



PCARA Update



Volume 10, Issue 9

Peekskill / Cortlandt Amateur Radio Association Inc.

September 2009

Summer's gone

As another summer comes to an end, our monthly meetings will start up again. Our next meeting is scheduled for **September 13**, 2009 at 3:00 PM at Hudson Valley Hospital Center.

Just a reminder that PCARA is participating in the 2009 New York QSO Party sponsored by the Rochester DX Association (<http://www.rdxa.com/>) on October 17-18, 2009. As well as participating in the contest, PCARA has sponsored a plaque for the



New York Phone category. Plans on taking part in the contest will be discussed at the September meeting. As always, please come join us to share your thoughts, ideas, and suggestions. I look forward to seeing each of you there.

- 73 de Greg, KB2CQE

Flashback to summer

Here are a couple of photos to remind you of PCARA activities during the summer months.



PCARA took part in Field Day on June 27-28. At the VHF station we see Karl N2KZ keying and Laura logging on an old notebook PC. See page 4 for more thoughts on old PCs.



Mike N2EAB (left) examines the high quality merchandise on Bob, N2CBH's table at the Ramapo Mountain ARC Ham Radio flea market. On the right is Joe, WA2MCR. This event was held on August 15 in Oakland, NJ.

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

Digital Doesn't Do

The transition to digital television has come and gone and the results are in. When it works, it works well—providing ghost and noise free pictures with an enormous full gamut of colors. The key phrase: 'When it works.' It simply doesn't.

Over-the-air TV is used by three groups of viewers: People who don't want to pay for pay TV, people who can't afford pay TV and people in rural areas beyond the reach of pay TV. I recently visited rural Michigan and the comments were universal wherever I went: 'Why did they turn off TV?' Digital TV actually means no TV to many, many viewers.

My family's home in mid-Michigan is about 75 miles from the closest TV broadcaster. Previous to the transition we could see quite a few channels with varying degrees of snow and continuity. Because of our great distance from the origins of these analog broadcasts, weather and ionospheric conditions could change our reception wildly. Regardless of reception conditions, you could always see *something*. America has now turned off its analog broadcasts. One of Canada's two major networks, CTV, has recently dropped its analog TV broadcasting from many outlying regions of Ontario. All that remains, in my area of mid-Michigan, are three distant channels all carrying Canada's other TV network CBC.

If you took the advice of broadcasters and bought a converter box or new digital TV you would be heading for the return counter. My top-of-the-line Zenith DTT901 converter not only did not work in mid-Michigan, it did not see any signals at all. Not one.



Zero. (Watching a screen that says 'no signal' is not much fun!) The televisions in local bars,

restaurants, hardware stores and the bakery were all turned off. The hair salon was OK. They had switched to DirecTV long ago.

At home, I live about 45 miles from broadcast central: Manhattan's Empire State Building. Only with a sophisticated outdoor antenna combined with a pre-amp can I bring in passable signals most of the time. My trusty VHF-UHF log periodic attic antenna, which has served me well for 40 years, is now inadequate and obsolete. Digital TV doesn't seem like a one-for-one replacement for analog. Only under optimal conditions do we see digital anything. Informal viewing using portable receivers, or battery powered TV during

blackouts, is now impossible. TV sound radios are now silent, as well. What have we gained here?

Digital radio is not much better. HD Radio receivers, seeking digital radio signals, also require a solid signal to work properly. This is hard to achieve especially in moving cars or anywhere electrical noise is present (nearly everywhere!) Few receivers are available. Only one portable HD Radio has been offered, its



Insignia HD Radio from Best Buy receives FM-HD signals near the transmitter, but no AM-HD.

reviews are marginal, and it only receives FM. Years after its introduction, HD Radio has stalled and its sails forever luff. Thank goodness analog radio broadcasts have not been turned off, as well! HD Radio is actually a full step backward. The 'compatible digital' signals broadcast create great havoc with their analog mates and reduce reception coverage especially on AM.

Professional two-way radios also suffer from digital deterioration. New York City's police and fire departments wrestled with digital handi-talkie radios for years. It was the same old story. When they worked, they were perfectly clear (when they worked.) If the H-T's signal faded or otherwise became corrupted nothing would be heard at the receiving end. This can really ruin your day if your life depends on solid communication. We could also talk for years about the sonic difference between vinyl records and CDs (and ultra-compressed iPods.) The only instance of digital success may be the improvement of DVDs and DVRs over analog VHS tapes!



V CAST Mobile TV is Verizon Wireless' mobile television service. This one-way system uses high power transmissions on 716-722 MHz, previously allocated to UHF TV channel 55.

Should we abandon digital transmission? Not quite yet. We must remember that we

are still in the infancy of the development of these mediums. Some recent improvements are especially encouraging. Verizon's V-Cast TV broadcasts, locally transmitted on former television channel 55, seem to lock with consistency while being viewed with handy hand-held devices. The British have refined their digital radio broadcasts achieving reasonable nationwide acceptance. Using fully-wired delivery, digital is hard to beat. Former shortwave enthusiasts delight in the crystal clear fidelity of Internet radio.

Broadcasters should resign themselves to digital's over-the-air shortcomings. It is very hard to compete with the incredibly robust nature of good old AM radio or analog NTSC TV. Noisy or not, analog gets the message through the most difficult situations. How I miss the good old days! Change is never easy! Bring back my old TV!

Weathering Change

Analog TV was a wonderful DXing resource. You could instantly see VHF and UHF propagation conditions by flipping on your over-the-air TV. Hurricane seasons would often bring jaw-dropping reception of stations up and down the Eastern Seaboard as far away as South Carolina or Newfoundland. Some TV DXers are now seeing Canadian and Caribbean TV like never

before but all of America is now mute. Where can you go to see what's up?

Help can come from unusual places. The National Weather Service and Environment Canada operate a wide network of stations on seven standard channels at

162 MHz. Amateurs can use these stations as a wide-spread collection of beacons ready for your use! Their frequent site identifications and local information make them easy to discern. All you need is a scanner or weather radio! Turn it on and you'll immediately know which way the tropospheric winds are blowing.

Handy weather radio frequency lists can be found on-line at: <http://www.nws.noaa.gov/nwr/nwrbro.htm> and http://www.msc.ec.gc.ca/msb/weatheradio/weather_info/index_e.cfm for stations in Canada. The seven weather band channels are: 162.400, 162.425, 162.450, 162.475, 162.500, 162.525, and 162.550 MHz. In our area, New York City's KWO-35 on 162.55 and Poughkeepsie's WXL-37 on 162.475 from Illinois Mountain are our 'locals.' See how many you can log!

Drop the Radio!

It must be a sign of the times. Radio Shack is

becoming simply 'The Shack.' Media analysts see this name change as an attempt to keep the company relevant. Try going into one of their stores and actually finding a

radio to purchase! It's not easy!

Marketing experts Butler,

Shine, Stern and Partners of Sausalito, California developed their new image and launched the campaign on August 6.

In their words: "Most people trust friends, not corporations. When a brand becomes a friend, it often gets a nickname. Our customers have long referred to Radio Shack as "The Shack." We do? Also worthy of mention was their previous name change from Radio Shack to RadioShack. I'm not sure what the relevance of that move was, either! I guess they were trying to save space!

The roll-out will be slow and subtle. Store signs will not be immediately changed. This move does give me pause. The world is changing so quickly. Radio Shacks have been around for decades. It's hard to think of them as Cell Phone Shack, but that is what they have become. Some basic parts, batteries and cables are still available but I guess the radio aspect is fading to black. Did you ever think you would see this day?

Seasonal Reminder

As our weather begins to cool and seasons change, think low band HF! Sunspot counts have been consistently near zero for months and months. The winter months should produce more remarkable opportunities for DXing 160, 80 and 40 meters. Don't miss out! One of my favorite times to operate is when I wake up around 4 am Eastern. I troll along the bottom 25 kHz on 80 meters. Early mornings are wonderful for catching signals along the Pacific Rim. So few stations are active at this hour, so hams are happy to hear from *anyone* who may be on! There could be a positive side to your insomnia! Try low band DXing and say 'hello' to the world for me!

Until next month, 73 de N2KZ
dit dit



Is smaller better for digital modes?

During PCARA Field Day, it struck me that we were using some very old computer technology for logging and the digital modes. My Sony netbook at the 40 meter station is seven years old and the other FD computers are even older.

I was thinking of upgrading to a new notebook PC, but there are problems with the latest models, not to mention high prices. While we wait for Windows 7 to appear, standard notebooks are only offered with Windows Vista — one of Microsoft's less successful operating systems. Plenty of amateur radio software is not yet compatible with Vista. And modern notebook PCs have lost their serial ports – USB is now the standard.

I lowered my sights and took a look at the new “netbook” models. Netbooks are small notebook-style PCs stripped down to the bare essentials for portable use with a network connection. A typical netbook includes a built-in WiFi adapter and Ethernet jack for wireless or wired connection to the Internet. Also included are USB ports plus connectors for external audio (headset) and video. What's missing from these



Netbooks are small, notebook-style PCs intended for portable use with a wired or wireless Internet connection.

featherweight PCs is any CD-ROM or DVD-ROM drive, any PC card slots or ancient floppy disk drives.

I settled on an inexpensive model from the HP Mini-110 range. The price was reasonable

for a small notebook with built-in 10 inch display, 160GB hard drive and 1GB of RAM. The keyboard is nearly full-size and — best of all — the operating system is still Windows XP. The version supplied is “Windows XP Home Edition for Ultra Low Cost PCs SP3” – Windows Vista is a little too much for these low-end, low-power notebooks. The display is backlit by LEDs and the model I picked includes a 3-cell Lithium battery that lasts 2-3 hours.

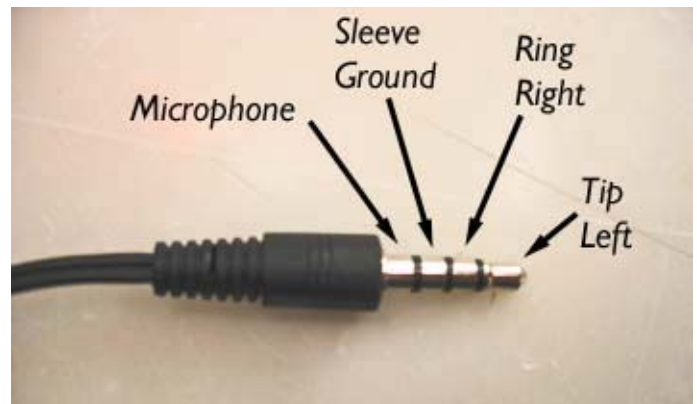
The first problem to overcome with any netbook is how to install software – there is no room for a built-in CD/DVD-ROM drive. If the software is available online,

and you have a sufficiently fast connection to the Internet, then the easiest approach is to download from an Internet site. However, if all you have is an existing CD or DVD with the software, there are other approaches. One method is to obtain an external CD/DVD-ROM drive with a USB connection and plug it into the netbook. The external drive will then appear as an additional drive letter in Windows.

If you have a second PC with a CD-ROM or DVD-ROM drive and a flash memory stick, here is another technique, which does not require expensive hardware. At the second PC, insert the CD or DVD and copy the folder containing the software over to your USB flash memory device. Transfer the USB flash memory to the netbook, then install the software from the USB device. This method has worked well for me.

A third method is to connect the netbook over a local network to a second PC with a CD/DVD drive, then share the optical drive over the network. I have had less success with this approach.

The next problem with notebooks and netbooks is the limited number of external connections for the built-in sound card. Desktop PCs usually have three separate 3.5mm stereo jacks for audio line in, line out and (mono) microphone in. A standard notebook PC only has two jacks, for microphone in and audio out, suitable for a headset. My little netbook reduces the number of audio connectors to a *single* four-wire 3.5mm jack, similar to the headset jack on an iPhone or iPod. In order to run any sound-card digital modes, I needed an adapter to fit the four-way jack and split the connections to a pair of 3.5mm jacks for audio input and output.



Four-wire headset plug for iPhone and HP Mini 110 netbook has standard tip/ring/sleeve connections for left and right audio out, plus a fourth ring for microphone input.

Several hours of Internet research revealed that no such adapter exists at present. The closest fit was a “Monster iSoniTalk Microphone Headphone Adapter for iPhone”, which includes a 3.5mm headphone jack and a separate wired microphone that could be cut off.

However, this item was not available locally. I thought about destroying my GE “All-inOne” Headset for its iPhone connector, but then in Radio Shack I came across a “Camcorder A/V Cable”, part number 16-3686. This cable has a 4-way 3.5 mm jack plug at one end and three separate RCA phono plugs at the other. It is intended to carry composite video plus left and right audio from a camcorder with a 1/8 inch A/V jack over to a TV or VCR. By adding suitable phono-to-3.5mm adapters and couplers, I had what I needed. Later on, at a computer show, I found some unbranded camcorder cables for a lot less than the Radio Shack model.



Camcorder A/V cable has a 4-way 3.5mm jack plug.

The next step was to install sound card software on the netbook and test the connection. I downloaded Hamscope and MMTTY software (see <http://www.qsl.net/hamscope>). Installation was fairly straightforward, so I connected the netbook’s four-wire audio jack to my SignalLink SL-1 interface (<http://www.tigertronics.com/>), then plugged the SignalLink’s RJ-45 cable into my IC-706MkIIg microphone socket.

Reception of RTTY was weak and watery for a while – until I realized I was picking up loudspeaker audio from the 706 radio through the netbook’s *built-in microphone*, rather than through the carefully wired external microphone input. I used the Windows sound controls to change from internal to external microphone — and everything started working. The waterfall display began falling, the on-screen indicators were indicating and I could easily decode RTTY and PSK-31 signals on 20 meters. Contacts were also easy, proving the transmit audio was getting through from computer to radio.

If there is one downside to the netbook, it is the 10 inch “widescreen” display. The LCD is bright and clear, but the screen resolution is only 1024 x 576 pixels. As a result, there is only a limited amount of vertical screen real estate to display program windows, and in the case of Hamscope, you can only see a few lines of received text at a time.

One solution is to plug in an external monitor. My HP Mini 110 netbook has a built-in 15-pin VGA connector, which makes connection to a monitor straightforward. The built-in video adapter will operate at much higher resolution than 1024 x 576, and is capable of excellent results on a large display.

But here we have the dilemma of the netbook. By the time you have added an external CD-ROM drive, an audio adapter cable and an external monitor, you might as well have bought a full size notebook, with all these features built-in. On the other hand if all you need is a very small, portable PC, which is capable of most of the tasks of its larger brothers, then an inexpensive netbook may be the right choice for you.

- NM9J



Netbook computer is shown receiving PSK-31 signals on 20 meters using Hamscope software. Sound card audio is connected through a SignalLink SL-1 radio interface to the Icom 706 MkIIg transceiver.

WECA Tech Class

Westchester Emergency Communications Association is sponsoring a Technician Class License course. The course will be taught by a team of knowledgeable Amateur Radio Operators at the Red Cross Chapter located on 106 North Broadway in White Plains, NY. Classes run from Tuesday September 29th to Tuesday November 10, 2009.

Anyone interested should contact Tom, KD2SQ by sending email to “KD2SQ at WECA dot Org” to reserve a place.

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

Next meeting:

Sun Sept 13: PCARA meeting, Hudson Valley Hospital Center, 3:00 p.m.

Hamfests

Sun Sept 13: Candlewood ARA Hamfest, Edmond Town Hall, 45 Main St (Rt 6), Newtown CT. 8:30 a.m.

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

VE Test Sessions

Sep 6: Yonkers ARC, Yonkers PD, 1st Precinct, E Grassy Sprain Rd, 8:30 a.m. Contact D. Calabrese, (914) 667-0587.

Sep 10: WECA, Westchester Cnty Fire Trg Center, 4 Dana Rd., Valhalla, NY. 7:00 p.m. Contact Stanley Rothman (914) 831-3258.

Sep 21: Columbia Univ VE Team, 2960 Broadway, 115 Havemeyer Hall, New York NY. 6:30 p.m. Contact Alan Croswell, (212) 854-3754.

Sept 26: PEARL, Mahopac Public Library, 2nd floor Periodicals Room, 668 Route 6, Mahopac NY. 10:00 a.m. Contact NM9J.



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