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May 2013

Fox in a box

My sources tell me that the Orange County Amateur Radio Club (OCARC) Hamfest on Sunday April 14, 2013 at the Town of Wallkill Community Center in Middletown, NY was very well attended in general, as well as in particular by PCARA members. One of our own – Henry, KB2VJP – won a raffle prize! Congrats Henry!



At the Orange County Hamfest on April 14, Henry KB2VJP draws attention to an item on the PCARA club table while Bob N2CBH and Tom AK2G look on.

The PCARA Foxhunt is quickly approaching on Saturday May 4, 2013. Karl, N2KZ a.k.a. *The Fox* has

spent some serious time scouting for a clever den. If past foxhunts in which Karl has played the fox are used as a reference, be prepared for quite an adventure!

N.B. - Be prepared for just about anything. Thinking "outside the box" is strongly advised.

The Bergen Amateur Radio Association (BARA) Annual Spring Hamfest will be taking place on Saturday May 25, 2013 at Westwood High School in the Township of Washington in



Foxhunt Rules are on page 4.

Bergen County, NJ. If anyone is interested in PCARA taking a table, please let us know at the May meeting.

PCARA's Field Day 2013 on the weekend of June 22 - 23, 2013 at Walter Panas High School in Cortlandt Manor, NY will be the topic of serious discussion at May's meeting. If you are interested in participating, please come and share your ideas and suggestions.

Our next regularly scheduled meeting will be Sunday May 5, 2013 at 3:00 pm at Hudson Valley Hospital Center in Cortlandt Manor, NY. I look forward to seeing each of you there.

- 73 de Greg, KB2CQE

PCARA Officers

President

Greg Appleyard, KB2CQE, kb2cqe at arrl.net Vice President:

Joe Calabrese, WA2MCR; wa2mcr at arrl.net

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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 news and neighborly information.

Adventures in DXing

N2KZ

Fox around?

You are cordially invited to join the PCARA for a radio direction finding foxhunt on Saturday, May 4th starting at 3 pm. Fellow hunters will assemble at the Beach Shopping Center on Route 6 in Peekskill just west of the intersection with the Bear Mountain Parkway at about 2:30 pm. You don't need a ham license. This is a listening event and the hunt is free!

The hounds will be easy to spot. Look for Radio Shack and the CVS Pharmacy in the west end of the shopping center parking lot. Malcolm, NM9J, will serve as our M.F.H. (Master of Fox Hounds) and register you at the site. Along with Malcolm should be several people comparing their Yagi antennas, attenuation gadgets and detailed maps of Westchester readying for the chase. Everyone waits for the first fox transmission at 3 pm. Get a quick bearing with your antenna and



Karl and Sarah will be foxes trying not to be seen – on Saturday May 4.

where we are! Your job is to find me!

The official PCARA fox frequency is 146.565 MHz FM simplex. Any receiver will do! A directional antenna is preferable, but you can achieve great results just by being persistent. We will hit the air at 3 pm with a nice, long five minute transmission. After you are off and running, we will be on the air for three minutes then silent for seven minutes to allow you to reach a new location. We won't stop until 4:30 pm or whenever all participants will find the fox!

The chase can be quite electric. Often, the winner arrives only seconds before other competitors. You'll have lots of fun and have a memorable ride! At the end of the hunt, everyone is invited to a local restaurant to enjoy a tasty meal, see the winner certificates awarded and exchange all the details of your foxhunt adventure with your fellow hounds. The rewards can be great! The person that first discovers the fox becomes the fox for the next hunt! A wonderful time is guaranteed for all! Please join us!

Going to Church

What might be the ultimate experience for someone who loves Morse code? A high-seas steamer trip as First Radioman? A summer internship as a railway telegrapher? A job at a Western Union office

back in the early 1900s? How about sending code from the outdoor porch of Mr. Morse himself?

you are off

where out

(that's me)

transmitting

periodically

location

corner. I

from a remote

nested away

in the wilder-

ness. I might

be on a street

might be in a

parking lot of

center. I might

might be far.

It's up to you

to discover

a shopping

be near. I

will be

and running!

there, the fox

Some-

I am happy to report that some wonderful dreams can come true. This past Saturday, April 27th, the nearby QSY Society sponsored a special event station operating from



Erecting a 17 meter Delta-loop antenna for the Morse celebrations at Locust Grove.

Locust Grove, the historic Morse estate along the Hudson River in Poughkeepsie. Thanks to Stan, WB2LQF, a grand group of about 30 hams had the opportunity to gather together and send code on the old man's porch. It was a perfect sunny day with temperatures of about 60 degrees and a spectacular view of the surrounding gardens and Hudson River Valley.

Three stations operated exclusively on CW with the special event callsign of W2M. A beautiful Elecraft K3, with a matching sidecar spectrum analyzer held court on 40 meters with 100 watts into a sloper. An Elecraft K2, at about ten watts, was fed to another sloper and a second K2 operated on 17 meters feeding its ten watts into a nifty delta loop. Plenty of traffic passed through those wires.

I concentrated on 17 meters, a WARC band I am never on. The activity was remarkable. We heard a

station in Greenland holding court right around our selected operating frequency, so we moved down a bit. One of our best catches was V44KAO operated by



20 meter station for the Samuel Morse birthday celebrations at Locust Grove, Poughkeepsie.

Oliver down in St. Kitts in the Caribbean. He had a huge signal into us with a solid fist. What a great moment. Conditions were better than average. The three stations worked all over America, into the Caribbean and we even touched base with places like Sweden. Another

interesting

development was the attendance of quite a few 'tourists.' I met someone named Mike and his wife who had been a ham about 30 years ago and didn't think there was any interest in CW anymore. We changed his mind! My 89 year old buddy, Finn, WB2UWU, once again brought along his Ten Tec mini CW QRP rig and operated using a whip antenna from the porch steps. This is a clever move! Finn can attend the event and get into the W2M log books all at the same time.

Stan, WB2LQF, thought of everything and did a remarkable job producing the event. He brought along three tall extendable masts to send the antennas high into the air. Stan's collection of museum quality keys was a sight to see. I operated one of Stan's rugged straight keys. It must have weighed about 20 pounds (or so it seemed!) My trusty Ameco K-4 straight key paled in its presence. The frosting on the cake was the stunning QSL card, to be sent out to the lucky ones

who worked W2M. What a memorable day! Many thanks to all at the QSY Society for another truly special event!



Goodbye to Glass

I have worked as a broadcast engineer for decades. Technology changes rapidly and things never stay the same. One thing has been constant since the beginning of television: glass picture tubes. They are often called by their formal name: cathode ray tubes or simply CRTs. Could the world of television exist

without them?

TV has always been big business and successful businesses rely on an influx of capital. It is essential to present your business as being vital and at the cutting edge of the state-of-the art. Imagine the horror seen during a recent executive tour as they noticed glass monitors still in service everywhere they went! Even worse, some utility monitors were still in black and white!! As an engineer, we pride ourselves in maintaining almost endless longevity with everything in our domain. The news we heard recently was hard on our ears!

It reminded me of an angry king venting steam! "Off with their heads!" he might say. The edict came down from our senior management above: "All glass monitors must go!" Seeing old-fashioned CRTs might

be construed as a sign of antiquity and poor upkeep. We must be modern! Bring on the flat screens! Keep our corporate worth high in the eves of investment capitalists!

This next month will be filled with melancholy. All our beautiful glass monitors, producing the sharpest and cleanest images, will be



A collection of unwanted and unloved Sony CRT monitors awaits its fate.

replaced by inexpensive flat monitors. There is no reason for this! It's only for show! Unfortunately, the show is everything in TV. Our company needs to keep its value high to maintain its dominant status.

From this day forward, I'll have to go home to see a glass CRT. In time, as the phosphors fade from their screens, so will my memories. Just like the transition from analog to digital audio recording media, flat screens are here to stay. People still like

vinyl records so maybe there will be a renaissance for glass CRTs! I still love the look of old-fashioned light bulbs. Will I be phased out, too?

Enjoy the spring and make sure you join us for the foxhunt! - 73 es dit dit de N2KZ The Old Goat.



PCARA Foxhunt Rules

Saturday May 4, 2013

- 1. Transmission: FM simplex on 146.565 MHz, horizontally polarized.
- 2. Transmissions start at 3:00 p.m. for 5 minutes, followed by 5 minutes off. Second transmission



commences at 3:10 p.m. 3 minutes on, 7 minutes off. The fox will not move during this time. This cycle repeats at 10 minute intervals until the last transmission ends at 4:30 p.m. when the fox will announce its location.

- 3. The opening transmission will include a time check for watch synchronization.
- 4. All contestants who wish to be eligible for a

prize must book in at the **Beach Shopping Center car park***, in Peekskill before the start. Contestants will count as one team if more than one person occupies a car. (i.e. if three in a car, they don't get first, second and third prize.)

* near Radio Shack and CVS.

- 5. No contestant is allowed to move his/her car until the end of the first transmission, so take your time with the first bearing and make it a good one. The transmission will be audible from the start without a super-sensitive receiver.
- 6. Radio silence will be maintained by all contestants on all frequencies from the first to the last transmission.
- 7. No excess mileage penalty will be incurred but all contestants are reminded at all times to stay within the law and observe speed limits, parking restrictions etc.
- 8. The fox will be hidden not more than 5 miles from the start. The location of the fox will not be on property which is inaccessible by car.
- 9. Upon a contestant finding the fox, please do not shout or in any way give the location away to other

contestants. Report your name/callsign to the fox and retire to the place of refreshment immediately. This will ensure that other contestants do not discover the fox because a group of people is hanging around nearby. It is requested that you maintain radio silence even though the fox has been found and the fact that you have found the fox should not be revealed to anyone until the place of refreshment has been reached.

- 10. The first competitor to locate the fox and positively identify him/her will be presented with a certificate. This competitor will be invited to assume the role of fox for the next foxhunt event.
- 11. Competitors should convene from 4:30 p.m. at the place of refreshment, which will be announced on-air by the fox.

Rules adapted from Bury Radio Society Fox Hunt – Malcolm, NM9J

BaoFeng transceiver

At the April meeting, Greg KB2CQE demonstrated the BaoFeng UV5-S FM transceiver. The UV5-S is similar to BaoFeng's earlier UV5-R VHF/UHF transceiver, but with a shiny metal speaker grille in place of the black plastic. Main selling point of this latest export from China is the low price, around \$40.00 in bulk.

Greg points out that this radio has dual-band simultaneous receive, with coverage of 136-174 MHz VHF and 400-480 MHz UHF. The dual-frequency LCD display has a choice of backlight color. Transmit power is 4 watts out, with additional outputs including a flashlight and an audio alarm. Built-in voice announcements are in US English. The radio comes with a mini-CD of programming software, and a stock antenna, which Greg replaced with a



BaoFeng UV5-S FM transceiver.

Diamond RH77CA for improved performance.

These radios are available online from vendors such as DHGate.com and the 409 Shop in Hong Kong.

Stryker radio - w2CH

After reading about 10 meter mobile transceivers, some of which include out-of-band CB capability, I decided to seek out the Stryker SR-955HPC, which appears to be the top model. It is normally rated at 60 watts for SSB, and also has the AM and FM modes encountered on 10 meters, though AM is more suited for CB.

There are reviews on YouTube which demonstrate the SR-955HPC and state that it is well-constructed. Normal selling price is around \$375 to \$379, and I tried to obtain one from dealers catering to the CB market. However, all of them were out of stock. I then checked eBay, and a dealer, J.R.'s Radios in Eden, NC had a number available. This dealer charges about \$100.00 more than the others, but states that their model has an output of 100 watts, and has been custom-tuned in their shop – "for high performance output, and enhanced receive levels."



Stryker SR-955HPC with green backlight [photos by W2CH]

The unit is attractive and looks like an expanded CB radio. It has CB features such as Echo, Roger Beep, Talk Monitor and PA if you want to use them. The main controls have knobs and switches on the front panel, with further menu choices available through the function button, displayed on the combined SWR/PWR/Signal meter, in the space where "SR-955HP" appears. The display color can be changed from the menu and can even be set to cycle through the colors.

The transceiver comes with a DC power cord, programming cable and microphone, but without programming software — that is available for download from the Internet. The telephone number in the User's Manual is listed as "910-221-1086 between the hours of 10 a.m. - 5 p.m. Eastern standard time". Area code 910, Exchange 221 is in Fayetteville, North Carolina. However no address of the manufacturer is given in the manual or on the unit. Maybe if one calls that number for an RA number for repair, you might find out where they are located. The unit has a three year warranty from the manufacturer, with registration by completing a card, or online at http:// www.strykerradios.com. I have not found a listing of the specifications — which are usually supplied for most amateur radio equipment.

There is a heat-sink in the back of the transceiver, a DC power jack for the power cable and a data jack

for the programming cable. There also is an external speaker jack and a CW key jack, which I have not

investigated as this transceiver does not have a specific CW mode. It does show a CE 0700 Mark on a sticker on the heat-sink and there is a silver "Do not tamper" label on the side of the chassis case. (Ed - the CE Mark means "Euro-



Close up of the LCD display with S-meter, Power and SWR meters plus dot matrix display for readout of settings.

pean Commission", while 0700 = tested by Notified Body 0700 = Phoenix Testlab GmbH, Germany.)

The radio can be tuned by "Band" (bands 1-10) or by "VFO" to move continuously up and down the bands. One band setting will give you the 40 CB channels with number and frequency. It also has

programmable memories like most amateur transceivers, which I have not yet investigated. To tune in VFO mode through the entire 10 meter amateur band takes a lot of manual twisting of the



Stryker User's Manual is a slim volume.

frequency knob, which is a bit cumbersome, compared to a conventional VFO tuning knob.

While the SR-955HPC can tune the higher 10 meter frequencies for amateur FM repeaters, I have not seen how to perform the -100 kHz offset required for repeater operation. There is a "TSQ" switch to turn on PL tone for repeaters, but the CTCSS unit is optional and I will need to contact the dealer for more details.

My first QSO on 10 meters this month was with a CU station in the Azores Islands on SSB. So it does work! I have only listened to the CB band, which is mostly still on AM mode.

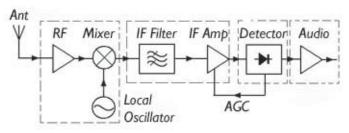
- Ray, W2CH

[Ed - Part of the attraction of these radios may lie in their ability to be modified for non-type-approved, 'extended frequency' transmit operation on USA CB frequencies. **Don't be tempted into illegal use!**]

Hello LO radiation

A recent article in UK magazine *Practical Wireless* triggered thoughts about a topic we don't worry about much nowadays – that's local oscillator (LO) radiation.

In the superheterodyne receiver, invented by Howard Armstrong in 1918, the incoming signal from the antenna is mixed with a locally-generated carrier in a non-linear **mixer** stage. The result is a set of signals on additional frequencies, mainly consisting of sum and difference products of the two input signals. This mixture of signals is sent through a filter to isolate the desired mixing product, then amplified. Armstrong's superhet provided a receiver design which can be tuned to a range of different input frequencies, while having most of its amplifier gain at a single frequency.



Superheterodyne receiver block diagram.

MF and shortwave receivers using the superheterodyne principle would normally mix incoming signals in the range of 1 - 30 MHz down to a lower frequency, for example 455 kHz or 470 kHz. It is easier to provide a large amount of stable gain at a single, low frequency such as 455 kHz – in contrast with the TRF (tuned radio frequency) design, where multiple high frequency amplifiers have to be re-tuned every time the incoming signal frequency changes.

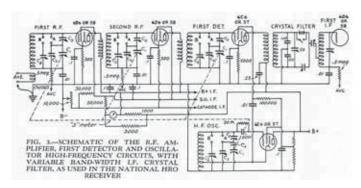
Vintage whine

The "Valve and Vintage" column by Phil Cadman, G4JCP in the April 2013 issue of *Practical Wireless* mentions the National HRO receiver. This 1935 design for radio amateurs was produced in the thousands



National HRO HF communication receiver.

during World War II and was still being used in the early 1960s by David Penny G3PEN, for professional monitoring of radio transmissions. As an example of the HRO's frequency mixing process, if the set was receiving a signal on 7.000 MHz, then the local oscillator would be running at 7456 kHz, producing an intermediate frequency signal at 456 kHz. Even though the National HRO receiver has *two* RF amplifier stages between the antenna input and the mixer stage, local oscillator radiation was still strong enough to cause



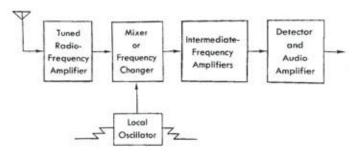
Schematic of HRO receiver front end, with two RF stages.

interference with reception of BBC Television on channel 1 (vision carrier 45.0 MHz). This was most likely caused by a *harmonic* of the LO frequency, rather than the fundamental. The solution described by G3PEN was simply to supply the receiver with a much lower high tension (B+) voltage, reducing the power fed to the local oscillator tube.

This tendency for receiver local oscillators to radiate is hardly a secret. As a youngster, I remember using the local oscillator of an AM radio receiver to interfere with a second AM receiver nearby, and to provide BFO injection for an AM-only receiver in order to receive SSB and CW on 160 meters.

Central intelligence

Local oscillator radiation can be a problem for military and intelligence agencies. If you are conducting a stealthy operation, you do not want to reveal your location by using a receiver with a leaky local oscillator. This paragraph is from a de-classified article on the CIA's web site "Agent Hazard in the Super-Het".



"It is the local oscillator that creates the hazard; it is in effect a low-power transmitter. Although its signal is intended only for the mixer, a portion of it, if power is excessive or the receiver otherwise poorly designed, is radiated outside the receiver. A portion may also be introduced into electrical power lines if the receiver is plugged in or even close to them. It may therefore be possible to detect it at some distance with an intercept receiver using either an antenna to pick up the radiation or a coupling to the power lines."

British leaks

This situation was exploited by the British security services in the 1950s, as described by former MI5 officer Peter Wright in his 1987 book "Spycatcher".



In 1958,
Peter Wright
became
convinced that
MI5's "watchers" — who
tailed foreign
diplomats in
London —
were themselves being
monitored by

the Russian embassy. Wright obtained a list of electronic equipment that the Russians had imported or purchased, then assessed whether it could be used to monitor the VHF mobile radios used by the British "watchers". He calculated how far away the local oscillator in the Russian's receiving equipment might be detected — up to about 200 yards was the distance for the tube-powered equipment of the time.

Peter Wright then arranged for a monitoring van equipped with two receivers to be driven past the Russian embassy in Kensington Gardens and to the Russian Consulate in Bayswater Road. There he detected an RF emission whose strength peaked at the address of the Russian Consulate. Wright was able to confirm that this emission was coming from a receiver in the Consulate that was monitoring the watcher's VHF frequency. By accident, a

UK mobile radiotelephone, vintage 1958. Pye "Reporter", PTC 116/7 was a tube transceiver with 1.0-2.5 watts VHF AM power output.

"watcher" vehicle drove past the other way, and made a transmission to base. The powerful mobile transmission overloaded the Russian's monitor receiver, pulling the local oscillator off-frequency. This distortion of the LO frequency was heard by Peter Wright, and opened up a new way to monitor Russian activities inside their own premises.

Wright arranged for watchers' radios to have new crystals fitted, moving them to a different transmit frequency. By monitoring local oscillator frequencies, Peter Wright was able to tell that the Russians were monitoring the watcher's new channel, this time with a receiver in the Embassy at Kensington Gardens.

When I lived in the UK, I once walked the length of Kensington Palace Gardens, past the many foreign embassies that line this leafy street on the west side of Hyde Park and Kensington Gardens. At the time, these embassies had a magnificent collection of HF antennas on the roof, usually a log periodic beam or a broadband wire-cage dipole. This street also leads past Kensington Palace, one-time home of Lady Diana, Princess of Wales.



Impressive embassy antenna.

Later on, Peter Wright used similar techniques of monitoring local oscillator radiation from the Russian embassy receivers to discover which **HF** frequencies were in use for circuits from Moscow. The same technique almost led to the interception of a mobile agent in the London suburb of Clapham, while the agent was receiving HF Morse code transmissions from Moscow.

What are you watching?

Detection of local oscillator radiation has a more down-to-earth application in the United Kingdom. Unlike the USA, television viewers in Britain have to purchase a license in order to watch TV. The annual license fee, which is currently £145.50 for color, pays for the BBC's commercial-free radio and television services.

In order to enforce the requirement for a TV license, the UK Licensing Authority is supplied with details of new TV purchases and rentals by electronic dealers. When I was in the UK, the authorities had a fleet of "TV Detector Vans" equipped with roof anten-

nas and sensitive receiving equipment. If the Licensing Authority believed a TV set was being used inside a home without a license, they could dispatch a detector



UK Television Detector van, vintage 1968. The roof-mounted antennas were designed to pick up local oscillator radiation from a TV's UHF tuner.

van, which then searched for signs of local oscillator radiation from the TV set's front end tuner and measured the frequency. During my time in the UK. I can remember cases of unlicensed TV sets being

reported in the local newspaper, with the Post Office personnel being able to specify which channel the TV set was tuned to, and at what time.



Infomercial broadcast by the BBC in the 1970s depicted an engineer inside the detector van homing in on an unlicensed TV set —

ENGINEER: "Yes, there's a TV set at No 5. It's in the front room. And they're watching Columbo."

VOICE-OVER: "If you don't have a TV licence, it won't take us long to find you."

That was then, this is now

Bringing the picture more up-to-date, the BBC's R&D Annual Review for 2001-2002 gives the following description of their more modern equipment:

Protecting the BBC's Income

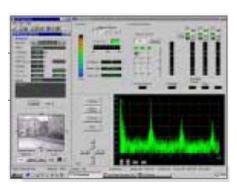
Licence fee evasion in Britain continues to fall due to improvements in detection methods, combined with media publicity to ensure that evaders recognise the risk of being caught. Evaders are tracked down with the help of handheld detectors and a fleet of detector vans, using a

national database of licence holders.

We are just completing a project to develop and document to production standard a new generation of van-based detection equipment. We have investigated a wide range of methods and chosen for development those which proved quickest and most accurate, with a view to minimising the time spent by a detector van at each target site.

The new equipment is controlled by a computer, which presents a very user-friendly interface to the operator. The detection results and all relevant data are recorded automatically. We have added a satellite-based live map navigation system which helps minimise the time spent travelling between sites, as well as an automated database showing receivable transmitters at the van's location. The equipment can show which transmitter is

being received, and which channel is being viewed. The van will be in frequent contact with TV Licensing Unit's database to check whether the viewer has a current licence. All of the equipment is contained within the van without exterior aerials. This offers the choice of covert



TV detection display screen. The graph shows the TV line frequency and its first two harmonics.

operation, or alternately of high-profile operation simply by emblazoning the van with an appropriate logo.

We are working with BBC Technology to produce a fleet of vans with the new equipment; meanwhile, the development and testing of a further detection method nears completion.

Portable detection equipment includes a handheld magnetic detector designed for use where van access is impracticable, and a shirt-pocket equivalent for covert operation.

Neighborly radiation

I have a couple of experiences of my own regarding LO radiation. One dates back to the UK, where I had a home close to the top of a hill in Rochdale and I was frequently monitoring the two meter band for weak SSB signals, around 144.2-144.5 MHz. From time to time I would find a strong carrier, which would peak up on the beam antenna in the direction of my next door neighbor. Listening carefully to this carrier revealed very weak, bass-heavy modulation, corresponding to one of the BBC's FM services. My interpretation of this was — my neighbor's FM radio receiver probably had the LO running below signal frequency,

and the harmonic was falling into the two meter band. This free-running oscillator was then being pulled by voltage fluctuations or by audio feedback to follow the audio of the received signal.

Poor man's signal generator

Have you ever needed a signal source to tune up a VHF/UHF receiver or a preamplifier? Perhaps you did not have a calibrated signal

generator for the band of interest. But if you have a VHF/ UHF scanner, then your problem might be over. Modern scanners have a superheterodyne design with the first IF on a frequency such as 10.695, 10.8 or 10.85 MHz. So try tuning the scanner to a frequency which is either above or below the frequency of interest by the IF and check on a working receiver whether you are successful. For example, my PRO-23 handheld scanner has a first IF of 10.800 MHz. So if I want a signal on 146.520 MHz, I just tune the scanner to 146.52 - 10.8 = 135.720 MHz.This frequency is in the AM air band and the nearest discrete scanner frequency is 135.7250. Tuning the scanner there produces a good strong carrier from the LO on 146.525 MHz.

One of our local firehouses must have had a scanner running continuously because driving past produced a regular opening of the squelch on our two meter repeater output. Has anyone else heard this? (Hint — it's on Route 9.)



Radio Shack Pro-23 VHF/ UHF scanner.

- NM9J

OCARC Hamfest Pics

As mentioned by PCARA President KB2CQE on the front page, the Orange County ARC Hamfest was held on Sunday April 14 at the Town of Wallkill Community Center in Middletown, NY. The fine, if rather cool, weather and lack of nearby hamfests in April led to a very good attendance. PCARA saw many old friends looking in at the club table. Here are some more photographs from the event.



Mike N2EAB points out a desirable piece of equipment to Jim N2KLC (right) with Bob N2CBH in the middle.



Ray W2CH and Marylyn KC2NKU made the journey from White Plains.



Your editor, gainfully employed manning the PCARA Club Table. [Pic by W2CH]

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 448.725MHz -5.0, PL 107.2Hz

PCARA Calendar

Sat May 4: PCARA Foxhunt, starts 3:00 pm from 'The Beach' shopping center.

Sun May 5: PCARA monthly meeting, Hudson Valley Hospital Center. 3:00 p.m.

Hamfests

Sat May 25: Bergen ARA Spring Hamfest, Westwood Regional High School, 701 Ridgewood Road, Washington Township, NJ. 8:00 am.

Sat June 1: Southern Berkshire ARC Hamfest, Goshen CT Fairgrounds, 116 Old Middle St, Goshen CT. 8:00 am

Sun Jun 2: LIMARC outdoor Hamfair, Briarcliffe College, 1055 Stewart Ave., Bethpage, NY. 9:00 am.

VE Test Sessions

May 4: Yonkers PAL Ham Radio Club, 127 N Broadwy, Yonkers NY. 2:00 pm. Contact: M Rapp, 914 907-6482. May 5: Yonkers ARC, Yonkers PD, Grassy Sprain Rd., Yonkers. 8:30 am Contact D Calabrese, 914 667-0587. May 9: WECA, Westchester Co Fire Trg Cen, 4 Dana Rd., Valhalla, NY. 7:00 pm. S. Rothman, 914 831-3258. May 20: Columbia Univ VE Team ARC, 2960 Broadway, Columbia University, 115 Havemeyer Hall, New

York, NY. 6:30 pm. Alan Crosswell, 212 854-3754.



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