



PCARA Update



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Radio revival

On Saturday March 31, 2012 at the Orange County Amateur Radio Club's Spring Hamfest, PCARA Update Editor-in-Chief Malcolm Pritchard, NM9J was presented with a plaque commemorating the ARRL Hudson Division Best Division Newsletter 2010. The award was presented by ARRL Hudson Division Director Joyce Birmingham, KA2ANF. Also in attendance was ARRL Hudson Division Vice Director William Hudzik, W2UDT. **Well done Malcolm! Congratulations!**



Presentation of the plaque for 'Best Division Newsletter 2010' by Joyce KA2ANF at the Orange County ARC Hamfest, March 31, 2012, with W2UDT at left and NM9J at right.

PCARA had a club table at the Mount Beacon Amateur Radio Club (MBARC) Hamfest on Sunday April 29, 2012. The weather was bright and sunny, with lots of activity in both the indoor and outdoor areas. Several PCARA members came by to place items on the club table and to meet up with old friends. This was an excellent way to spend a Sunday morning.

We have a busy couple of months coming up! The PCARA Foxhunt revival is on Saturday May 12, 2012, details and rules for which will be available at the May 2012 monthly meeting [and in this newsletter - Ed.] Field Day 2012 is on the weekend of June 23-24, 2012. We will also be discussing and planning for this in earnest at the May meeting.



Meeting up at PCARA's club table during the Mt Beacon Hamfest on April 29 were: Lovji N2CKD left, Greg KB2CQE right and their instructor from the recent Extra Class, WECA training director Larrie W2UL.

Our next regularly scheduled meeting will be Sunday May 6, 2012 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

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Greg Appleyard, KB2CQE, kb2cq 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

Heaven

You can find ham radio heaven. It can happen to you. It happened to me! I was talking to Henry, KB2VJP, on The Old Goats Net. Henry told me ‘You know, The QSY Society is running a special event station at Locust Grove this weekend’ and suggests I get in touch with Scott, W2NTV, who is arranging the affair. Right after the net, I dropped Scott an e-mail and courageously asked ‘Any chance I could operate?’ The answer was enthusiastic: ‘Yes!!!! I insist you show up! The world is waiting, Karl. Let’s do this!’



The 200 acre Locust Grove Estate in Poughkeepsie, NY was home to Samuel Morse.

For any dyed-in-the-wool CW aficionado, Locust Grove is a holy site. It is where Samuel F.B. Morse lived with his family in his later years. Travel up Route 9 to just south of Poughkeepsie. The Morse estate sits high atop the eastern bluff along the Hudson River. You’ll find an informative visitor’s center on the grounds displaying old telegraph gear, some of Morse’s classic portrait paintings and other memorabilia. The views of the Hudson Valley are truly spectacular aided by stunningly beautiful gardens. To see everything could take hours! Sample the beauty at: <http://www.lgny.org/>.

Scott set some ground rules: ‘I need as many CW operators as possible. Only bugs or straight keys. No paddles! I need as many ops as possible. If you can operate for half an hour – great! If you can operate for an hour – even better! Just come and have fun!’ I didn’t need any more incentive than that! I never use anything but straight keys! Sending Morse Code from Mr. Morse’s estate? Amazing. Wow. It’s time to celebrate the Morse Code!

Saturday morning, April 14th was a beautiful day. The temperature was in the mid 60s and wispy clouds floated high accessory to a deep blue sky. I arrived just after 10am and was greeted by a couple of fellow hams: Finn WB2UWU and Stan, WB2LQF with his chihuahua. They happily escorted me to the station already in action right up on the porch of the great man’s house. It doesn’t get better than this!

The QSY Society was granted a special event callsign K2QS (as a tip of the hat to ‘QSY.’) I never knew that the FCC and ARRL will not assign callsigns that include often-used Q-signal jargon. You’ll never ever hear a K2QSY, only K2QS! The station was simple and very sweet. On a fold-out picnic table was a nearly brand new Icom IC-756 ProIII with matching power supply. Out in the nearby trees and lawn was an inverted V for 40 meters and a vertical for 20 meters. The world awaits!

The QSY Society knows how to set up a station! I sat down in the operator’s position and sent CQ on 14.034 MHz. Immediately, a reply from a W7 in Washington state came back to me with a huge signal. I say to myself ‘So this is what 100 watts is like!’ Stations just rolled in on 20 meters. I was using a seasoned J-38 straight key that looked like it had some decent mileage on it. The feel was wonderful. This is living!



Karl, N2KZ operates the QSY Society’s Morse special event station from the terrace at Locust Grove.

Later, we switched down to 40 meters and worked KM1CC, the Titanic memorial station on Cape Cod on 7.030 MHz. Several other stations came in as we rolled up to 7.034 MHz. Operating from the Morse porch was sweet. The views were spectacular. The company was great – surrounded by enthusiastic hams, lots of straight keys and bugs and fascinating conversations about operating and CW. I could easily

do this every Saturday morning!

I shared the key with friends old and new. Keeping the airwaves warm were Stan, WB2LQF, Nick, N2QZ, Finn, WB2UWU, Scott W2NTV and Mark WA2NYY among others. The keys available were very interesting. There were a couple of military surplus J-38s, a very big and strong replica of a genuine Morse key with really bright and shiny chrome, an interesting bright brass bug that sat vertically instead of horizontally (it reminded me of a pendulum) and many more. I brought a couple of KOBs from my collection (Keys On wood Boards:) An Ameco K-4 and a Navy Flameproof. Just before I left, I received the finest comment I could ever wish for: 88 year old Finn, WB2UWU, said to me "You are a good operator." This was better than



Finn, WB2UWU operates the key at the Morse special event station K2QS.

passing any 20 wpm code test! Thank you, sir! You can enjoy watching Finn working a long haul QSO from the porch at: <http://www.youtube.com/watch?v=I1T6GWUFsVE>. (Finn used a Ten Tec QRP rig to work Mark just a few feet away from him! Great fun!)

The QSY Society is an admirable group of diverse hams who certainly know how to enjoy our hobby. Check out the club website at: www.qsysociety.org and Scott's web site at: w2ntv-qsy-cw.blogspot.com. They hold a CW practice net nearly every night at 9pm on 144.050 MHz simplex. Their monthly meeting is on the first Tuesday night of the month at The East Fishkill Community Library, 348 Route 376 in Hopewell Junction. Join the fun!

Be Foxy!

After a very long wait, the PCARA fox will soon be out of the bag! Please join us on Saturday afternoon, May 12 at 3 pm for a foxhunt to remember.

Mike, N2EAB and Joe, WA2MCR will be hiding somewhere out there as we start the hunt from the Beach Shopping Center in Peekskill. Bring your Yagis or other directional antennas, attenuators, handheld HTs, a really good map and whatever else aids you! Beware! The first group to find the fox will become the fox for the next hunt!

Now what?

You've studied like crazy and earned your Technician license. You saved all your spending change to afford your first HT. You reached a couple of local repeaters and made a few contacts. Now what? There has to be more than this! Well, there is... and here's how!

Make the most of your HT. Try operating simplex. No repeaters are necessary! You transmit on the same frequency you listen on. This method of making a contact adds a new level of difficulty and satisfaction. Your HT probably produces only five watts or less employing just a rubber duck antenna. Being heard, at a distance, requires more skill and probably a better location. Look for a perch that is high and away. Put your power where it belongs: Build yourself a directional antenna. Know your frequencies: Learn where other people may be listening.

In the world of two meters (144-148 MHz) and 70 centimeters (420-450 MHz,) height is everything. Take your HT along with you everywhere you go and try out different locations. Two wonderful locations are the peak of Bear Mountain at the top of Perkins Drive and the amazing fire tower high atop Ninham Mountain in Carmel. Both are easily accessible complete with memorable views. Don't forget your camera! Bring your HT to these summits and you will be able to work stations far and wide. You'll be amazed at the distances you can reach when you are up there!

Some hams find great adventure up high. For some inspiration, take a look at The Summits on the Air club (<http://www.sota.org.uk/>) and the many videos of Steve, WGOAT and his pet goats Peanut and Rooster at <http://www.youtube.com/user/goathiker>. There is no limit to the fun you can have and get yourself in shape at the same time! Find your own peak and let us know when you'll be up there! We'll be glad you did!

The most active places to look for simplex activity



Take your HT along with you.

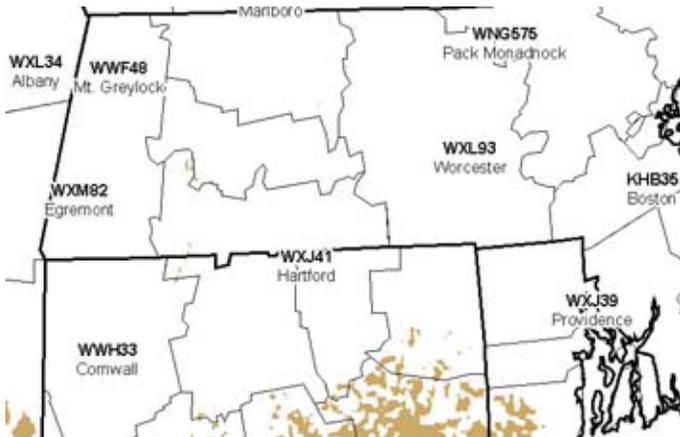




in our area is the national simplex calling frequency 146.52 MHz and another simplex allocation: 146.58 MHz. You'll find foxhunts going

on occasionally on 146.565 MHz. Remember the third harmonic of this frequency at 439.695 MHz. When you get really close to the fox, you'll be able to hear them on the harmonic as you find your way through the last few hundred feet of your quest. Also look at 147.555 MHz where you can hear the code practice broadcasts of the ARRL's W1AW transmitting from Newington, Connecticut near Hartford. If you can pull W1AW in, you're in a really good spot!

Another valuable gauge of your reception in our area is two NOAA weather radio frequencies: 162.425 and 162.450 MHz. You'll find these channels useful since no local weather broadcast stations occupy them. Look for WNG704 near Coatsville, Pennsylvania and WXM82, Egremont, Massachusetts outside Great Barrington on 162.425 MHz and WXM60 near Howell Township in Central New Jersey on 162.450 MHz among others. Not only are these stations a great way to measure how sensitive your 'ears' are, you'll also have a good idea which areas are being favored by current propagation. Reception conditions are often reciprocal. If you hear distant weather forecasts with really good strength, chances are hams in these areas may be able to hear you!



NoAA Weather Radio in Massachusettes includes WXM82, Egremont on 162.425 MHz.

For some insight into easy-to-make directional antennas for VHF and UHF, come to the PCARA fox hunt on Saturday, May 12 at 3 pm at the Beach Shop-

ping Center in Peekskill along Route 6. Everyone will have some sort of directional antenna and there is bound to be at least one tape measure Yagi to see. All you need is a length of inexpensive PVC pipe, three PVC joints, a little scrap of wire, some small hose clamps and a tape measure. The tape measure's metal strips become the very flexible elements of the Yagi antenna you can create. For full plans, see the excellent plans posted by Joe, WB2HOL, on-line: http://theleggios.net/wb2hol/projects/rdf/tape_bm.htm.

A Yagi will extend your transmitting reach dramatically. Suddenly, your little HT will be capable of some serious signal strength. It will open up a whole new world of DXing where you'll have enough extra punch to hear distant stations and be heard by them, as well!

You can use your HT to link to the world! You just have to know where to go! One very easy way: Use the Rockland Repeater Association's 443.85 machine with a 114.8 PL. This is a 200 watt repeater using a series of receivers waiting for your signals all over our area. A nifty voting system polls the receivers to find the best signal from your HT. You can work the world here! This repeater is linked to similar RRA repeaters on the 6 and 10 meter bands. It's just like you are operating on these bands directly! Walking my dog, I have spoken to stations all over America using this machine. Not bad for a hand-held HT and a little rubber duck antenna! For complete details, go to: <http://www.rra.net/repeaters.htm>.

Your signals can also fly around the world with the help of the Internet. The most popular methods of hooking up are Echolink and IRLP (Internet Radio Linking Project.) In a nutshell, you send your signals to a repeater. With prompts sent from your HT, your local repeater connects to a far-distant repeater via the Internet (much like a Skype connection.) The distant repeater relays your signal to be heard as if you were a local operator. I've talked to hams in New Zealand and Scotland using IRLP! For details, go to echolink.org and irlp.net. There is so much you can do with your HT! Start today!

Make sure you include the PCARA in your plans. The PCARA website, pcara.org, offers all sorts of resources to aid your ham radio pursuits. You'll find an archive of past issues of our award-winning newsletter, *PCARA Update*, a link to our Facebook page and lots more. Don't forget to join The Old Goats Net every Thursday night at 8 pm on the PCARA repeater – 146.67 MHz, -600 offset and 156.7 PL.

Have a great month and catch that fox! 73 es dit dit de N2KZ The Old Goat.



PCARA Foxhunt Rules

Saturday May 12, 2012

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 (near Radio Shack), 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.)

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

Beeping barrier

From time to time I visit far-flung sites belonging to the organization I work for. On a recent trip, I came across an interesting barrier which is intended to limit access to the company's section of a large office building. The reception desk had given me a visitor's badge. Holding this badge against a sensor in the barrier was supposed to release the lock. The rotating arms of the waist-high turnstile could then turn, allowing employees and visitors to enter or exit by pushing on the horizontal arm.

But my badge was not working—waving it at the barrier did not release anything. I borrowed a colleague's badge, which was working, and then made my way into the restricted area.

Our meeting room was adjacent to the electronic barrier, and I soon noticed a pattern. First of all, the electronic badge reader was responding to other people's badges not with a single beep, but with **Morse Code**. If you had a valid badge, holding it against the badge reader was immediately acknowledged with beeps in the form of the letter "D" (*dah-di-di*). The turnstile could then be opened. If you had an invalid badge, the response was the letter "B" (*dah-di-di-di*). Listening carefully, I noticed that other people who were having difficulty opening the barrier were being sent a figure "6" (*dah-di-di-di-di*).

Being able to watch the barrier for a while revealed an interesting pattern. It was pretty clear that a large number of people — including senior managers — were not being allowed into and out of the controlled area. Different people had different reactions. When entering with a group, it was easy enough to borrow a co-workers' badge. Some people exiting on their own would stride over the barrier if tall enough, while a few



Electronic turnstile was responding in Morse Code.

diminutive people could squeeze underneath the rotating arms.

Our own group discovered that the glass panel alongside the security gate could be released with gentle pressure, allowing the barrier mechanism to be elegantly bypassed.

Decoding the code

The question is — why does the badge reader send a Morse code “D” when it reads a valid badge and “B” or “6” for an invalid badge? I found the manufacturer’s web site for this type of turnstile gate (<http://www.shiningsecurity.com>) but there was no explanation of the beep-code meanings.

Perhaps “D” stands for barrier “dis-armed” or “disabled” and “B” stands for “barred” or “blocked”?

What could “6” stand for?

Maybe it’s telling you to

deep-six the card? Or maybe that you are **Number Six** (*The Prisoner*) and never allowed to leave?

- NM9J



Does a morse code “6” mean that - like Patrick McGoochan - you can never leave?

Sony revival

One item that has always accompanied me on my travels is a portable shortwave receiver. Until a few years ago, a short wave radio could provide a traveler with reliable reception of BBC and VOA transmissions on a worldwide basis. Nowadays, with budget cut-backs, short wave transmissions have been severely reduced, and programs are only directed toward the developing nations. The developed world is supposedly listening to its international radio on satellite, local FM or over the Internet.

But it’s still helpful to have a portable radio along for the ride. Hotel bedrooms usually have a TV set, but this might be satellite fed, with few, if any, local stations available. Radio sets are disappearing from the night stand. So bring your own radio for a flavor of the local broadcasting scene.

The radio in my travel bag is a Sony ICF-SW100. This diminutive AM/FM/SSB receiver was first produced in 1994. I purchased mine from the Audio Video Shops in Schiphol in 1997. The radio is tiny — only 4.5" x 3" x 1" — and it runs off a pair of AA batteries. The controls are hidden by a hinged lid — opening the

lid reveals a 1.5" diameter speaker alongside the liquid crystal display. In the lower half of the radio there is a high-quality keyboard with push-buttons to set the time, adjust the frequency, select receive mode and store in memory.

Not only does this radio receive USB/LSB/CW, but it can also receive AM stations with

synchronous carrier detection. This is especially helpful when an AM signal is subject to selective fading, or when one side of a dual-sideband AM transmission is subject to interference.

VHF-FM reception in the ICF-SW100 includes the Japanese 76-90 MHz band as well as the more-usual 88-108 MHz. Plugging in headphones allows stereo FM reception.



Sony ICF-SW100 is a diminutive AM/FM/SSB short wave receiver.

Somnolent Sony

On my last trip, I was devastated to find that my ICF-SW100 had stopped working. Pressing the “Power on” or “Sleep” button turned on the receiver display, but no audio could be heard. The other buttons were all inactive and after a few seconds, the receiver turned itself off again. What had happened? Had my little radio been through the baggage X-Ray one time too many? I had to wait until my return to discover the cause.

Back home, I checked on the Internet and found that early-model ICF-SW100 models were prone to problems with the ribbon cable, which connects the keyboard buttons in the lower section to the microprocessor in the upper lid. The cables are stretched taut against a sharp edge whenever the hinge is closed. Eventually the conductors break, and multiple push buttons can stop working, including the on/off switch.

I learned that Sony had changed the case design in late 1997 to overcome these problems. My receiver evidently preceded this design change as its orange-colored ribbon cable was still visible through a gap in the hinge on my radio. Later models have a black plastic shield plate to protect the ribbon cable. Luckily, Sony provides a repair kit to update earlier models like mine, so I ordered a “Chassis Assembly Flexible” kit number X-3372-340-4 from Sony Services Plus (<https://www.servicesplus.sel.sony.com/>) for \$33.42.

Five days later, the repair kit arrived. It contained a completely new front-lid assembly minus the sharp edge, two new ribbon cables and the plastic cable shield. Sadly, there were no installation instructions included with the kit.

Fortunately, I found two good sources of information. Michael Rathbun's web site, <http://www.tesp.com/SW100FAQ.htm>, provides a written description of the steps required to disassemble the radio and replace the ribbon cables. Further help is available from a sequence of YouTube videos by "poikaa3" (KB8DNS) at <http://www.youtube.com/user/poikaa3>. These clips demonstrate exactly how to disassemble the receiver and replace the problematic ribbon cables. Look for "Sony ICF-SW100 ribbon cable replacement (Part 1-10)".



Removing the top cover of the ICF-SW100, which is held on by plastic clips, reveals the loudspeaker, microprocessor board and two yellow ribbon cables.

I followed the advice and carefully dismantled my receiver. Some of the covers are only held on by plastic clips, and the technique I used was to gently run a finger nail along the gap between the two separate parts until the cover popped off.

The hinged section is held on by two long, horizontal screws, which need to be removed with a tiny, 1.6 mm crosshead screwdriver. There are multiple layers in the base unit, held together by four Phillips screws. All the



Disassembling the lower section shows the ribbon cable threaded through the keyboard cover.

layers have to be disassembled to gain access to the connector for the lower ribbon cable. Take care with these connectors, they need to have a plastic tab pushed back to release the ribbon cable. And don't forget to replace the rotary volume control when reassembling.

After a lot of work, the new ribbon cables were installed and threaded through the holes in the plastic parts. I transferred the loudspeaker, circuit board, light switch, click plate and spring from the original front lid assembly to the new one, then folded the flexible cables the same way as the originals before reattaching.

I replaced the two AA batteries, switched on and — hurrah — it all worked again! I was quite relieved, because there are a lot of parts to remove, then reassemble in the correct order.

The Sony ICF-SW100 was a very high-quality product that is no longer manufactured. Sony does not have a small, synthesized international set in its range any more and has almost withdrawn from the short wave radio market. The only world radio shown on Sony's USA web site nowadays is the ICF-SW7600GR, which is twice the size and three times the weight of the ICF-SW100. Not so easy to throw into your roll-on as that handy, little ICF-SW100!

- NM9J



Lower circuit board in the ICF-SW100 with ribbon cable attached.

OCARC Hamfest



Pictured at the March 31 Orange County Hamfest, (L to R) Joe KD2BDG, Ray W2CH, Marylyn KC2NKU, Larry W2LGB, Karl N2KZ and Lovji N2CKD -- who had just passed his Extra test.

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

N2CBH: 448.725MHz -5.0, PL 107.2Hz

PCARA Calendar

Sun May 6: PCARA monthly meeting, Hudson Valley Hospital Center, 3:00 p.m.

Sat May 12: Foxhunt, 3:00 pm Beach Shopping Ct

Hamfests

Sat May 19: Southern Berkshire ARC Hamfest, Goshen CT Fairgrounds, 116 Old Middle Street (Rt 63) Goshen, CT. 8:00 a.m.

Sat June 2: (*Date change*) BARA Spring Hamfest, Westwood Regional HS, 701 Ridgewood Rd, Washington Township, NJ. 8:00 a.m.

Sun June 3: LIMARC outdoor Hamfair, Briarcliffe College, 1055 Stewart Avenue, Bethpage, NY.

VE Test Sessions

May 6: Yonkers ARC, Yonkers PD, Grassy Sprain Rd, Yonkers, NY. 8:30 am Contact Dan Calabrese, 914 667-0587

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

May 18: Orange County ARC, Munger Cottage, 183 Main St., Riverlight Park, Cornwall NY. 6:00 pm. Contact: Thomas Ray, (845) 391-3620.

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



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