



PCARA Update



Volume 10, Issue 10 Peekskill / Cortlandt Amateur Radio Association Inc. October 2009

Autumn almanac

Just a reminder that PCARA is participating in the 2009 New York QSO Party sponsored by the Rochester DX Association on October 17-18, 2009. PCARA has sponsored a plaque for this event. [Details on page 6 - Ed.]



Apart from the BARA Hamfest on Saturday October 10, the only blip on the radar screen is the upcoming Holiday Dinner in December, preparations



Mike, N2EAB brought this home-brew single-turn magnetic receive loop to the September meeting. It worked surprisingly well within the shielded confines of HVHC. Details: <http://www.kr1st.com/swlloop.htm>.

for which will be discussed at the October meeting. There were some discussions about Special Event Stations, Foxhunting, and fundraising activities at the September meeting.

Our next meeting is scheduled for October 4, 2009 at 3:00 PM at Hudson Valley Hospital Center. As



Bob, N2CBH examines a quiet little Honda generator at the Candlewood ARA Hamfest on September 13.

always, if you have any suggestions for club activities, please bring them with you to the October meeting. I look forward to seeing each of you there.

- 73 de Greg, KB2CQE

PCARA Officers

President:

Greg Appleyard, KB2CQE, kb2cq at arrl.net

Vice President:

Joe Calabrese, WA2MCR; wa2mcr at arrl.net

Net night

Peekskill/Cortlandt Amateur Radio Association holds a weekly net on the 146.67 MHz W2NYW repeater on Thursdays at 8:00 p.m. Join net control Karl, N2KZ for neighborly news and technical topics.

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Adventures in DXing

- N2KZ

If you love six meters, you never want to miss ARRL VHF QSO Parties. Operators across North America and beyond were on the air with passion the weekend of September 12th and 13th. With ambition and determination, I headed out to Bear Mountain on Saturday afternoon looking for a few new grids and some great operating conditions. Some of the wind immediately left my sails!

I arrived at Bear Mountain State Park about 20 minutes before the contest start time and discovered that Perkins Drive, leading up to the summit, had been closed due to inclement weather. Hey! I don't care about fog and rain clouds! Let me up the mountain! During my retreat, I saw a Park Police car and asked the officer for advice regarding alternate summits. No help! I was on my own with only a few minutes to spare.

My limited knowledge of this part of the world led me up Route 9W past nearby Highland Falls and The West Point Military Academy. I found a serviceable spot overlooking Storm King State Park. What a view! I parked the N2KZ-mobile in a cozy space hugging the



N2KZ took part in the ARRL September QSO Party from this high spot on Route 9W.

guard rail and quickly set up my station. Armed with my trusty fourth-hand Yaesu FT-690RII and a newly acquired Cushcraft mag-mount whip, I must have lost a few hundred feet in altitude, but nothing could stop me now! The view of the rapidly passing storm clouds was dramatic and fun to watch. I waited a minute or two for the stroke of 2:00 pm and then the flood gates opened. The contest was up and running. Watch out! Here they come!

There were few surprises at first. A handful of

superstations, running up to a kilowatt with long Yagis high above ground, sat on fixed frequencies and held court working station after station. I heard absolutely no CW activity on or around 50.098 MHz, a favorite hangout for CW operators. The USB pile-ups were intense and hard to break through with my measly 10 watts. I reverted to my tried-and-true strategy: break through the mess by sending CW and mentioning QRP! Station after station would pause and dig me out of the noise to make the contact. You won't find this on any other band but Six! What a magic band!

I worked a few big-gun stations first and then headed off to work some more exotic catches. My greatest achievement was touching base with John, W1XX in FN41ej way out in Rhode Island - a new grid! John tried for several minutes to pull out my meager flea-powered signal. "If this is correct, send R!" Further excitement was found by QSOing with New Hampshire and Massachusetts. My location featured severe rock to the west, so I could only hope for catches in New England. If I ever get shunned from Perkins Drive again, you will find me along Long Mountain Parkway at the overlook above Woodbury Commons. I need western grids!

As time passed, the band calmed down allowing the flea-powered to start really making contacts. Everyone's strategy shifted from 'work everyone you can' to 'who haven't I worked?' For battery-powered QRP stations, like myself, this is when the fun begins. You look around for stations and try to reach them on USB. If they can hear you at all, you'll probably log them. If all else fails, revert to CW! Stations love to hear tiny passionate CW calls!

I managed to drive away with a nicely filled logbook and some great fun. I keep promising myself to get a three or four element Yagi for six meters. Ten watts and a Yagi? In the world of QRP, that's cheating! My next chance is the VHF Sweepstakes January 23 to 25, 2010. I can't wait!

What's Left?

The meek have inherited the earth. For those of you who are holding on to the very last threads of analog TV, the choices are random and even bizarre. In the New York City market, three surviving low-power channels can be seen in PCARA-land. Channel 32 WXNY-LD offers a



full-time endless loop of the unorthodox and odd comedian performance artist Jared Whitham. I am not sure who he is or why but he makes your public access channel look like the big time! See for yourself at www.jaredwhitham.com. Note: As we publish, this channel has been off for several days. Did Jared run out of money?

WMBQ-CA Channel 46 is running religious programming produced by Cornerstone Television that is grossly out of audio sync. When Cornerstone is not on the air, you'll see a random live camera with a NOAA Weather Radio audio track. This channel may also make you nervous. The picture often shifts wildly up and down due to poor sync.

If you can't get enough of TV shopping channels, try W60AI with Home Shopping Network. Channel 60 is on the air for those areas that don't have HSN on their local cable systems. (Horrors!) W60AI has quite a history. It was once part of an over-the-air pay TV



W60AI is still carrying Home Shopping Network in low power analog TV.

service called Wometco Home Theatre. For a year, it was part of MTV wannabe U-68 and has also hosted a couple of Spanish-speaking services. Sadly, it was one of many stations originally located on The World Trade Center

before its demise. Now, it's rebuilt atop the Citigroup Center on Lexington and 53rd. You can also DX more distant low-powers during periods of tropospheric skip. Not only is this a challenge, it's quite an adventure out there. Catch it while you can!

Look up!

It's finally fall and low sunspot conditions draw us to the low bands. Make sure you take a look at all the antennas you may have up in the air held by ropes or other means. Spring and summer weather tug and pull and sun damage ropes and they can fray without notice. I was up on my



The 915 ft high Citigroup Center.



It's the time of year to check your antennas and supports. Here is a recently-discovered frayed rope, barely clinging on to Karl's chimney.

roof and discovered a couple myself! It's much easier to work on ropes when the weather is nice than to lose an antenna and be off the air for ages during the winter. Take a look and save some grief!

Grow Some Ham

In the world of ham radio, we could always use more recruits! Why not give some thought about who might make a good new member to our clan. Maybe there's an old friend looking for new challenges or someone who was once licensed and let their ticket lapse. Encourage them to get back on the air! Set a good example by operating yourself. Two meters and 440 could use a few more people searching for a good QSO. Mobile antennas are always attention getters. A big tall tower isn't bad either! Leave old copies of *QST* at barber shops or doctor's offices. Lend an old receiver to a friend and plant a seed! I often meet CW hams who are thrilled that I am on the air and practicing the skill of the ancients. A good fist is hard to find! Ham radio is only as interesting as the people who participate. Start today!

Remember to listen in to The Old Goat's Net on the PCARA two meter repeater at 146.67 with a -600 offset and a 156.7 PL. You'll find us every Thursday night at 8pm. Get licensed, get on the air and join the fun! We're saving a spot for you! Until next month,

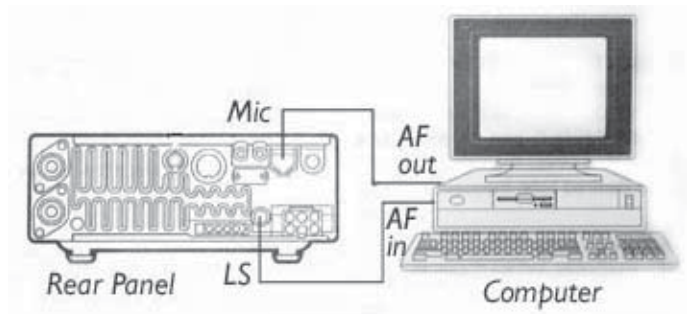


73 and dit dit de N2KZ.

Second sound card?

In my search for the perfect digital station for Field Day, I described last time how a Netbook portable computer can be an adequate substitute for a full size desktop or notebook computer. Despite its small size, the netbook has a capable sound card integrated into its design. On my HP Mini-110 netbook, the only difficulty was the non-standard four-wire headset jack, used to bring audio signals in and out of the unit.

One of the first things needed for sound card modes is a way of connecting the PC to your transceiver. A minimalist approach would just use a couple of cables to connect the PC audio-out to the transceiver microphone input and the PC's audio-in to the radio's loudspeaker output. In practice a few more things are



Simplest sound card connection — transceiver loudspeaker out is wired to PC audio in; PC audio out is wired to transceiver microphone in.

usually needed — for example, control of the radio's press-to-talk (PTT), a way to match audio levels and a means of preventing ground loops from introducing hum between computer and transceiver.

Some of these functions can be provided by a unit like the classic RIGblaster from West Mountain Radio or the Signalink SL-1 from Tigertronics shown last time. The RIGblaster employs a computer serial port to handle PTT, while the Signalink SL-1 has a built-in VOX



circuit to turn the transmitter on.

One problem with modern PCs is that the RS-232 serial com port has gone the way of the dodo... it has been replaced by the USB (Universal Serial Bus), with much faster transfer speeds. A couple of

years ago, I tried out a RIGblaster “plug & play” which incorporates a USB connector for PC control of PTT and other radio functions (assuming your transceiver is capable of computer-control). The RIGblaster “plug

and play” worked quite well, but in common with other basic interfaces, it relies on the built-in sound card and correct setting of the Windows sound controls — which



The RIGblaster “plug & play” sound card interface has lots of connectors for (L-to R) PC output audio, PC input audio, USB, transceiver data and transceiver control.

might have been mis-adjusted for other applications. And if Windows system sounds are left active on the computer, they can be transmitted over the air alongside your narrow-band RTTY or PSK-31 signals.

Second Sound Card

One fix for all these problems is to add a second sound card. The second card can be dedicated to amateur radio digital modes only, so the sound levels do not need constant adjustment. And the Windows system sounds can be left running through the primary sound card, so they have no effect on over-the-air transmissions.

Unfortunately, my little netbook had no room for a second sound adapter... but perhaps there was an alternative ? A recent product from Tigertronics (<http://www.tigertronics.com>) is the “**Signalink USB**”, which includes

its own low-noise, built-in USB sound card chipset. Connection to the computer only requires one USB cable and wiring to the transceiver is also simplified. In my case, I wanted to use an Icom IC-706MkIIG so the helpful people at Tigertronics recommended



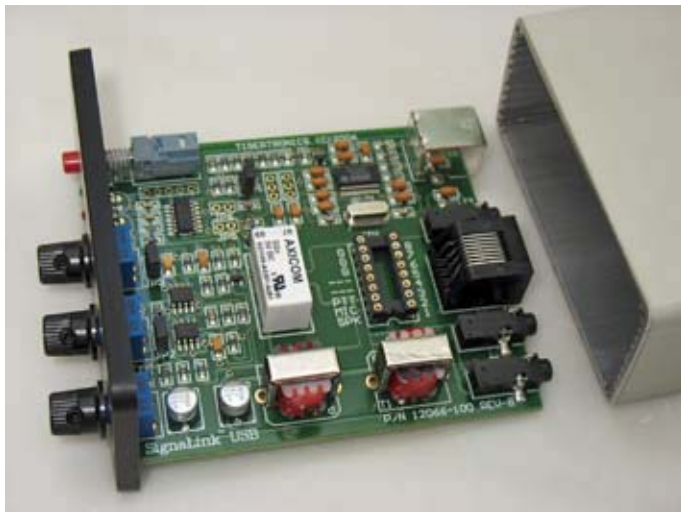
Tigertronics' Signalink USB has an integrated USB sound card.



IC-706MkIIG 6-pin mini-DIN Data socket, rear panel view.

their cable with a 6-pin mini-DIN connector. This would plug into the “Data” socket on the rear of the Icom transceiver, originally intended for packet radio. Incidentally, the 6-pin mini-DIN for packet radio is one of the very few connectors that is standardized across different amateur radio manufacturers.

According to Tigertronics’ publicity, the Signalink USB supports all sound card digital and voice modes including RTTY, SSTV and CW plus the newer modes like PSK31, MT-63 and EchoLink. The unit works with all radios and can be attached to the Mic jack, Data Port or Accessory Port. The Signalink USB is delivered with a mini CD-ROM containing the following free software: DigiPan, HamScope, MMTTY, AGW, MT63, MMSSTV and MixW (trial version).



View inside the Signalink USB interface shows the audio isolation transformers (red) and nearby a DIL socket for the wire jumpers that customize connection to the radio.

When the new unit arrived from Tigertronics, I connected it in place of the Signalink SL-1 and its tangle of cables. After setting the internal wiring links for the radio, the first thing I had to do was make sure that the Netbook’s built-in audio was being used for regular Windows sounds and the “USB audio codec” was set up for amateur radio programs. In HamScope, this setting is found under the menu item SETTINGS>GENERAL SETUP..., then under “Soundcard Selection”, both Input and Output are changed from the built-in sound card to “USB Audio CODEC”. In MMTTY, the setting is a less obvious menu item: OPTIONS > SETUP MMTTY(O)... >MISC TAB >DEVICE ID: **1**.

An advantage of the Signalink USB is that audio

levels are not set in Windows. Instead, there are separate rotary controls on the Signalink’s front panel for “TX” and “RX” audio. These are far more convenient to adjust than trying to juggle with multiple windows on the computer. There is a third rotary control marked “DLY”. This one adjusts the hang time of the VOX-derived PTT control from approx. 15 milliseconds up to 4 seconds.



The Signalink USB combined with a small, netbook computer makes a light combination for digital mode operation. Total weight — just 3 lbs.

In practice, the Signalink USB works just like a conventional interface would with the computer’s built-in sound card. The advantage is that there is no need to turn off Windows sounds, no need to turn off the built-in microphone, and the audio levels for the USB sound card are “set and forget”. Connections are reduced to a single USB cable to the computer and a single data cable to the transceiver. There is no need for an external power supply, instead the Signalink USB is powered from the computer’s USB port. The “PWR” button on the Signalink front panel is a little misleading – what it really does is inhibit transmission while the button is in the “out” or “off” position.

Perhaps, one day, all sound card adapters will be built this way. The Signalink USB is a lot easier to set up and move around than the older sound card interfaces. The only feature I miss is the capability for rig control via USB interface, as built-in to the RIGblaster ‘plug & play’. In theory it should be possible to add a USB to serial adapter, but then I would also need a “CI-V level converter” to match Icom’s remote control jack. My search for the perfect digital mode setup for Field Day continues...

- NM9J

New York QSO Party

After a gap of 25 years, the New York QSO Party has been revived by the Rochester DX Association

(<http://www.rdxa.com/>). The NY QSO Party will take place on the third weekend in October. Peekskill/Cortlandt Amateur Radio Association is sponsoring a

plaque for winners of the **New York Phone** category. Here are some Q&As about the contest to help you join in.



When does it take place? For 12 hours from Saturday October 17th, 1800 GMT (2:00 p.m. EDT) to Sunday October 18, 0600 GMT (2:00 a.m. EDT).

Who can take part? Stations inside and outside the State of New York are all welcome to take part. The aim for New Yorkers is to work as many participating stations in other NY Counties and in other states as possible.

How do I call? If you are within the State of New York you can call:
Fixed station: "CQ NYQP this is <your call> Westchester County NY" (Anybody, anywhere!)
Mobile station: "CQ NYQP DE <your call> /M Wes (for Westchester County)"
RTTY/Digital: "CQ NYQP <your call> <your call> Putnam NY CQ"

What is the exchange? NY stations send signal report and county using 3-character abbreviations, for example WES for Westchester, PUT for Putnam and ORA for Orange County. Stations outside the state of NY send signal report and their State, Canadian Province or "DX".

NY stations should log states with the common 2-letter abbreviations used by the Postal Service.

Which bands can I use? All bands HF and VHF are included, with the exception of the non-contest WARC bands. Suggested frequencies (phone): 1.870, 3.825, 7.200, 14.290, 21.500 and 28.400 plus 6m and 2m. CW: 1.820, 3.550, 7.050, 14.050, 21.050, 28.050 etc.

How do I score? Score 1 point for each phone contact, 2 points for CW, 3 points for RTTY and digital contacts.

And multipliers? NY stations may count the number of U.S. States, the number of NY Counties and the number of Canadian provinces worked up to a maximum multiplier of 121. Non-NY stations count NY Counties only up to a maximum of 62.

Which logging software is recommended? Rochester DX Association is recommending a number of programs including N1MM logger, CQ/X, SD, WriteLog

and Win-EQF. Many of these are free, but need an on-line update to cover the special conditions of the NY QSO Party. Entries should be submitted within 14 days of the end of the QSO Party, in Cabrillo format.

Where can I find more details? <http://www.NYQP.org>.

Lighten your toolbox

No doubt you have a flashlight or two somewhere in your workshop, radio room or toolbox. The flashlight can be a vital piece of equipment when carrying out repairs inside a restricted chassis, probing the connections behind a congested piece of equipment, or checking out the circuit breakers when the house has gone dark.

The old style flashlight with an incandescent bulb has been with us for over one hundred years. The first flashlight was produced around 1896. Portable electric lights were called "flash lights" because they were not very reliable and would only work for a short period.



Advertisement for first Ever Ready flashlight, 1898.

The carbon filament was inefficient and the batteries were weak, allowing the user to "flash" the light on for only a few seconds at a time. As techniques improved, the lights became more popular. The first "Ever Ready" flashlight was produced in 1898 by Conrad Hubert and David Misell in New York, using three "D"-size dry cells housed in a paper tube. In 1906, the carbon filament was replaced by the more efficient tungsten filament, and Hubert's company changed its name to "The American Ever Ready Company".



Ever Ready flashlight from 1898.

Flashlight technology has not changed much since then. The carbon-zinc batteries were replaced by

alkaline technology and flashlight cases have been made of rubber, plastic and aluminum. The old incandescent tungsten bulb is still the source of light in many flashlights. The main difficulty with the tungsten filament was the low efficiency of conversion to light energy, the dependence of both light output and color temperature on the battery voltage, and a tendency for corrosion of the contacts to reduce the available light.

Things changed when white-light LEDs became available around a decade ago. The first flashlights with LEDs appeared around 2001. These lamps tend to maintain a steady light output with constant color temperature, even as the battery voltage declines. Some lamps even employ electronic regulation to maintain a steady output.



Flashlights with three, four or more low power LEDs were popular a few years ago.

Early LED flashlights were disappointing – they needed to have a group of several low-power, white-light LEDs positioned in front of the reflector in order to match the output of an incandescent lamp.

The latest generation of LED lamps is a lot better. They usually have a **single** high-power light-emitting



Next-generation LED flashlights use a single high-power white-light LED and produce bright illumination with long battery life. Left-to-right, “Coast” (one AAA battery), “Police” (three AAA), Victorinox (two C cells) and yellow Dorcy light (four AA cells).

diode at the focus of the reflector. The power rating of the LED can be from 4 to 7 watts. These flashlights are **really** bright, and can make a big difference when exploring dark spaces, especially for tired eyes. The batteries last much longer than with old-style incandescent flashlights.

If you don’t have one of these new-style LED flashlights, pay attention to the vendor booths at the next Hamfest, or pay a visit to your local Sears store. You’ll find various models in the tools and electrical section.

- NM9J

Surprise certificate

A surprise certificate was recently discovered in the Peekskill / Cortlandt Amateur Radio Association mailbox by Joe, WA2MCR. This particular parchment was a VHF/UHF contest award from the ARRL for: “W2NYW, Single Operator, Low Power, Eastern New York Section, 2008 ARRL September VHF QSO Party”. The award makes W2NYW winner of the 144 MHz band in this particular class and section.

The occasion commemorated by the award was just one year ago, when Ray W2CH and Marilyn KC2NKU hosted an entry in the 2008 VHF QSO Party and invited PCARA members to take part — hence the club call. See the October 2008 issue of the *PCARA Update* for more details.

The accompanying letter from ARRL Contest Branch Manager Sean, KX9X explains that the 2008 contest saw the lowest level of participation in several years, thanks in part to Hurricane Ike that hit Texas over the weekend of the event. Sean encourages ARRL members to increase participation by inviting a rookie VHF’er to their stations and getting them involved in the next contest.



Peekskill / Cortlandt Amateur Radio Association

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Newsletter contributions are always very welcome!

Archive: <http://home.computer.net/~pcara/newslett.htm>

PCARA Information

PCARA is a **Non-Profit Community Service Organization**. PCARA meetings take place the first Sunday of each month* at 3:00 p.m. in Dining Room B of the Hudson Valley Hospital Center, Route 202, Cortlandt Manor, NY 10567. Drive round behind the main hospital building and enter from the rear (look for the oxygen tanks). Talk-in is available on the 146.67 repeater. *Apart from holidays.

PCARA Repeaters

W2NYW: 146.67 MHz -0.6, PL 156.7Hz

KB2CQE: 449.925MHz -5.0, PL 179.9Hz
(IRLP node: **4214**)

N2CBH: 448.725MHz -5.0, PL 107.2Hz

PCARA Calendar

Sun Oct 4: PCARA meeting, Hudson Valley Hospital Center, 3:00 p.m.

Hamfests

Sat Oct 10: Bergen ARA Fall Hamfest, Westwood Regional HS, 701 Ridgewood Rd, Washington Township, NJ. 8:00 a.m.

Sun Oct 11: Hall of Science ARC Hamfest, New York Hall of Science, 47-01 111th St., Flushing Meadows Corona Park, Queens, NY. 8:00 a.m.

Sun Oct 25: LIMARC Hamfair, Levittown Hall 201 Levittown Parkway, Hicksville, NY. 9:00 a.m.

VE Test Sessions

Oct 4: Yonkers ARC, Yonkers PD, 1st Precinct, E Grassy Sprn Rd, 8:30 a.m. Contact D. Calabrese, (914) 667-0587.

Oct 8: WECA, Westchester Cnty Fire Trg Center, 4 Dana Rd., Valhalla, NY. 7:00 p.m. Contact Stanley Rothman (914) 831-3258.

Oct 10: Bergen ARA, Westwood Regional HS, 701 Ridgewood Rd, Washington Township, NJ. 8:00 a.m. Contact Donald C. Younger, (201) 265-6583.

Oct 19: Columbia Univ VE Team, 2960 Broadway, 115 Havemeyer Hall, New York NY. 6:30 p.m. Contact Alan Croswell, (212) 854-3754.

Oct 23: Orange County ARC, Munger Cottage Riverlight Park, Hudson St., Cornwall, NY. 6:00 p.m. Contact Ronald D Torpey, (845) 234-2371.



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