



PCARA Update



Volume 9, Issue 4 Peekskill / Cortlandt Amateur Radio Association Inc. April 2008

Seeking perfection

We have a tentative date for our next PCARA Foxhunt of May 10th or 11th. We'll lock down the date at our April 6th meeting. Malcolm, NM9J is scheduled to play the fox, since he was the closest to finding the fox during the last hunt. I'm sure he'll make it most interesting. If you have any ideas or suggestions for the format of the upcoming Foxhunt, make sure you bring them to Malcolm's attention.

Just another reminder, PCARA has taken tables for the Mt. Beacon ARC and Orange County ARC Hamfests on April 13th and April 26th respectively. If you want to clean out the shack, feel free to bring any stuff you might want to try to unload... uh, I mean sell.



Mount Beacon ARC Hamfest pictured in 2007.

In last month's newsletter I'd mentioned that I was in the process of rebuilding a couple of Pioneer Project 80 2-way speakers that I inherited from a friend. The only things original in the speakers now are the enclosures and the crossover networks (1,500 Hz). I am proud to announce that the rebuild has been a success (at least to my hearing-impaired ears). Over the course of this project I've rediscovered my quasi-audiophile roots that I had developed so long ago in High School. What's even scarier still, is that I'm thinking about buying a turntable so that I can play some of my vintage vinyl (how archaic, draw up the commitment

papers now)! Another thing that I have noticed is that my 32 year old Kenwood receiver sounds sooooo much richer than a significantly younger Pioneer high-tech digital receiver that I also own. I might just be comparing apples to oranges and maybe it's just my warped perception. I'll have to leave the whole analog (old) versus digital (new) debate thing to another time and article. Who said hams are only interested in radio?!

Our next meeting is April 6, 2008 at 3:00 p.m. at Hudson Valley Hospital Center. As always **all** are welcome! I look forward to seeing each of you there.



One of Greg's rebuilt loudspeakers.

- 73 de Greg, KB2CQE

Net night

Peekskill/Cortlandt Amateur Radio Association holds a weekly net on the 146.67 MHz W2NYW repeater. Net control Karl, N2KZ conducts the net on Thursday evenings at 8:00 p.m.

PCARA Officers

President:

Greg Appleyard, KB2CQE, kb2cq@arrl.net

Vice President:

Joe Calabrese, WA2MCR; wa2mcr@arrl.net

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Adventures in DXing

- N2KZ

Clipperton Atoll!

As you DX through life, follow this advice: W-N-W-L! (Work Now. Worry Later!) Sometimes you just get lucky. I have a 30 meter QRP rig by my bedside. It's an Oak Hills Research OHR-100A originally designed by an old friend Doug DeMaw (W1FB SK.) I always feel guilty using this rig since it runs serious QRO at five full watts. With this much power, miracles can happen... and they did!

On the evening of March 13th, at 7:45 pm, I tuned around 30 meters looking for someone calling CQ. I heard a dominant station holding court, so I sent my call sign just once. They came right back to me! It was a usual DX QSO: UR 599 DE N2KZ TU dit dit. I waited to hear their call sign: TX5C. What the heck is that? I looked up the call on QRZ.com and nearly fell off my bed! Holy Cow! It was the legendary Clipperton Atoll DXpedition!

And they heard me on a first try! Wow!

I re-searched the station and found their main web site at: <http://clipperton2008.org/>.

The site included a nifty lookup page where you could not only see if you were in their logbook, you could see which operator handled your QSO. My QSO was with a seasoned contester, Arnold, N6HC from Santa Ana, California. What a fast and



QSOs with: N2KZ
[Call searched 16 times, has made 23 searches so far]
You have worked TX5C on 1 out of 27 band slots!
The best time to work TX5C from United States (East) or from CQzone 05

	6m	10m	12m	15m	17m	20m	30m	40m	80m	160m
CW										
PH										
RTTY										

Operator: N6HC

More leaderboards?
The top 100 band/slots stations in CQ zone 05 or Uni

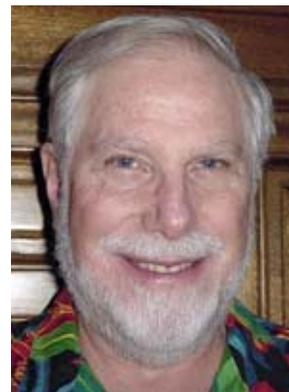
NA

Nil To see who was the operator you worked, just place your mouse button
Search returned in 0.096s

The Clipperton DXpedition web site includes a LOGSEARCH page where you can look up contacts. Here is Karl's QSO on 10 MHz.

sharp fist he had! It was a pleasure to work an operator with such accuracy and confidence. I reached Clipperton very late in their six and a half day stay, so my call sign didn't show up on-line until the TX5C gang

reached shore and downloaded their last QSOs into their database. I searched their web site daily waiting for my call sign to appear. It finally did! I was thrilled! My little QRP kit made it to this tiny doughnut of an island! (It has a big lagoon in the middle!) Look for it on a map just west of Costa Rica in the Pacific Ocean.



Arnold, N6HC

I sent off my QSL request, with SASE, to the QSL manager, the N7CQQ ARC, the morning after the QSO. Patiently, I will wait! TX5C logged a total of 71,788 QSOs during their adventure, more than half of them on CW. What an amazing time they had. Congratulations to my DX mentor, Joe, WA2MCR, who worked TX5C on *four* bands: 15, 17, 20 and 30 meters! Follow the golden rule of DXing: Listen carefully and call even if the bands seem dead. Magic will surely come your way!

Turned Off

The funeral began at 1330 UTC on Easter Monday, March 24. For ninety minutes, Ireland's public broadcaster RTE, Radio Telefis Eireann, summarized 82 years of broadcast operations on 567 kHz medium wave. A wonderful show it was. The final song was an instrumental version of "Someone to Watch Over Me" followed by an old Radio Eireann sounder and time pips for the stroke of 3 p.m. Then the audio was pulled down and the air went silent. RTE medium wave broadcasts had become history.



The deed is done. The final switch has been pulled. RTE no longer broadcasts on medium wave. 567 AM was a major player in the world of European broadcasting with 500 kilowatts of power pumped into a single tower in Tullamore, just outside of Ballycommon, Ireland. It will never be the same. (We learned later that the 567 kHz frequency is now broadcasting an endless announcement loop asking listeners to tune to VHF FM or long wave. I wonder when the facility will *really* go dark.)

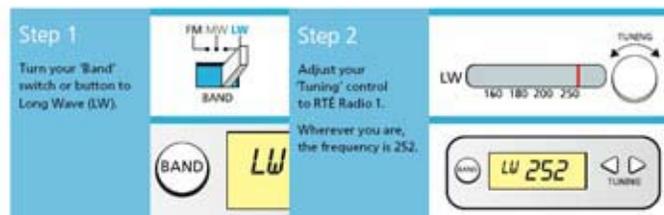
You can watch the close down at: <http://www.youtube.com/watch?v=RtzyhmvHR-Y> and listen to the last few minutes of their broadcast at: http://www.youtube.com/watch?v=bAw_caeKdQ.

RTE suggests now tuning to long wave to hear the alternate programming offered by their full-service Radio One. Their facility on 252 kHz was originally an independent rock 'n' roll station known as Atlantic 252. It produces a powerful signal that can be heard for

Tuning to Long Wave

Tune to RTÉ Radio 1 on LW 252 if you have difficulty receiving FM on your radio, or if after 24 March you want to listen to the programme options broadcast on MW.

The LW 252 signal is available throughout Ireland, in Britain and beyond.



hundreds of miles day and night. With patience, a good antenna, and ears capable of handling extreme QRN, you can log RTE Radio One on 252 kHz along North America's East Coast. There is some speculation that RTE's medium wave transmitter on 567 kHz may return to the air as a relay station for hire similar to the fate of the former Radio Luxembourg. Stay tuned!

On this side of the pond, another medium wave giant will soon go silent. A cornerstone to Canada's CBC Radio One network, CBA 1070 kHz in Moncton, New Brunswick, is scheduled to end its service on Monday, April 7th around 1130 UTC. Its transmitter is co-located with the facilities of Radio Canada International and has been on the air since 1939.

The physical transmitter currently on the air at CBA has its own history. It is the first all solid state 50,000 watt on the air made by Nautel in Nova Scotia serial number 1! Their site is ideal for clear channel medium wave broadcasting situated near the famous Tantramar Marshes.

Since January, CBA's transmissions are also being transmitted on 106.1 FM with 69,500 watts. This FM transmitter goes solo April 7th. The silence on 1070

kHz may not last long. The CBC's former AM outlet in Toronto, CBL on 740 kHz, has enjoyed a new life as a commercial station offering nostalgic

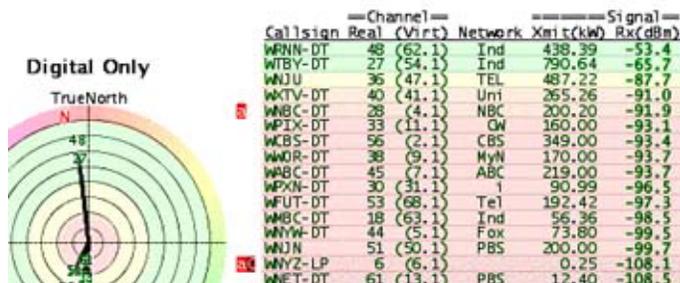


music known as CHWO "Prime Time Radio." 1070 kHz may have a similar fate.

Everyone Loves the Fool

TV Fool is the best tool to discover over-the-air TV reception at your QTH. It is an amazingly accurate diagnostic tool detailing exactly what you can pick up now - or - what you will be able to see post-DTV transition in February 2009. Just type in your address and antenna height and they do the rest! TV Fool will plot a map showing you the bearings of possible TV signals

from your location, readings of predicted signal strength and even the mode of propagation you can expect (such as line-of-sight, one or two-hop bending or tropospheric.) They also provide a Google Map plug-in for transmitter sites that will amaze you. It's free and it's fun! Try them at www.tvfool.com.



"TV Fool" web site predicts digital TV reception in Peekskill. Pay a visit to tvfool.com for the full picture at your own address.

What's That?

If you suddenly inherited another ham's shack contents, how would you know what everything is? If something happened to your shack, how would you remember all its contents? You might know very well what something is, but many might shake their heads! Take a few moments and inventory your gear sometime soon. Write down model numbers and serial numbers and a brief description of what the item does. Even better: Take a picture of your items or make a simple drawing of their face. Should something happen to you, or your home, finding your list would be a welcomed gift.

Net Night

Don't forget to join us Thursday nights at 8 pm for The Old Goats' Net on the two-meter PCARA repeater at 146.67 MHz, minus 600 kHz offset and a 156.7 PL. You'll hear an amazing assemblage of talent, humor and news and you can join the show just by stopping by! We would really enjoy your company!

Until next month, happy trails de N2KZ 'The Old Goat.'



Unhappy URL

If you are having problems reaching PCARA's web site, <http://www.pcara.org>, try this alternate address: <http://www.geocities.com/pcara2000>.

CW Skimmer

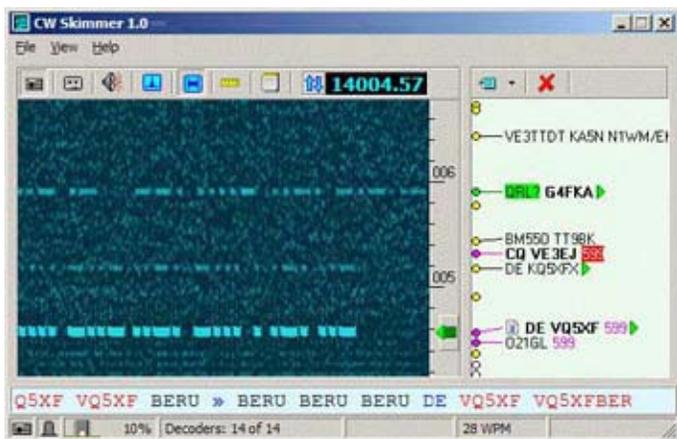
Did you ever tune across a pile-up with so many stations that you had no idea what was going on? Wouldn't it be nice to have a radio butler and tell him: "Jeeves – scan all those stations in the pile-up, copy what they are sending and give me a list of all their call signs."

Some weeks ago, Joe WA2MCR suggested I take a look at "CW Skimmer", a piece of software that the DXers are getting enthusiastic about. A few days later, I opened my March 2008 copy of *RadCom*, the journal of the Radio Society of Great Britain, and found an excellent review of the same program by Steve Ireland VK6VZ, who normally co-edits the *RadCom* column on software defined radio.

"CW Skimmer" is really intended for use with software defined radios that present a wide audio bandwidth to a computer soundcard for demodulation. But it can also be used with conventional radios, acting in a similar manner to soundcard demodulation of PSK31 and RTTY.

The point of CW Skimmer is that it decodes CW signals – but it does not just decode *one* signal. It will launch as many decoders as necessary to display multiple signals within the audio passband presented to it. The software has been optimized for DXpeditions and contests. If a DX station is working "split", transmitting on one frequency and receiving on another frequency several kilohertz up or down the band, then it is possible to watch the DX station — and identify the frequency of the station he is working. As CW Skimmer is decoding the Morse code signals, it looks out for call signs and signal reports, then displays these on the waterfall spectrum display.

The waterfall display moves from right to left, so the dots and dashes of morse code can be read by eye



Screen shot of CW Skimmer program in 3kHz mode. The RSGB Commonwealth Contest (aka BERU) was running at the time. The program has identified each station in the waterfall display, and is currently decoding VQ5XF at the bottom of the window.

from left to right. This lets you carry out your own decoding after the fact. Most of the time, this is not necessary – for the selected station, CW Skimmer shows continuous decoded text along the bottom of the window. For all the other stations, you can simply hover the mouse pointer over the decoder's indicator in the band map and the decoded text will be displayed. CW Skimmer automatically looks for keywords such as "CQ" and "DE" to decide whether the call sign belongs to the transmitting station then indicates this information on the band map.

To move a station into CW Skimmer's "filter", just click the corresponding signal in the waterfall display. Provided your computer is connected to the transceiver's control port (e.g. CI-V), the receiver will be tuned automatically, the signal is moved in to the filter area and the new receive frequency will appear top right in CW Skimmer's window. In order for this to work correctly, the radio must be tuned to the *lower* sideband. If you are tuned to upper sideband, the VFO will be moved in the wrong direction.

In my own test setup, I had the notebook computer connected to a Rigblaster Plug and Play from West Mountain Radio. The Rigblaster has a "Rig Ctl" jack for connection to my IC-706MkIIg. A special cable with mono-to-stereo 1/8" jacks is available from West Mountain for direct connection to the Icom's CI-V jack.

Before you ask... no, the CW Skimmer software does not have any provision for sending CW. All it does is receive, decode and display. But it does an excellent job of that. Just plug your own key or paddle into the transceiver's key jack and off you go!

To download a 30 day free-trial version of the CW Skimmer software, pay a visit to: <http://www.dxatlas.com/CwSkimmer/> .

- NM9J

Across the Bay

If you look back at radio history, back to the days of Marconi, medium frequencies, marine radio and amplitude modulation, there are lessons learned when radio was growing up that we can still benefit from today.

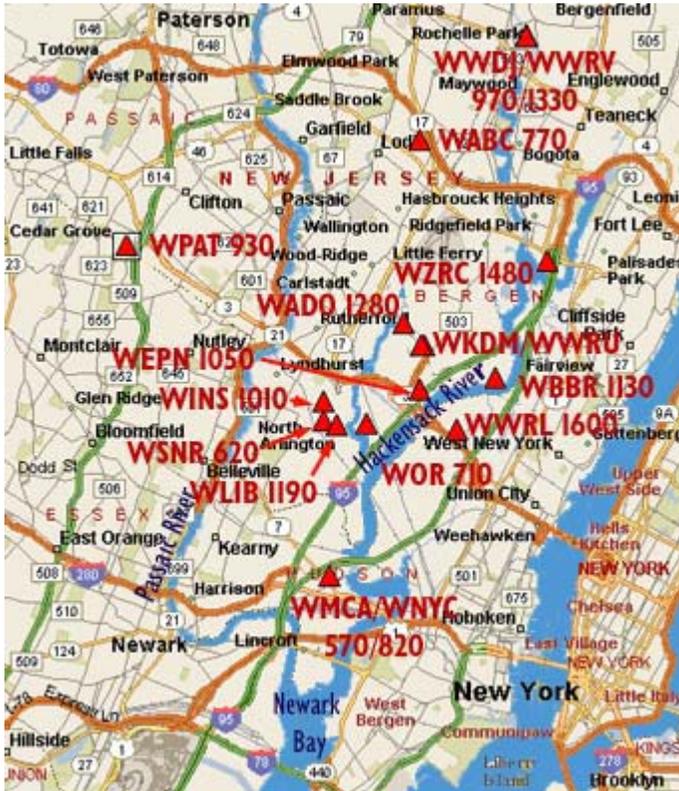
One lesson concerns the best location for a medium frequency (MF) transmitter. During the 1920s and 1930s, radio engineers began to find the best locations for MF transmitting stations. AM broadcasting takes a long time to change, so many of these locations are still with us today.

If you want to transmit a strong, vertically polarized ground wave signal on medium frequencies (300 kHz – 3 MHz), then a location with very good ground conductivity is a must. This will ensure an efficient, low resistance connection to ground at the base of the

antenna, and will also reduce attenuation of the ground wave signals as they travel away from the site. The very best locations are likely to be in low, swampy ground with lots of water around. Salt water is especially good because of its superior electrical conductivity. The worst locations for MF transmission are likely to be high in the hills, over dry, rocky ground.

You may know about some good MF transmitting locations already. One example in our area is the Meadowlands salt marsh of northern New Jersey, around East Rutherford and Lyndhurst, where the Hackensack River and Passaic River flow into Newark Bay. As previously documented in these pages by Bob, N2CBH there are **a lot** of AM stations located in this area, using vertical antenna arrays to beam their signals across the brackish wetlands, through Union City, across the Hudson River into New York City. (See *PCARA Update* for March 2003 where Bob describes his work at then-WEVD, 1050 kHz.)

Stations in the Meadowlands area include: WMCA



AM radio stations in the area of the New Jersey Meadowlands. This may be the greatest concentration of AM stations anywhere in the world.

530 kHz/WNYC 820 kHz (three towers, shared), WOR 710 kHz (new station with three towers, but in the area since the 1930s), WABC 770 kHz (single tower, in Lodi), WINS 1010 kHz (four towers), WEPN 1050 kHz (three towers), WLIB 1190 kHz (four towers), WBBR 1130 kHz (three towers + 1 tall tower) and WWRL

1600 kHz (four towers).

For the high power, clear channel stations beaming



The four towers of Bloomberg Radio WBBR, 1130 kHz, stand in a pond alongside the Hackensack River, east of Giants Stadium. Daytime transmissions from Carlstadt NJ employ the single, half-wave 435 ft tall tower; nighttime uses all four towers in a directional pattern. Photo acknowledgement: dsearls, flickr (<http://www.flickr.com>).

50 kilowatts east toward New York City and Long Island, the RF does not always stop at the borders. During the night, these stations are sometimes heard 3000+ miles away in Europe. This type of AM DXing was easier a few decades ago when European broadcast stations, spaced at 9 kHz intervals, would shut down after midnight, local time.

We'll follow those DX signals across the pond to the British Isles, where there is another example of medium frequency stations being located "across the bay". Let's take a look at AM radio in the principality of **Wales**. Coastal South Wales not only includes the Welsh capital Cardiff, but also the city of Swansea, home to the Driver and Vehicle Licensing Agency. These



AM radio stations covering South Wales are actually located "across the water" in England.



BBC West Regional twin-wave station at Washford, Somerset came on air in 1933, with antennas attached to these two 500 foot guyed masts.

cities' AM radio service comes from the other side of the Bristol Channel, from former BBC transmitter sites at Washford and Clevedon. The Washford Cross station opened in 1933, as part of the BBC's "Regional Scheme". This was a series of high power stations sited outside major cities, radiating two services – a regional program and a national program.

Washford began transmitting the West Regional Service on 804 kHz and the National program on 1149 kHz. These services were radiated from antennas attached to the two 500 foot masts. In 1937 the National Program was also available from the Droitwich transmitter on 200 kHz long wave, so this service was discontinued from Washford and a new Welsh Regional Program took its place. New stations at Clevedon near Bristol (1474 kHz) and Start Point on the south coast (1050 kHz) took over the West Regional service from Washford in 1939.

[Actually, in the 1930's nobody spoke about frequencies in kilohertz — if frequencies were mentioned at all, they were in kilocycles per second, kc/s.]

Nowadays, BBC Radio Wales is broadcast from Washford on 882 kHz with a power of 100 kW and BBC Radio 5 Live is broadcast from Clevedon on 909 kHz at 50 kW. Washford also radiates commercial stations Virgin AM on 1215 kHz and TalkSport on 1089 kHz.

In the past, the BBC services were *only* available on MF-AM, but nowadays Radio Wales is also available on VHF-FM (95.1/95.9 MHz), while both Radio Wales and Radio 5 Live are available on DAB Digital Radio, using frequencies around 220 MHz.

Incidentally, the recently revived classic TV series, *Doctor Who*, seen in the U.S. on the Sci Fi Channel and BBC America, is produced by BBC Wales. *Doctor Who*'s recent spinoff *Torchwood* is not only produced in Wales but is set in Cardiff as well.

- NM9J

Skywarn training

On April 23, Orange County Amateur Radio Club in conjunction with Orange County ARES/RACES will be presenting Skywarn training. A representative from the National Weather Service will explain how the Skywarn program of volunteer weather spotters provides severe weather reports to the NWS. The training will demonstrate how to identify severe weather features, and how to report these in a timely, accurate manner.

The training session take place on Wednesday April 23, from 7:00 p.m. to 10:00 p.m. at Munger Cottage, Riverside Park in Cornwall NY. Seating is limited and attendees are asked to preregister at http://www.erh.noaa.gov/okx/skywarn_form.html or by contacting Steve, N2UBP, e-mail: N2UBP 'at' arrl.net.



It was always there

- KL7AJ

At a recent Arctic Amateur Radio Club board meeting, during a rare lull in the oft-heated discussions about how best to increase our membership, I threw out a simple question: "How did you get into ham radio?"

The responses were revealing, to say the least. One by one, our board members, some young, some old, told the story of how they got into this hobby of all hobbies. One gentleman had a father who was a ham, and more or less forced him into the hobby, for which he was unspeakably grateful... years later, of course. One XYL saw a shortwave radio at a friend's house, started twiddling knobs, and got frustrated that she could only listen, For her, the rest was history. A couple of others were exposed to amateur radio in high school, one in Boy Scouts. Another credited me with getting him into ham radio, much to my gratification. One other confessed that he didn't really know; it just seemed to him that ham radio was "always around."

Interestingly enough, not one of the hams entered the hobby because of a concentrated recruitment program.

Although occasional public relations "Blitzkriegs" have their place in Amateur Radio, I'm not sure they produce lasting hams. Like many other clubs, we manage to get a lot of hams licensed, but the dropout rate is appalling.

The vast majority of our newly licensed hams never get on the air. I don't think our message is flawed; I think it's our delivery. Of all the board mem-

bers I mentioned above, I believe the last fellow, the one who said ham radio was “always around” had the key. We need to get back to the place where amateur radio is a continual, if quiet, presence. People who get lured into the hobby, stick with the hobby. People who get coerced and cajoled into the hobby leave as soon as we aren’t looking.

The fact is, most new hams never see a working ham shack, about all they see is a handheld, which isn’t all that fascinating. When a young person sees a ham shack equipped to cover everything from DC to daylight, they take notice... it doesn’t matter whether they’re a geek or not. I’ve never seen anyone who wasn’t impressed by a Moonbounce (Earth-Moon-Earth contact) array swinging around on its rotators... whether they had a clue what it was or not!

People don’t know about ham radio because they don’t see ham radio... except, perhaps at Field Day.

The best place to cultivate that “always around” feeling is in the schools. We need to infiltrate the middle and high schools again.

Notice, I said, again. There was a time, not too long ago, when it was difficult to find a high school without a club station. Field Day should be a three hundred and sixty five day a year event, and that is easier to achieve in the schools than anywhere else.



“Field Day should be a three hundred and sixty five day a year event.”

There is no better way to teach science than with ham radio. We need to remind our public (and private) school teachers and administrators of that. We need to let our students get their hands grubby making things happen, rather than merely watching things happen. We need to get some real hardware into the schools. We have wonderful new allocations now, and the technology to use them is cheaper and easier than ever. When I was in high school in the late ‘60s, it was everything one could do, and then some, to do Moonbounce. It was only because we had a lunatic (no pun intended) electronics teacher, that we were able to pull off such a stunt. Now, Moonbounce is practically within reach of any determined high school club station.

Wouldn’t it be great if Moonbounce stations proliferated at our high schools the way HF stations once did?

Of course, I only use Moonbounce as one radical example. We have exciting things happening down at 500 kHz, as well. What better way to learn weak signal, digital signal processing techniques than with our newly allocated MF experimental spectrum?

This all may be rocket science, but it doesn’t take rocket science to get it into the schools! Our teachers want to see us excel in the sciences. Let’s give them the tools to do so.

Fifty years from now, someone may be asked how they got into ham radio. It would be nice if they could answer, “I don’t know... I guess it was always there.”

- Eric P. Nichols, KL7AJ
President, Arctic ARC
E-mail: kl7aj ‘at’ arrl.net

Acknowledgments: *The ARRL Club News* and American Radio Relay League.

March meeting



Flashback to the March PCARA meeting when Bob, N2CBH described his work upgrading Chicago’s FM transmitters. Bob is holding an ERI Power Sensor assembly containing parts manufactured in Cortlandt by his company BDI, Broadcast Devices Inc.

Peekskill / Cortlandt Amateur Radio Association

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Web site: <http://www.pcara.org>

(Alternate address: <http://www.geocities.com/pcara2000>)

PCARA Update Editor: Malcolm Pritchard, NM9J

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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

Apr 6: PCARA meeting, Hudson Valley Hospital Center, 3:00 p.m.

Hamfests

Sat Apr 5: Cherryville RA Hamfest, N Hunterdon HS, Rt 31, Annandale, NJ. 8:00 a.m.

Sun Apr 13: Mt Beacon ARC Hamfest, Tymor Park, LaGrangeville NY. **9:00 a.m. Club Table.** (Note opening time!)

Sat Apr 26: Orange County ARC Spring Hamfest, Town of Wallkill Community Cntr, 2 Wes Warren Rd.,Middletown, NY. 8:00 a.m. **Club table.**

Sun Apr 27: Great South Bay ARC Hamfest, Fireman's Memorial Pk, Hartford St., Lindenhurst, LI, NY. 9:00 a.m.

Sat May 31: Bergen ARA Spring Hamfest, Westwood Regional HS, 701 Ridgewood Rd, Washington Twnshp, NJ. 8:00 a.m.

VE Test Sessions

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

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

Apr 13: Mt Beacon ARC Hamfest, Tymor Park, LaGrangeville NY. 9:00 a.m., Contact: Andrew Schmidt, (845) 297-4238.

Apr 18: Bergen ARA, Westwood Regional HS, 701 Ridgewood Rd, Washington Township, NJ. 7:00 p.m. Contact Donald Younger, (201) 265-6583.

Apr 26: Orange County ARC Hamfest, 2 Wes Warren Rd., Middletown, NY. 8:00 a.m. Contact: Ronald Torpey, (845) 783-1692



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