



PCARA Update



Volume 12, Issue 1 Peekskill / Cortlandt Amateur Radio Association Inc. January 2011

Rotating anchors

What better way to start the New Year than organizing and cleaning out your shack to make space for some fresh equipment? What are you to do with



the surplus and all of the free space you'll now have? There are answers for both of these questions and they can be found at the

Annual PCARA Bring and Buy Auction on Sunday January 2, 2011 at 3:00

pm at Hudson Valley Hospital Center. Start cleaning, organizing, packing up your treasures, and bring them with you to the January 2, 2011 meeting and see what happens! You just may go home with some additional cash and/or riches.

The Annual PCARA Holiday Dinner was held at *At the Reef* on December 5, 2010. The event was very



Happy faces at the 2010 Holiday Dinner.

well attended and everyone had a wonderful time. We even saw a few faces we hadn't seen in a long time!

Remember that our next meeting is at 3:00 pm on January 2, 2011 at Hudson Valley Hospital Center.



Another view of the December 2010 Holiday Dinner "At the Reef". [Photo by Ray, W2CH.]

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

Contest Fun

Happy New Year! Start the New Year right with ARRL's Straight Key Night from 7 pm New Year's Eve through 7 pm New Year's Day. Many operators will be using vintage and homebrew gear. Speed is no object! Most everyone will be sending s-l-o-w! Sunday, January 2nd is ARRL's Kid's Day – a wonderful time to introduce ham radio to all the little ones in your life. The next weekend, January 8th and 9th features the CW North American QSO Party and January 22nd through 24th is the ARRL VHF Sweepstakes. You may never get off the air!

Old Goats' regular Jeff, WA2RAS, recently received a rare QSL from a VE8 up in Canada's Northwest Territories. If you are envious, you'll have another chance to catch some arctic radio waves from 1 pm Saturday January 8th through 7 pm Sunday January 9th. The Inuvik Amateur Radio Club will be on the air celebrating their local Sunrise Festival. Look around 14.250 and 7.250 MHz SSB. Frozen details about ham radio up north can be found at <http://ve8ev.blogspot.com/p/sunrise.html>. Here you can read all about DXing under the glow of the aurora borealis and the adventures of John VE8EV. His blog includes fascinating accounts about operating in the land of the midnight sun.



John, VE8EV operating portable from a rare IOTA location in the Northwest Territories.

Resolutions

One excellent New Year's resolution should be backing up your computer. This is especially important if you use electronic logging in your shack. Consider the horror to find that weeks, months or years and

years of amateur radio contacts have been lost to a hard drive failure. External hard drives are cheaper (and larger) than ever. Maybe this is a great time to go out and finally buy one! If you really want to cover all bases, consider using cloud technology to backup your work off-site.

The black screen of death hit my laptop recently. I put it down and went to dinner. When I returned a black screen welcomed me with: 'failure: hardware. No device found.' Adding to my sadness was the sound of my little, now deceased, hard drive aimlessly searching and reading nothing. I now owned a 130 GB paper-weight!

At about two and a half years old, my laptop is already considered a dinosaur. I looked on-line for a new hard drive and found that the smallest available replacement was about four times the size of the one I had been using! For under one hundred dollars, I was back in business in about three days. Now, I had to rebuild from scratch!

I do not use luxurious backup programs like Ghost or Acronis to make mirror images of my computers. I had backed-up all my essential work onto an external drive, folder by folder. It saved my life! I only lost a couple of weeks of material since the last backup. Not too bad!

My two hardest problems took time to conquer. Loading your operating system onto a new hard drive is not too difficult. Finding all the drivers for each and every accessory device is time-consuming and cause for great thought. One wonderful reference to your personal computer's driver roster may be found on-line. I own a Dell computer and visited their support site at: <http://support.dell.com/support/downloads>. I entered my computer's service tag ID and instantly had a full list of installed drivers at my disposal. I also discovered that my computer was out of warranty by a few months!

With a little experimentation, and a lot of patience, I managed to re-activate nearly every feature of my laptop. It also made me appreciate just how valuable (and time saving) a full mirror of your hard drive can be!

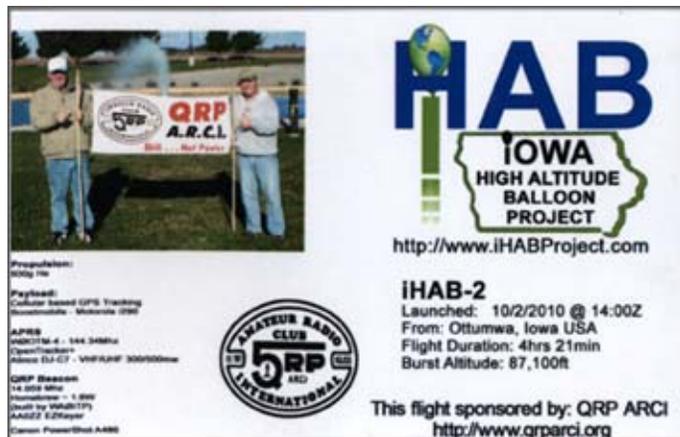
The ultimate nut to crack was the restoration of my iTunes library. All my music returned effortlessly, but I had to re-enter many, many album cover arts. The fun had only just begun! With thousands and thousands of songs to choose from, I had to decide which 2,000 would reach my iPod during the next re-synch. iTunes does not allow you to remember what you had chosen previously, so lots of decisions needed to be made. I don't need to tell you how much mouse clicking was necessary to achieve this last step.

Here is one New Year's resolution you should not miss: Don't let disaster strike you! Make sure you back up all your essential files often! Someday, it could be

the finest gift you ever receive!

Up, Up and Away!

One of the great pleasures of DXing is receiving a coveted and rare QSL card. How many do you own from stations located 90,000 feet above the Earth's surface? I have just received my card from K6JSS/B, the 1.6 watt homebrew QRP beacon that flew aboard the second IHAB balloon mission launched in Iowa last October 2nd. It was an amazing day for copying this QRP CW station. I heard it's signals from just after launch until the unit landed over four hours later.



I was fascinated to experience the changes in propagation during the flight. I found that the beacon was strongest at about 30 to 40 thousand feet during its ascent and descent. Half the fun was watching the rest of the world comment about their reception via the QRP spots web site: www.qrpspots.com. Another launch is being planned during 2011. Read all about the balloon at: <http://www.ihabproject.com> .

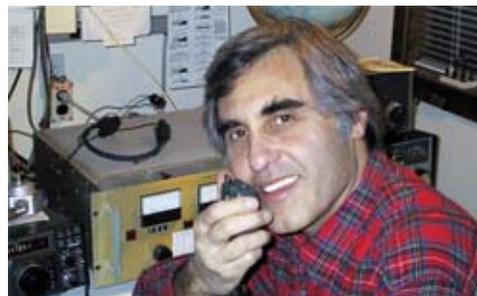
It's Simple

Do you seek adventure? Two-meter simplex can produce some interesting contacts if you give it a chance. On my way home from work, I listen to 146.52 (the *de facto* simplex calling frequency) and 146.58 MHz. With just my low-powered mobile rig and antenna, I've worked some fairly distant stations. QSOs with stations a hundred or miles away are possible. Recently, I have touched base with North Babylon, Long Island and several stations in Eastern Pennsylvania as far away as Harrisburg.

Two things separate simplex operators from people that chat on repeaters. Simplexers seem to be much more contest- and DX-oriented and are very willing to do nearly anything to complete a contact. They also tend to be more interested in technical pursuits and generally have more complex and powerful stations featuring long Yagis and linear amplifiers. I often find myself in simplex QSOs with more than one station, all eager to relay messages to those who might

be out of reach of another station. With a tall, high-gain antenna mounted on my car, I often hear very distant stations having QSOs and can only wonder where they might be. I've also gained an appreciation for nearby high and away spots in the local terrain where my signals will travel far and wide.

Two-meter simplex may also lead you to some very interesting people. I've recently met a very local ham Jay, NE2Q, down in Pound Ridge, New York. Jay is an avid VHF operator and was featured in QST flying wire antennas high up into the air with



Jay, NE2Q.

kites. Jay has also built an amazing homebrew 5 element Yagi for 20 meters. Read about his adventures at: <http://www.k8dd.com/files/Kites/ScottSled%20in%20QST.pdf> . Simply put, you might wonder why people use repeaters at all.

22 States on AM Radio

Bored in your car with nothing to do? Test your car radio's ability to DX. Powerful AM radio stations are still on the air nationwide and it's easy to hear a handful of states in a very short time. Here's a quick list of where to look and listen in for your first 21 states (and one province): 630 WPRO Providence, RI, 650 WSM Nashville, TN, 660 WFAN New York, 740 CFZM Toronto, Ontario, 750 WSB Atlanta, GA, 760 WJR Detroit, MI, 830 WCCO Minneapolis, MN, 840 WHAS Louisville, KY, 870 WWL New Orleans, LA, 890 WLS Chicago, IL, 930 WPAT Paterson, NJ, 1030 WBZ Boston, MA, 1040 WHO Des Moines, IA, 1080 WTIC Hartford, CT, 1090 WBAL Baltimore, MD, 1110 WBT Charlotte, NC, 1120 KMOX St. Louis, MO, 1140 WRVA Richmond, VA, 1170 WWVA Wheeling, WV, 1210 WPHT Philadelphia, PA, 1500 WFED Washington, DC and 1530 WCKY Cincinnati, OH. How many can you hear?

Some Resolutions

Look for the very latest news and DX tips on the PCARA Facebook page. Listen weekly to the PCARA Old Goats Net Thursday nights at 8 pm. Try to get on the air more often! Until next month.

- 73 and dit dit from N2KZ.



A whole quarter

January 2011 marks an interesting anniversary in my amateur radio experiences. It is now twenty five years since I left the UK and moved to the USA. Here's how it happened...

Back in the summer of 1985, I was living in the suburbs of Rochdale, a former-textile town in north-west England. My employer — a multinational chemical company based in the Netherlands — had moved the R&D team once already from the outskirts of Liverpool to a new laboratory near Rochdale. After five years in the Pennine Hills, out of the blue came an



The R&D lab near Rochdale in northwest England where I was working. The Pennine Hills are in the background.

offer to relocate eight people to the company's lab in the Chicago suburbs. We were offered a one-week visit to see what the new place might be like, and as a result of that trip, five of our number decided to make the move, along with our manager.

I was one of the five, so at the end of the year, I was busy preparing for relocation. This included selling the house, saying goodbye to family and friends and deciding what to take and what to leave behind. Some of the decisions were relatively easy — as “technical adviser” to the group, it was easy enough to say that domestic appliances running on UK-style 240 volt AC 50 Hz mains would have problems with the USA 120 volt 60 Hz power supply. As a result there were ranges, ovens, washing machines, refrigerators and vacuum cleaners that all had to be sold. Our colleagues who were staying behind in the UK were happy to pick up some of these ‘bargains’. Small electronics and other appliances might be capable of multi-voltage operation, but I had to point out that anything involving television or video should probably be left behind because of the different broadcast standards. At the time, the UK employed 625 line PAL (Phase Alternate Line) analog color television on UHF-only, while the USA had NTSC on 525 lines VHF and UHF.

More questions arose over audio entertainment equipment. Power line voltage and frequency were a

concern, especially for record decks and cassette players that might rely on the 50 Hz UK line frequency. Even radio equipment could be problematic. I had a JVC digitally synthesized LW/MW/FM stereo tuner/amplifier, and I knew that US standards for frequency steps and FM de-emphasis were different — so that item had to be left behind. Good news was that external loudspeakers would work equally well in the UK and USA, so I brought my Wharfedale and Solavox stereo speakers along.

Another bright spot was my collection of Heathkit items, including audio, test gear and amateur radio. Heath designed those kits for use in many different countries, so they had voltage taps on the power transformers and made allowances for different AC frequencies. I had a Heath AM/FM tuner amplifier with built-in 8-track player — by adjusting transformer taps, changing de-emphasis capacitors and substituting the drive pulley on the 8-track, I was able to convert it back from UK to US standards. It's just a pity that 8-track tapes were already a dead medium!

While our employer was willing to transport household belongings, they drew the line at automobiles. Apart from European models that could not be serviced in the USA, there were two main problems. UK gasoline contained the anti-knock additive tetraethyl lead at the time, so vehicle engines would have had problems with US lead-free gasoline. Then there was a little matter of the steering wheel being on the wrong side of the vehicle. In the UK and Ireland, we drive on the left-hand side of the road, while most other places in the rest of the world keep to the right.

I had to say goodbye to the bright red G3VNQ Volkswagen Polo, with its mobile equipment, consisting of an FDK Multi-700 EX for 2 meters and a Pye Westminster for 430 MHz.



Volkswagen Polo on an exercise with East Manchester Raynet group (Radio Amateur Emergency Network).

Why dispose of the VHF and UHF equipment? During the try-out visit to Chicago the previous summer, the two radio amateurs on the visiting team — Malcolm G3VNQ and Arthur G4UTB — made contact

with Jim Brady, W9JB, through Jim's XYL who was working at the Illinois lab. Jim kindly agreed to an evening visit to his shack, then spent the time patiently answering all our questions about licensing, regulations and band plans in the USA.

The conclusion from this visit to W9JB was that — despite amateur radio being a world-wide hobby — there were enough differences between the USA and Europe at VHF and UHF that we should leave our channelized equipment behind. In Europe, the 2 meter band covers only 144 - 146 MHz, while at 70 cm, the band is only 430 - 440 MHz. On 2 meters in the 1980s, UK FM channels were spaced 25 kHz apart, with repeaters using a 1750 Hz tone burst for access, and a -600 kHz offset. On 430 MHz, the channel spacing was also 25 kHz, with repeaters employing a 1.6 MHz offset. At the time, PL tones were something new to us, but we gathered from W9JB that PL tones

were widely used on the repeaters in Illinois.

My FDK Multi-700EX mobile transceiver only covered the European 144-146 MHz band so it had to

go. I would replace it in the USA with a dual-band Icom mobile radio that covered the FCC frequency allocations, with PL tones built-in.

My old Pye Westminster was an ex-commercial trunk-mounted radio with crystal-controlled channels for the local UHF simplex and repeater frequencies. Those quartz crystals — one for transmit and one for receive on each channel — had been purchased over the years at considerable cost. I could have replaced them and re-tuned the radio for 440-450 MHz in the USA, but I decided it would be more valuable to someone in the local area who could continue to use the existing crystal channels.

I had some portable equipment for VHF and UHF that met a similar fate. My Trio (Kenwood) TR-2300 was a portable FM transceiver a little larger than a handi-talkie. This unit's 1 watt output, powered by NiCd cells, was restricted to 144-

146 MHz. I also had a Standard C-78 portable transceiver, capable of 1 watt FM output from 430-440 MHz. Neither one would have been much use in the USA, so they were disposed of among members of Bury Radio Society (G3BRS). Other items that I was sad to leave behind included yet more Pye equipment, plus a home-brew QRO 2 meter amplifier powered by a 4CX250B. And I said a fond farewell to my little

Honda Generator, stalwart of many a contest and Field Day, which would have had problems running on lead-free gasoline in the USA.

Fortunately, HF equipment is more standardized, and my Yaesu FT-902 transceiver did make the trip across the pond. The AC power supply was built-in and only needed some changes to the transformer taps plus a new power plug to make it compatible with 120 volts AC. My old Sommerkamp HF separates (TX and RX) also crossed the Atlantic, but in the care of Arthur G4UTB, who had recently bought them from me.

One of the last things I had to do before leaving Rochdale was to take down the antennas. Rochdale is on the edge of the Pennine Hills in northwest England, and my house was located on a high spot overlooking the town, some 650 feet above sea level. It could be quite pleasant down in the town center but blowing a gale at my place. I chose the best available wintery day



FDK Multi-700EX 2 meter transceiver



The G3VNQ location on a snowy day in Rochdale, UK. Rotary VHF antennas at right included a 2 meter cubical quad, 430 MHz 8 over 8 and a 3 ele Yagi for 70 MHz.

at the end of the year, pulled out the extension ladder and climbed up to the dormer roof. Taking down all the aluminum antennas for 10 meters, 4 meters, 2 meters and 430 MHz, followed by the long wire antenna for HF was a sad occasion. But as one door closes, another one shuts and the transferees with amateur radio licenses were looking forward to new adventures across the Pond.

And so, one cold day in January 1986, I flew out from Manchester airport and arrived at O'Hare in even colder Illinois. Let me make a small suggestion at this point — if you ever decide to start a new life in the midwest, don't begin it in January! It was cold, it was snowing, it was nothing like our try-out visit in July. I spent the first few months in a chilly apartment at Four Lakes Village in Lisle, IL. This was an odd place in the western suburbs of Chicago that seemed to be full of sporty, corporate individuals who were attracted by the artificial ski slope and the jogging trails. Not that



Standard C-78 430 MHz transceiver

anybody was jogging in that ultra-cold weather!

Fortunately, most of my colleagues had come over several weeks earlier, and they were able to show me around without getting into too much trouble. I look back on navigating a huge, rear-wheel-drive rental boat — a Chevy Monte Carlo — on what seemed to be the wrong side of the icy, Illinois roads and wonder that I did not do more damage.



The first radio I purchased in the USA was this Icom IC-02A 2 meter FM portable.

After a few months, we all left Four Lakes Village and I moved out to Naperville, IL. Now was the time to get to know the local radio amateurs in Bolingbrook ARS and DuPage ARC. All the members were very friendly, encouraging Arthur and myself to study for our FCC licenses. The reciprocal FCC permits we were initially operating with were quite restrictive, so we took our tests at a V.E. Test session organized by Bolingbrook ARS — I stopped signing G3VNQ/W9 and became NM9J, while Arthur became NO9D a few weeks later.

From that point, I don't think either of us looked back. We joined in the activities of our new radio clubs, became Volunteer Examiners, experienced Field Day and got involved with various repeaters. Arthur put up a large satellite dish and a large HF beam antenna at his new home in unincorporated Naperville, where planning restrictions were not a worry. Back in the UK, we had been restricted to 150 watts input or 400 watts PEP — but this was the USA, so Arthur also enjoyed a powerful linear amplifier. Meanwhile, in my downtown location near the West DuPage River, I made do with 100 watts from my FT-902, a G5RV wire antenna stretched over a willow tree and became busy exploring the (new-to-me) 220 MHz band, plus Packet Radio on 2 meters.

The good news was that Chicago and its suburbs turned out to be a very active radio location. There was plenty of activity on the VHF and UHF bands, and several amateur radio stores were within easy driving distance. Well-attended Hamfests were scheduled throughout the year, including the depths of winter. BARS and DuPage ARC had their own repeaters and organized their own hamfests in the summer. And the flat terrain of the midwest meant that radio signals on HF and VHF traveled a very long way without obstruction! What more could we ask for?

– G3VNQ, NM9J

Deliberate mistake

The December 2010 issue of the PCARA Update newsletter included a “Deliberate Mistake” contest. Readers were invited to scan the pages for a mistake, then submit entries to the Editor.

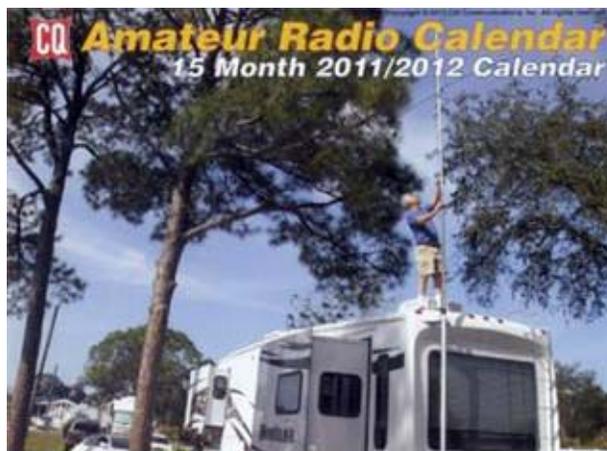
Entries were received from Peter KC2RCW, Ray W2CH, Karl N2KZ and Jeff WA2RAS. It turned out that there was **more** than one “deliberate” mistake in the December Newsletter! Here are the mistakes that your Editor is aware of:

Page 3, Adventures in DXing: “It has been fifteen years since the advent of the expanded AM radio broadcast band. Back in November 1985, the FCC opened up the floodgates to a whole new group of stations from 1610 to 1700 kHz.” (That ‘fifteen years’ was accurate, but it was 1995, not 1985 when the first expanded AM station came on air — WJDM on 1660 kHz, then in Elizabeth NJ.)

Page 4, Adventures in DXing: “Join us at the Reef restaurant in Peekskill on Sunday December 5th...” (‘At the Reef’ restaurant is in Cortlandt Manor, not in Peekskill.)

Page 8, PCARA Calendar: “Sun Jan 2, 2010: PCARA Annual Bring and Buy Auction, Hudson Valley Hospital Center, 3:00 a.m.” (Apart from the incorrect year, the Auction is scheduled to start at 3:00 p.m, not 3:00 a.m. Early birds will not find any worms.)

The winner, chosen by drawing at the Holiday Dinner, was Jeff, WA2RAS. Jeff joins the PCARA Thursday evening net on a regular basis and he had spotted the “3:00 a.m.” deliberate mistake. Congratulations Jeff! His prize is a CQ Amateur Radio Calendar for 2011-12.



Auction time again

Here's a reminder that PCARA will hold its fourth annual "Bring and Buy Auction" at the January meeting, 3:00 p.m. on Sunday January 2 at HVHC.

At this time of year, there is a general absence of local hamfests. Selling from the trunk in a snowstorm would not work out too well. The next local event does not come around until the Orange County Hamfest on Saturday March 26, 2011 in Middletown.

So... take a look around your shack and storage area for items that have not been used in a while. Anything you have not plugged in for a year or two will not be missed.

Switch it on, check that it works, clean it up then set it aside ready for the "Bring and Buy" auction.

If you need a rough idea of the second hand value, you can always check on the Internet. But remember — auctions with real equipment and real-life people to bid against are more exciting!

General Class pool

This summer — July 1, 2011 to be precise — there will be a new General Class question pool. The new pool was released by the National Conference of VE Coordinators on December 6, 2010. Here are some of the questions — how would you fare? The correct answer is in parentheses on the first line.

G1A01 (C) [97.301(d), 97.303(s)]

On which of the following bands is a General Class license holder granted all amateur frequency privileges?

- A. 60, 20, 17, and 12 meters
- B. 160, 80, 40, and 10 meters
- C. 160, 60, 30, 17, 12, and 10 meters
- D. 160, 30, 17, 15, 12, and 10 meters

G2A09 (D)

Why do most amateur stations use lower sideband on the 160, 75 and 40 meter bands?

- A. Lower sideband is more efficient than upper sideband at these frequencies
- B. Lower sideband is the only sideband legal on these frequency bands
- C. Because it is fully compatible with an AM detector
- D. Current amateur practice is to use lower sideband on these frequency bands

G2C04 (D)

What does it mean when a CW operator sends "CL" at the end of a transmission?

- A. Keep frequency clear
- B. Operating full break-in

- C. Listening only for a specific station or stations
- D. Closing station

G3A03 (C)

Approximately how long does it take the increased ultraviolet and X-ray radiation from solar flares to affect radio-wave propagation on the Earth?

- A. 28 days
- B. 1 to 2 hours
- C. 8 minutes
- D. 20 to 40 hours

G4A04 (B)

What reading on the plate current meter of a vacuum tube RF power amplifier indicates correct adjustment of the plate tuning control?

- A. A pronounced peak
- B. A pronounced dip
- C. No change will be observed
- D. A slow, rhythmic oscillation

G6B05 (C)

What is the approximate junction threshold voltage of a conventional silicon diode?

- A. 0.1 volt
- B. 0.3 volts
- C. 0.7 volts
- D. 1.0 volts

Holiday fun



Can you guess whose triband antenna is being held up by a jolly old elf?

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 Jan 2, 2011: PCARA Annual Bring and Buy Auction, Hudson Valley Hospital Center, 3:00 p.m.

Hamfests

Sun Jan 9, 2011: New York-Long Island Section Convention — Ham Radio University 2011, Briarcliff College, 1055 Stewart Avenue, Bethpage, NY. 7:30 a.m.

Sat Mar 26, 2011: Orange County ARC Spring Hamfest, Town of Wallkill Community Center. 2 Wes Warren Drive, Middletown, NY. 8:00 a.m.

VE Test Sessions

Jan 2: Yonkers ARC, Yonkers PD, Grassy Sprain Rd, Yonkers, NY. 8:30 a.m. Contact Daniel Calabrese, 914 667-0587.

Jan 13: WECA, Westchester Co Fire Trg Center, 4 Dana Rd., Valhalla, NY. 7:00 p.m. Contact Stanley Rothman, 914 831-3258.

Jan 21: Orange County ARC, Munger Cottage, Riverlight Park, Hudson Street, Cornwall NY. 6:00 p.m. Contact Ronald Torpey, (845) 234-2371.

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



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