



PCARA Update



Volume 11, Issue 12 Peekskill / Cortlandt Amateur Radio Association Inc. December 2010

Anchor points

On Sunday December 5, 2010 at 5:00 pm the Annual PCARA Holiday Dinner will commence at *At the Reef* on Annsville Circle in Cortlandt Manor, NY. As always, **ALL ARE WELCOME!** Elections for office will be held during the course of the evening, and we could really use a volunteer for the position of Secretary/Treasurer. If you have thought about getting more involved with the organization, this is a perfect chance to do so!

For the eighth time in five years, the *PCARA Update* has been chosen as the ARRL Hudson Division's Newsletter of the Month! I've heard rumblings from behind the scenes that *PCARA Update* Editor-in-Chief, Malcolm, NM9J has received offers from major publications to relocate to their operations. I guess I'll have to increase his salary significantly, just to keep him at the Update! Once again Malcolm, **Congratulations** on your award and **Thank You** for a job that is so well done from month to month! We couldn't do it with-

out you!

On January 2, 2011 at 3:00 pm the PCARA Bring and Buy Auction is coming to Hudson Valley Hospital Center. This is an excellent opportunity to clear out some of your old gear to make room for new. Just pack up a bunch of your gently used electronic treasures and bring them with you to the meeting. You might just go home with a little more cash in your pocket... or not... if you find some items that catch your fancy. You never know... Come and join us!

To each of you, your families and loved ones, I wish a Very Happy and Healthy Holiday Season, and a most Joyous and Blessed New Year!

- 73 de Greg, KB2CQE

Deliberate mistake

You should read this issue of the *PCARA Update* with extra care — you might win a prize for finding the Deliberate Mistake. See page 7 for further details. Winner to be drawn at the PCARA Holiday Dinner.

PCARA Officers

President:

Greg Appleyard, KB2CQE, kb2cqe 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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PCARA's holiday dinner will be "At the Reef", the restaurant anchored at Annsville Circle.

Adventures in DXing

– N2KZ

A New Era

Ninety years ago, radio came to fruition as a means of instant communication bringing the world to our grandparent's homes. By 1950, engineering innovation added pictures to the airwaves. After another twenty or thirty years, the advent of cable television and the Internet fulfilled our every desire for information and entertainment. Could there possibly be more?

A new century. A new era. Devices have become smaller and smaller and ever so more personal. Everything now seems customized for single users. You can hold an entire music and video library in the palm of your hand with instant recall. The Internet is with you wherever you go. You can find



Devices have become smaller and smaller.

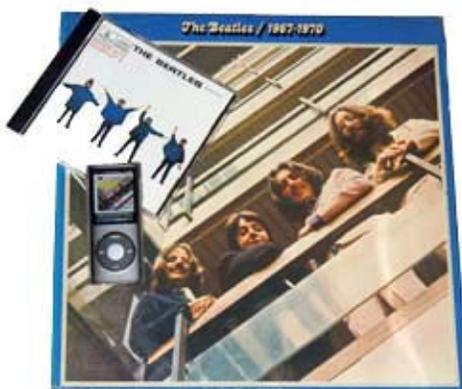
anything in the world at the tips of your thumbs exactly to the specifications of just one you.

By our own design, original points of reference are slowly disappearing. Radio is nearly extinct. Television has been supplanted by on-demand. Journalists and commentators now distribute their thoughts with electrons instead of paper. Big black

records became shiny discs and are now intangible little bundles of computer code that can be heard but never seen.

Something is missing. One great big something. More and more choices have moved us farther and farther apart from each other.

No longer are there four sources of information. Now there are 400 million! The ability to become a grand worldwide audience is drifting away. A great moment may happen but now we will see it at our convenience instead of simultaneously and live. Grand speeches disseminate



Big black vinyl became small, shiny discs—then shrank to bodiless bits.

much more slowly. Victories are become more gradual. Large groups of people are losing the ability to listen all at once, in a room or in a stadium, to news and sport and spectacle.

Will it be long before the question will arise: 'What is a radio?' My daughters' generation is bound to iPods and computers and nearly never uses traditional mass media. The concept of communal communication is so foreign to them. Tivo, Hulu and YouTube are all so much more convenient. Even important missives, like Glee and American Idol, are so much more easily attained via download.

From my elderly perspective, I feel as if something great has been lost. I recall the entire world watching men walk on the moon, listening to teenage crowds cheering The Beatles up in their hotel room. It was easy to follow coverage of wars, assassinations and grand weddings as it happened. Portable radios have been replaced by tiny wonders without any RF capability. Has immediacy been lost forever?

One can only wonder if mobile Internet radio or mobile ATSC TV will eventually fill-in our current delivery deficits. This may be more hopeful than realistic. Are we allowing the complete destruction of our emergency alert systems? How do you reach large amounts of people immediately? Do we all need an 'Urgent News' app? Thousands of different media now need to be synchronized instead of just a handful. What a different world it has become.

Amateur radio may change dramatically in the next decade or two. It is easy to predict that we will see a great increase in digital transmission modes. D-STAR, APRS, PSK-31 and the multitude of similar protocols will continue to grow in favor. I personally hope that basic CW will remain as a permanent fixture. Its simplistic nature is hard to beat. Amateur radio has already saved Morse Code from extinction. Will our hobby become a grand home of other retired and discarded technologies?



A grand home for retired and discarded technologies?

Homebrewing will also change its orientation. As more and more miracle chips hit the market, supplanting discrete componentry, hams may find themselves with a new perspective. Instead of being involved in the design of the intricate devices themselves, we may find ourselves taking on a different strategy: Discovering new ways to use the designs at hand. Writing

computer code and developing new apps will also be part of a ham's portfolio. During a few recent Old Goat's Nets, we had a local ham checking into us via an Apple iPhone. Do we really need dedicated devices made by Icom, Kenwood and Yaesu to get on the air anymore?

As a group, hams will continue their efforts in emergency communications and support. Our fragile newfound digital infrastructure could easily collapse in times of disaster. Cell phones, handhelds and computers are so reliant on extremely complex interconnection. Using relatively simple modes of communication, amateur radio operators are always prepared to provide essential links in times of despair.

Very basic modes of communication, like battery powered CW, could transmit for very long periods of



C. Crane's CCRadio-2 covers AM, FM and the 2 meter band.

time with little energy requirement. Simple antennas can be quite efficient as building blocks in building a replacement infrastructure. Hams can be very clever and resourceful about their means of conveying messages during disasters as we have shown time and time again. Watch

our activities during Field Day for verification of our skills!

The recent addition of two-meter band coverage in the latest battery-operated radio designs only encourage hams and point out their importance. We may be witnessing the grand beginnings of a whole new era for our hobby. Stay tuned!

Two Worlds

What makes QRP CW operation fun? I recently received a bureau QSL from Bernd, DL7BY, in Berlin,



Germany for a QSO we had on 20 meter CW. What a combination we made! He was operating at 500 watts with a Yaesu FT-920 and a Cushcraft A4S rotatable beam antenna on a high tower. I was operating with just one watt, battery powered with a straight key, into a homebrewed wire dipole! What a disparity in operating styles. At 500 times my output power, I was using just a fraction of the power he was probably reflecting!

DL7BY /p /m
EX Y54TD, DL7VBM

VIA: **TO N2KZ**

DL7BY - Confirming our QSOs
DD MM YY UTC HNE 2way EST REMARKS
16-Sep-99 2204 14.0 CW 539 KARL

BERND JARLING
P.O. BOX 940343
12443 BERLIN
GERMANY
DL7BY@DARC.DE

Rig: FT920 ANT: Windom/Vertical/A4S

RIG	ANT	WATTS
		<input type="checkbox"/> W
		<input type="checkbox"/> 100 W
		<input checked="" type="checkbox"/> 500 W

PHOTO: SUNRISE DURING WWDX CW 2004

www.qlshop.com
P.O. Box 17 02222 Bonn - Germany

PSE TNX QSL
TNX QSO(s) ES VY 731
PSE QSL DIRECT OR VIA DARC QSL BUREAU
LINDENALLEE 4 - 34225 BAUNATAL - GERMANY

Gord Luck & Karl

Fifteen Years?

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. I remember the first experimental stations on this segment. Experimental broadcasts were first set up to demonstrate AM stereo at The National Association of Broadcasters convention for a couple of years in a row. Another experimental station was launched from Maryland called K-Truck to demonstrate a rolling self-contained radio station developed for the military for use in the Middle East.

The very first expanded band permanent broadcast station heard was KCJJ in Iowa City, Iowa on 1630 kHz operating with 10 kilowatts daytime and 1,000 watts at night. With the frequency all to themselves, KCJJ was heard nationwide for many months before the band became crowded with other broadcasters. KCJJ still arrives in the New York area from time to time depending on conditions.

Just think how far your 160 meter signal would go if you had a 5/8ths wave antenna and 120 ground radials surrounding it! All of the stations I've mentioned were received coast-to-coast.



All you need is a clear frequency and good conditions. How about this as an incentive to operate on 160 meters? You bet!

Join the Fun

Get in touch with your fellow PCARAns this holiday season! Join us at The Reef restaurant in Peekskill on Sunday, December 5th for the PCARA holiday dinner. No reservations are needed! We would love to see you attend. As always, spend a few minutes on any Thursday night and join the revelry of The Old Goat's Net on the PCARA 2 meter repeater at 146.67 MHz, -600 offset and a 156.7 PL. Hams have been discovering our net and we have had recent check-ins from all over the tri-state area and beyond. Press your push-to-talk button and join the fun! Have a wonderful holiday season!



73 de N2KZ dit dit

Digital doubts

In the November issue of the Radio Society of Great Britain's journal, *RadCom* there are several reader letters that give pause for thought. In the first letter, Derek, G1ZJQ complains that after his club put up a D-Star repeater, the initial flurry of activity died down and the airwaves are now very quiet. Perhaps analog FM was a better system? The next letter from Jim, MOJHW complains about the 'ear shattering noise' that results when his scanning FM transceiver stops on a dual-mode FM/D-Star repeater running in digital mode.

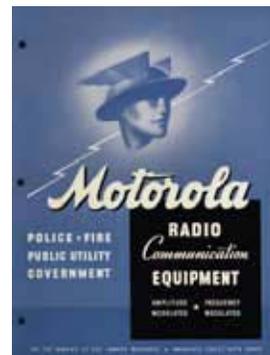
Your editor thinks that the new digital modes have their place in amateur radio, but in the process of installing and evaluating them, we should be careful not to throw out the baby with the bathwater. D-Star equipment is still *very* expensive compared with conventional amateur VHF/UHF radios — and the single manufacturer has been subsidizing the cost of repeater equipment. Two-way FM radio has been developed and refined over a period of **seven decades**. The Connecticut State Police began operating a two-way FM mobile system in Hartford back in 1940, using equipment designed by Daniel Noble and Fred



M. Link. Noble subsequently joined Galvin Corp (later Motorola), which launched its own first FM system in Philadelphia in 1941.

Portable FM dates back to 1943, when Motorola introduced the SCR300 backpack radio for the U.S. Army Signal Corps. This first FM "walkie-talkie" weighed 35 pounds and radiated 300 mW in the range 40-48 MHz.

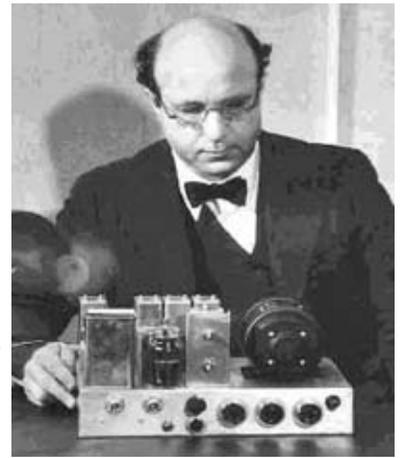
Radio amateurs first became interested in FM when surplus mobile equipment became available in the 1960s and 70s as a result of narrow channel spacing. Forty years later, we have a huge amount of portable and mobile equipment making use of FM. Clubs and individuals (including PCARA) have invested lots of time and money into repeater installations that provide coverage over wide and narrow areas. If an alternative digital mode is to replace FM, then it will need a lot of



Motorola 2-way sales brochure from 1940s.

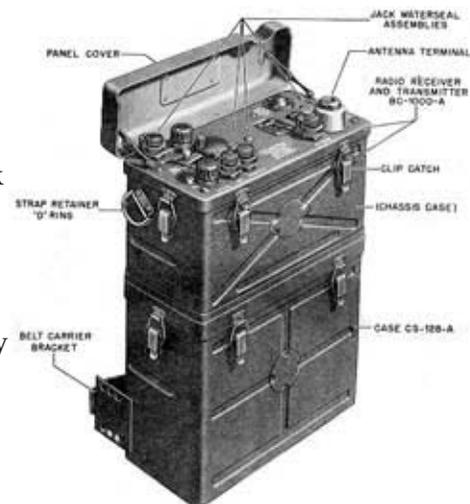
advantages over its 70-year old predecessor before it wins a place in our hearts.

Cast your mind back (if you can) to the changeover from AM to SSB on the HF bands. This process took 15-20 years, starting in the early 1950s. There were clear advantages for SSB including narrower bandwidth and much improved signal to noise ratio compared with AM. But the final changeover was driven by availability of conveniently-sized tube transceivers that



The first two-way FM mobile system for the Connecticut State Police was based on equipment designed by Daniel Noble and Fred Link in 1940.

advantages over its 70-year old predecessor before it wins a place in our hearts.



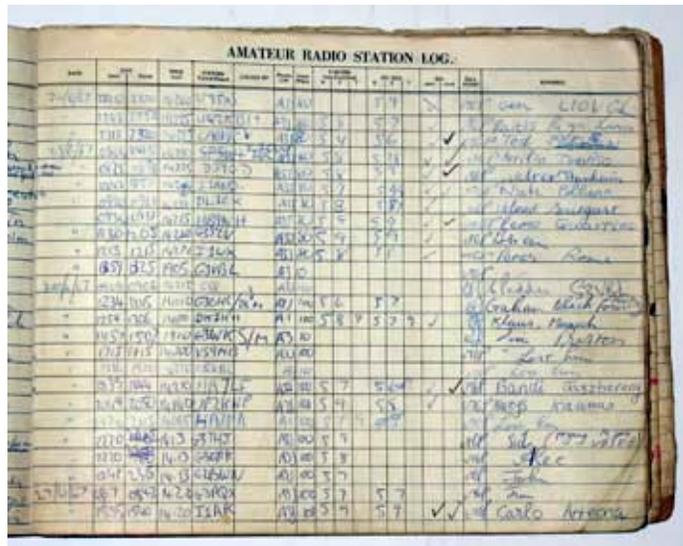
In 1943, Motorola's SCR300 transceiver was the first FM "walkie-talkie". It weighed 38 pounds and provided 0.3 watt output on 40-48 MHz.

incorporated both transmitter and receiver into smaller, less expensive boxes than the old, separate AM transmitter and receiver of yore.

In my view, it will need a similar leap for D-Star — or some other digital voice technology — to take over from FM. The new mode will need to show clear advantages over FM and be no more expensive before it truly takes off.

A third letter in December's *RadCom* provides a digital cautionary tale for us all. Denny, M3HSJ recalls an Estonia station in the middle of a 20 meter pile-up who took the time to work his weak signal from the UK. Denny credits the station for good operating, but sadly he cannot remember the callsign because "the laptop the log was stored on is no more".

This is terrible — suppose all *your* contacts were stored in a log file that disappeared along with a dying hard drive! You would be unable to confirm incoming QSL requests, and it would be impossible to check back in the log for names of people you had worked in the past. I still have my paper log books from 40+ years ago, and occasionally I've had to go all the way back to volume one to check information. Paper still



Earlier pages from the log — 20m SSB, summer 1967.

works 40 years on. I'm doubtful that any electronic log from today will still be readable in the year 2050! Will the software still run? Will we still be using notebook PCs and logging software in 40 years time? I doubt it... but I'm sure we will still be keeping records of HF contacts. Perhaps our radios will have terabytes of removable flash memory to record the sound of the actual contact, plus voice and code recognition software to make it all searchable.

We can only dream. But meanwhile, if you keep an electronic log, please maintain a reliable backup. It might be a contact with *my* station that disappears.

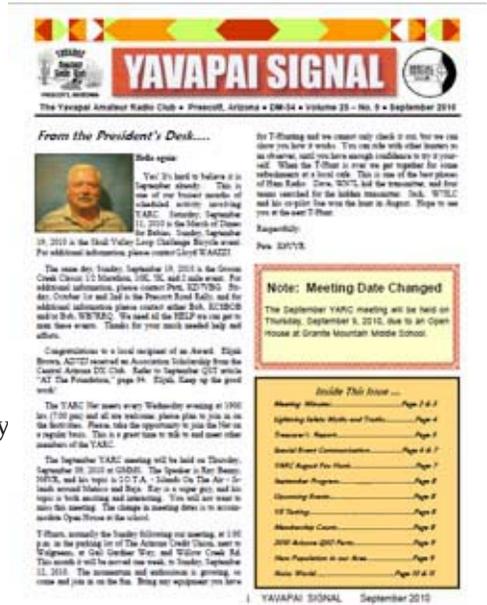
- NM9J

Noisy echoes

Back in March 2010, there was an article in the *PCARA Update* entitled "Noisy World", lamenting the increasing amount of electrical noise around our homes. I took a portable radio receiver around the house to report on noisy electrical devices — one of the noisiest items I found was a GE Energy Smart LED Lamp, which was causing interference on both MF and VHF.

The article was subsequently republished in the September 2010 issue of the *Yavapai Signal*, the monthly newsletter of the Yavapai Amateur Radio Club in Prescott, Arizona. You can read this and other issues produced by editor Joe Oliver, AC6AA on the club's web site, <http://www.w7yrc.org>.

A short time after this first reappearance of the noisy piece in sunny Arizona, I was contacted by Paul, N6DMV to ask if the article could be re-printed in *Hírmondó*, the quarterly newsletter of NMARK, the International Hungarian Amateur Radio Club. A little research on the Internet revealed that NMARK has a web site at: <http://ha5fq.ha5khc.hu/nmark> and the newsletter — translated title "*Herald*" — is published in Hungarian.



September issue of Yavapai Signal



A translated version of the article now appears in the latest quarterly issue of *Hírmondó*, for December 2010. I have to trust that Paul, N6DMV arranged an accurate translation, because the Hungarian language is not one of my strong points.

- NM9J

Return of Radio Cortlandt

Readers may remember that in the January and February 2010 issues of the *PCARA Update*, we told the story of a mysterious FM radio station that appeared in the Peekskill/Cortlandt area at the end of 2009. The station came on-air broadcasting Sirius-XM radio, then changed to a continuous 1980s-style middle of the road format, without any announcements.

With assistance from several PCARA members, the primary coverage area was mapped out — it seemed to be bounded by Route 6, Lexington Avenue, Route 202 and the Bear Mountain Parkway, roughly surrounding the shops of Cortlandt Town Center. Further analysis narrowed the source to a street near Lincoln-Titus Elementary School, on the edge of the “Mohegan Colony”. This location had a good view over the low-lying area containing the Highway Depot and Cortlandt Town Center. The station continued on-air for the first few weeks of 2010, then disappeared in late February. (Hurrah!)

All was well for many months, but then, on Thursday Nov 18, 2010, I found I was once more experiencing interference to WNYC-FM on 93.9 MHz. Reception of the HD-Radio subchannels of WNYC was also being affected, so I tuned to the adjacent channel — and there once again was a strong signal on 94.1 MHz. Could it be anomalous propagation? No, the signal was still present the following day and over the weekend.

The programming had a similar feel to the previous year, with lots of 1980s music. Closer listening revealed that the initial source was Miami Beach, FL station WMIA-FM — which identifies itself as “939 MIA” (Web site: <http://www.939mia.com>). Later, another 80’s style station was heard, with music from WILV-FM, “Chicago’s Rewind 100.3”. This station’s slogan is “Feel good favorites from the ‘80s and more.” In view of the occasional interruptions with ‘dead air’ it’s my guess that these stations were being received in Cortlandt through their Internet streams, then rebroadcast locally on 94.1 MHz FM stereo.



Just to confirm my suspicions that Radio Cortlandt TC was back on the air, I took another drive around “The Colony” with my trusty Radio Shack DX-398 receiver, and its built-in S-meter. Although modulation was off at the time, the FM-stereo carrier on 94.1 MHz was still present, and signal strength grew stronger and stronger as I approached the same location as before on the edge of “The Colony”. Reception of WNYC-FM on 93.9 MHz was completely wiped out adjacent to the familiar spot. The travel trailer was still parked in the driveway, and the same ground plane antenna was up on the roof, draped over an amplified TV antenna.



Travel trailer with ground plane antenna on the roof.

In the following week, the station was broadcasting WFAS-AM “Westchester’s soft favorites”, but signals grew weaker, then disappeared altogether.

AM 1230 WFAS
Westchester's Soft Favorites

Perhaps we can draw some conclusions from this odd situation. The signal comes on-air around Thanksgiving then comes and goes over the holidays until early in the New Year. It radiates mostly 1980s-style music and runs enough power to be heard clearly around Northern Cortlandt and parts of Peekskill. What does this tell us about the owner?

In my mind’s eye, I have a picture of someone like the Simpson’s “Disco Stu” with his leisure suit and liking for upbeat music. Stu comes home for the holidays each year and makes sure he can still hear his favorite tunes while driving around town by installing an FM transmitter that does not meet FCC Part 15 rules for avoiding interference. He chooses 94.1 MHz as the frequency because it seems to be an ‘empty’ channel in this part of the world. Now that the Thanksgiving holiday is over, let’s hope “Stu” has realized the error of his ways and moved on, perhaps selecting a different FM channel, with lower power level and an antenna that meets FCC regulations.



Interestingly, the web site of WFAS-FM and WFAF-FM (<http://www.wfasfm.com>) advises that “103.9/106.3 WFAS has been taken over by pirates!” More specifically, the station explains that there are locations in Westchester where 103.9/106.3 WFAS is not being heard clearly due to interference from radio

pirates. The web site includes a form for listeners to submit details of where and when they experience interference. WFAS-FM is located near Ardsley, while WFAF-FM is the former WVIP-FM, broadcasting from near Mount Kisco.

Holiday Meal

The upcoming Holiday Meal has been planned to coincide with the monthly meeting on Sunday December 5. Location will be as before, "At the Reef", located on Route 9 at Annsville Circle. The start time has been



adjusted to **5:00 p.m.** to accommodate members who are working that day.

The menu will be as follows:

DINNER MENU

Tossed green salad

Choice of entrées with Baked Potato and Vegetable:

Boneless Breast of Chicken Marsala

Chicken Cordon Bleu

Penne à la Vodka with grilled breast of Chicken

Broiled Stuffed Filet of Sole

Broiled Filet of Salmon

Prime Ribs of Beef (\$2.95 extra)

*Cake of the Day,
Coffee or Tea*

A standard choice from the menu will be \$19.95 plus tax and gratuity (18%). Additional charges for drinks, alcohol etc. are your own responsibility.

Deliberate mistake contest

In last month's newsletter, a significant mistake was spotted by one of our eagle-eyed readers. While describing the local repeater scene Karl had written:

"LIMARC holds super-repeater status, along with Westchester's PEARL (145.13) and WECA (147.06) machines, covering large portions of the New York City metro area and beyond."

Your editor usually proofreads all items and corrects these little errors with a digital blue pencil. But I must have been jet-lagged as the November issue was approaching deadline and missed that particular one. (Did you spot it? It has something to do with counties and neighboring radio clubs...)

In celebration of the occasional error that slips into the pages of the very best periodicals, this month we have

introduced a **deliberate mistake competition**. If you can find the deliberate mistake in this issue of the *PCARA Update*, send a note to the editor by e-mail, identifying the item. You can find the editorial e-mail address on the back page.

If more than one person spots the mistake, there will be a prize drawing at the PCARA Holiday Dinner on Sunday December 5 to determine the winning entry. A suitable **radio-related prize** will be presented to the winner.

- NM9J



The Editor's "blue pencil"

Peekskill / Cortlandt Amateur Radio Association

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E-mail: NM9J @ arrl.net

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 Dec 5: PCARA Holiday Dinner, "The Reef" Restaurant, Rt 9 at Annsville Circle, Cortlandt Manor, NY. 5:00 p.m.

Sun Jan 2, 2010: PCARA Annual Bring and Buy Auction, Hudson Valley Hospital Center, 3:00 a.m.

Hamfests

Sat Dec 11: Boy Scout Troop 139 - Flea Market/Craft Fair/Hamfest, Conlon Hall, 19 North William St., Bergenfield, NJ.

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

VE Test Sessions

Dec 5: Yonkers ARC, Yonkers PD, Grassy Sprain Rd, Yonkers, NY. 8:30 a.m. Contact Daniel Calabrese, 914 667-0587.

Dec 9: WECA, Westchester Co Fire Trg Center, 4 Dana Rd., Valhalla, NY. 7:00 p.m. Contact Stanley Rothman, 914 831-3258.

Dec 20: 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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