. This is where you learn that most hams have limited spelling and counting skills. Date of origination. The year, and filing time is usually omitted from Routine messages Handling Instructions are for the ham at the end of the chain who delivers the message to the final destination. Choices include: send a delivery confirmation back to the originating station, send a failure notice if you couldn't find the recipient, hold message until a given date, and my personal favorite, try to goad the recipient into sending a reply via Radiogram to the originator.

Net meetings

Most traffic nets meet daily, on an appointed time and frequency. Almost all nets have a geographical area that they serve, such as a state or section. Like the captain of a ship, the Net Control Station (NCS) has absolute authority and will try to keep things moving along efficiently. After reading the opening announcement, NCS will call for a volunteer liaison station to collect all messages headed outside the net area, and take them to another net.

NCS will call for check-ins. Typically, you simply state your call sign adding the phrase "with traffic" or "no traffic" as applicable. Once several stations have piped up in this manner, NCS will call you back and ask you to list your traffic. A typical traffic list would be "One Akron, two Massachusetts, one W8STX."

When all traffic is listed, NCS will direct various stations to call each other and pick up traffic. The liaison station will take all outbound traffic. Volunteers will be solicited to take incoming messages. If somebody lists a message for a town near you, NCS will greatly appreciate if you speak up and volunteer to take and deliver the traffic.

NTS net structure

If you send a message to your cousin in Los Angeles, the liaison station will take your message to the Eighth Region Net (8RN) that handles traffic for Ohio, Michigan, and West Virginia. This net is timed to take place after the local and section nets. The liaison station for the regional net will take your California message to the Eastern Area Net (EAN), which handles all cross country traffic for regions 1, 2, 3, 4, and 8. At this level of activity, there are usually separate liaisons for traffic going into and out of, EAN, and sometimes more than one of each.

From EAN, your cousins traffic will be intercepted by the Trans Continental Corps, and sent to the Pacific Area Net, PAN will hand it off to a Southern California section net, and possibly to a local net in the Los Angeles area. If your cousin is home, he should be getting a phone call from the delivering station on the same day.

This interlocking structure of local, section, regional, and area nets makes up the National Traffic System. The schedule of nets so that each net can hold sessions with it's liaison nets is called a cycle. NTS runs three complete cycles a day.

Ohio Nets

My personal favorite is Tri-County Traffic Training Net, which meets Tuesday, Friday, and Sunday nights at 9:30 on 147.015 repeater in Geauga county. As the name implies, TCTTN specializes welcoming newcomers and bringing them up to speed in all things related to traffic. Free training manuals are available at www.tricountytraffic.net . Formal training sessions are conducted on Friday. A comment round is held every session, which is a great way to get to know the regulars. TCTTN frequently has traffic for Portage and Summit counties and would greatly benefit from your participation.



Ohio Single Side Band Net is the largest net in the state. It convenes daily at 10:30 am, 4:15 pm, and 6:45 pm on 3972.5 KHz. Several times a week, a comment round follows the traffic handling session. After you've listened for a while, why not check in? OSSBN is open to all. Their web site is www.qsl.net/ossbn/

Burning River Traffic Net (BRTN) is a daily local net that gets underway at 9:30 pm on the 147.15 repeater in Lorain. You'll find that this net moves traffic pretty quickly, so don't be a late check-in. Saturday is training night, right after traffic has been passed.

Bill - WB9LBI



PCARS Thursday Net Schedule

The following people are scheduled to run the Thursday night PCARS net on the 146.895 repeater – 8:00 pm.

March 16 – KC8PD	March 23 – WB8LCD
March 30 – W8KNO	April 6 - WB8LCD
April 13 – KC8PD	April 20 – KB8UUZ
April 27 – KB8DPN	May 4 – W8KNO

If you'd like to give it a go and be a Net Control, please contact me so I can get you in the schedule. Being net control is a good way to practice, and have fun at the same time.

Tom - WB8LCD

What's in it for YOU?

This is, what's in it for you to be active in ARRL? Why should you want to promote ARRL? The bottom line simply is that if you enjoy Amateur Radio, if you want Amateur Radio to survive for another generation, if you have invested in Amateur Radio equipment . . . you will get personal benefit from taking an active role in ARRL. What are the problems and how can you help? I'll discuss just one of these problems today. Others will be covered in future issues. ARRL membership is dropping. There are several reasons for this. Lack of awareness of the facts is probably the most prevalent reason. Simply stated, most non-members have not taken the time to learn what ARRL is and what it does for each of us radio

amateurs and for Amateur Radio. We who understand the reasons we belong need to spread the word. We need to let non-members know why they will want to become ARRL members. Yes, I said, want to become members. ARRL is the only effective game in town when it comes to promoting Amateur Radio nationally. To be sure, there are other groups that promote Amateur Radio, but none of them are organized well enough and are big enough to get the job done. Anyone who wants Amateur Radio to have strong representation before the FCC, in the US Congress and in our State governments will want to belong to ARRL. This is the only organization that can fight effectively for Amateur Radio through the International Amateur Radio Union in promoting our great service before governments worldwide. Amateur Radio would not exist today if it was not for the strong defense given it by ARRL. We would have no frequencies -- LF, HF, VHF, UHF or any other. The bottom line to what's in it for you is that the larger membership ARRL has, the greater impact it can have on regulators and legislators at all levels. The greater the impact ARRL wields the more ARRL is able to do for you and Amateur Radio. The more ARRL does for you and Amateur Radio, the more bang you get out of your membership dollars. It is just this simple. Why not go recruit a new member or two?

Jim - K8JE

Director, ARRL Great Lakes Division

Photos from the March PCARS Meeting



Above: Jim Korenz - N8PXW talks about Fox Hunting.



Right: Jim wearing his Doppler Fox Hunting Helmet, ground radials and all!

Below: Joe – K8QOE addresses the membership

Bottom: Members listen intently to the program
By Gay – WB8VNO and Jim N8PXW on hidden transmitter hunting.



Cooking With RF

Many students, and other young people, have little in the way of cooking skills but can usually get their hands on a couple of mobile phones. So, we'll show you how to use two mobile phones to cook an egg which will make a change from phoning out for a pizza. Please note that this will not work with cordless phones. To do this you will need two mobile phones - they do not have to be on the same network but you will need to know the number of one of them. The only other items you will need are:

1. An egg cup, (make sure that the egg cup is made of an insulating material such as China, wood or glass - plastic will do. DO NOT use stainless steel or other metal).
2. A radio, AM or FM - you can also use your hifi.
3. A table or other flat surface on which to place the phones and egg cup. You can place the radio anywhere in the room but you might as well put it on the table.

How To Do It:

Take an egg from the fridge and place it in the egg cup in the centre of the table.

1. Switch on the radio or hifi and turn it up to a comfortable volume.

2. Switch on phone A and place it on the table such that the antenna (the pokey thing at the top) is about half an inch from the egg (you may need to experiment to get the relative heights correct - paperbacks are good if you have any - if not you may be able to get some wood off cuts from your local hardware shop).

3. Switch on phone B and ring phone A then place phone B on the table in a similar but complementary position to Phone A.

4. Answer phone A - you should be able to do this without removing it from the table. If not, don't panic, just return the phone to where you originally placed on the table.

5. Phone A will now be talking to Phone B whilst Phone B will be talking to Phone A.

6. Cooking time: This very much depends on the power output of your mobile phone. For instance, a pair of mobiles each with 2 Watts of transmitter output will take three minutes to boil a large free range egg. Check your user manual and remember that cooking time will be proportional to the inverse square of the output power for a given distance from egg to phone.



Phone A --- Egg --- Phone B

Note: We cooked our egg during the evening using free local calls, if you were to cook an egg for lunch it would cost \$6 - not cheap but you do have the convenience.

Suzzanna Decantworthy - additional research: Sean McCleanaugh www.wymsey.co.uk/wymchron/cooking.htm

Antenna Day

To all PCARS members: Please join us at **10:00 am on SATURDAY, April 8, 2006** at the Cunningham Memorial Shelter located near the water tower in the Ravenna City Park. The entrance to the park is on Oakwood Street about one block north of Main Street. This is going to be a dry run for Field Day 2006 and will be our chance to scope out the site and decide how we want to set up. We will be setting up antennas and equipment and getting on the air. Let's see how many bands we can operate on effectively! Weather permitting we will probably be there till around 2:00 p.m. (or what ever...) This should be a good time! We'll will arrange for food and refreshments. If you can make it, please send an e-mail to Jim Aylward at kc8pd@portcars.org or call him at 330-297-7979. Even if you don't RSVP or if your plans change in the meantime, just show up and join in the fun!



Jim - KC8PD

Why The Black Squirrel?

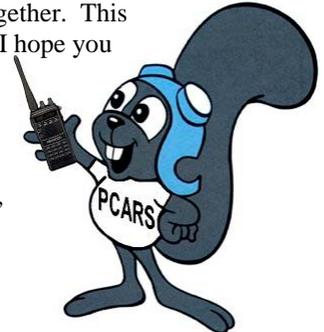
Ten rare Black Squirrels were imported from Ontario Canada in February 1961 by Larry Woodell, superintendent of the Kent State University grounds, and M. W. Staples, a retired executive of the Davey Tree Expert Company. When first accidentally (?) released at KSU, the large, black-spiked squirrels were frequently mistaken for skunks. Today they own the Kent State University campus and have since migrated throughout the county. So, we adopted the Black Squirrel as our 'mascot'. No matter where you go in the county - you'll see the Black Squirrel and think of PCARS!



Thanks

Well, that's the 3rd issue of the PCARS newsletter. Another 12 hours of work putting it all together. This issue sure has allot for everyone! I hope you enjoy it. I look forward to you sending in those articles to share with our members.

Thanks goes out to this months contributors: WB8LCD, KC8PD, KB8VJL, W8KNO, K8CMP, K8QOE, KB8UUZ, W1AGP, WB9LBI, K8JE, ARRL, and the world wide web. With your continued help - we can make this a great newsletter.

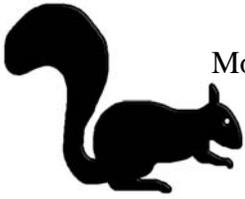


Tom - KB8UUZ
Newsletter Editor

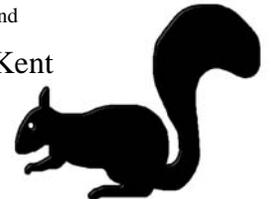


PS - Cooking with RF

Well, this issue was sent out on April Fools Day...



The Portage County Amateur Radio Service, Inc. (PCARS) meets the 2nd Monday of each month at 7:00 PM at Mike's Place – Routes 261 & 43 in Kent
All are welcome to attend – Drop in and say hello!



“When All Else Fails – Amateur Radio Works”

PCARS Repeater: 146.895 MHz (PL 110.9 – Rootstown, Ohio PL 114.8 – Kent, Ohio)

Repeater is graciously provided by N8KW for use by PCARS members

PCARS Elected Officers

Office	Call	Name	E-Mail
President	WB8LCD	Tom Sly	wb8lcd@portcars.org
Vice President	KC8PD	Jim Aylward	kc8pd@portcars.org
Treasurer	KB8UUZ	Tom Parkinson	kb8uuz@portcars.org
3 Year Trustee	KB8VJL	Al Atkins, Sr.	kb8vjl@portcars.org
2 Year Trustee	W8KNO	Joe Wehner	w8kno@portcars.org
1 Year Trustee	KB8DPN	Russ Anderson, Sr.	kb8dpn@portcars.org

Appointments & Committees

Awards – Contests	W8KNO	Joe Wehner	w8kno@portcars.org
Club Call Trustee	KB8VJL	Al Atkins, Sr.	kb8vjl@portcars.org
Field Day	KC8PD	Jim Aylward	kc8pd@portcars.org
KD8CKP QSL Mgr.	KB8VJL	Al Atkins, Sr.	kb8vjl@portcars.org
Net Controller	WB8LCD	Tom Sly	wb8lcd@portcars.org
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PIO	KC8PD	Jim Aylward	kc8pd@portcars.org
Secretary	KB8UUZ	Tom Parkinson	kb8uuz@portcars.org
Web Master	KB8DPN	Russ Anderson, Sr.	kb8dpn@portcars.org

PCARS Web Site: www.portcars.org

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Portage County Amateur Radio Service, Inc.

Tom Parkinson – KB8UUZ - Newsletter Editor
9992 State Route 700
Mantua, OH 44255

This is the **Electronic E-Mail** version of the **PCARS Newsletter**. The advantages to receiving the newsletter are:
You get **COLOR** pictures, **NO** postage needed, and it's 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.



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. To remove your self from the mail list – send an e-mail to me at: kb8uuz @ portcars.org



Nolo
Lavetro
Cumminado