PCARA Update

Volume 13, Issue 11 Peekskill / Cortlandt Amateur Radio Association Inc. November 2012

Be prepared, look forward

As I write this article, Hurricane Sandy is on Her way. Over the past several days I've made all the preparations I think that I might need. I have gas for the generator, charged gel cell batteries, a new deep cycle battery for the sump pump, batteries for flashlights and radios, and some extra supplies for the pantry. Events like Sandy remind us that as amateur radio operators we should always be prepared for events either natural or man-made. Our preparations are sure to be tested over the next several days.

The PCARA Holiday dinner is scheduled for December 2 at Table 9 (formerly *At the Reef*) on Annsville Circle. The festivities will commence at 5:00 pm. The cost is $29.95 per person plus tax and gratuity. As always, **ALL** are welcome! Please join us.

Redesigned "Table 9" restaurant is located on Annsville Circle, at the junction of Route 9 and Route 6/202.

Our next regularly scheduled meeting will be Sunday November 4, 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

Fall backward

Here's a reminder that clocks fall backward with the end of Daylight Saving Time at 2:00 am on Sunday morning, November 4. In Europe, the clocks were moved back from daylight saving to standard time one week earlier, on Sunday October 28.

The Energy Policy Act of 2005 extended Daylight Saving Time in the U.S.A. as follows:
- begins 2:00 a.m. on second Sunday of March
- ends at 2:00 a.m. on first Sunday of November.

Be sure to adjust your clocks before Sunday's PCARA meeting on November 4, or you might arrive at the wrong time. Changing of the clocks is also a good opportunity to check batteries in smoke detectors and other devices that you depend on.

PCARA Officers

President:
Greg Appleyard, KB2CQE, kb2cqe *at* arrl.net
Vice President:
Joe Calabrese, WA2MCR; wa2mcr *at* arrl.net

Contents

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

Reach the Summit

If you listen to The Old Goats Net on the PCARA repeater Thursday nights, you know that I always challenge check-ins with questions of the week. A few weeks ago, the question was: "Where is the highest point in Westchester County?" The answer was Bailey Mountain inside Mountain Lakes Park in North Salem. Lucky for me, North Salem is only one town over from my home QTH. I just had to find it and discover what it was all about. After all, for VHF and UHF DXers like me, height is everything!

The entrance to Mountain Lakes Park is on the east side of Hawley Road, by the Lewisboro - North Salem border.

Looking for the park? The main road through North Salem is Route 121. If you take it northbound from Cross River, you make a right onto Hawley Road. The park entrance is only a minute or two away on the left. There is a big wooden sign announcing the entrance. You can't miss it! I was pleased to find the park so easily and drove right in. The adventure had just begun!

I thought I would explore as much as I could from my car. It was a beautiful autumn afternoon and nary a soul was in the park. The leaves were in full color and the sun shone brightly through the magnificence of the trees. As I drove up the park's drive, I wasn't sure if there was a cut-off point where mortal's cars should stop and proceed no further. I continued up and up very slowly as the road turned from asphalt to loose gravel. It became obvious that what I was riding on was the road less traveled!

I passed a couple of people walking their dogs and one lone fisherman. With my amateur radio plates and my long trunk-mounted antenna, I guess I might have passed as an official vehicle. Up and up I went as I continued to gain altitude. I spotted several wood sheds, a cabin or two and quite a few park benches and campfire sites. The trees were marked by type to educate visitors about each species. Mountain Lakes Park is beautifully maintained and immaculate. It was such a pleasure to visit.

I eventually reached a high point and the road turned to the left going downhill. I patiently followed along. "When does this end?" I said to myself. Down and down and down I went, passing a river and a couple of ponds. Eventually, I saw the end of the road in the distance and a crossroad intersection. Only until I reached the very bottom of the road did I see that there was a long yellow steel gate blocking access locked with a rotating numeric combination Sesamee padlock. Rats! I was stuck!

I carefully turned around to retreat. All along the way, I was listening to WWF48, the 125 watt National Weather Service station broadcasting from Mount Greylock in Northwestern Massachusetts on 162.525 MHz high above the town of Adams. Mount Greylock is the highest point in all of Massachusetts and WWF48 makes a wonderful DX indicator.

I could just barely hear it as I drove up through the park and lost the signal as I went down again. There was one point where the signal peaked at the top. There was a reason for this!

Westchester County's Mountain Lakes Park straddles the towns of North Salem and Lewisboro. Karl followed the paved road from the Hawley Rd entrance to Bailey Mtn.

As I drove slowly and carefully back along the park's gravelly drive, I noticed a little sign. Aha! I had reached the pinnacle and I didn't know it! I had found Bailey Mountain at 982 feet above sea level. The peak

is about 300 feet higher than my home QTH just a few miles away. It was a great moment!

Karl reached Bailey Mountain, the highest point in Westchester, as shown by this sign.

After studying the trail map of the park, I learned a couple of things. The little signs I had seen along the way weren't marking species of trees. These were campsite markers: Larch, Balsam and Cedar. There are several places you can go on foot where you can reach great heights (if you know where to look!) One spot is actually called Look Out Point. Another is Hunt Mountain, a peak that is best reached by driving along another nearby road known as Hunt Lane. I was inspired by the coaching of fellow PCARAn Ray, W2CH, to check this spot. Ray visited this peak long ago when it was known as Titicus Mountain.

The Larch *campsite in Mountain Lakes Park.*

Driving to beyond the other side of the park is easy. Head back onto Route 121 and continue farther northbound. Look carefully for the right turn for Keeler Lane. (At the crossroads, Keeler Lane is just opposite, across the road, from Baxter Road which is very clearly marked.) Follow Keeler up to the top where it turns to Hunt Lane and you have arrived at another peak. This spot is known as Hunt Mountain. There is a little drive-off there where you can sit and experiment out of the way of traffic.

Every PCARAn is familiar with Bear Mountain looking down upon Peekskill from across the Hudson River. Drive to the top of Perkins Drive and you will be 1284 feet above sea level. As compared to Bailey Mountain, what a difference 302 feet make! VHF and UHF reception is simply spectacular at the top of Bear Mountain. Bailey Mountain and Hunt Mountain were good secondary perches, but didn't reach up to the high standard set over in Orange County. I can only dream about the results possible atop the mountains I skied down out west!

For its beauty alone, Mountain Lakes Park is worth a visit. The vistas you can see during a casual hike are memorable. Some of the overlooks really will take your breath away. Look for the park just east of Route 121 in North Salem touching the border of Fairfield County, Connecticut. Don't forget to bring your HT!

One of the Mountain Lakes.

Maybe next month I will finally find the time to venture up to Bear Mountain with my new 2 meter transceiver and trunk-mount antenna. Until then, I'll just have to speculate and dream about the great distances I can achieve from up high. I remember well how amazing analog TV reception was from the top of Bear Mountain. Some of our experiences during Field Days spent up there weren't shabby either. More to come!

Until next month, have a wonderful Thanksgiving and enjoy our hobby! 73s and dit dit de N2KZ "The Old Goat."

I like Icom

After I purchased a mobile radio at a recent hamfest, Joe WA2MCR made an interesting point — that he had seen me purchase several FM transceivers at flea markets, and quite a few of them were Icoms.

So I drew up a list of the mobile VHF/UHF transceivers purchased during my time in the USA and came to a scary conclusion — Joe was right, the total was in double digits and 59% of those radios were made by Icom! (If you are interested in statistics, the remainder was made up by — 12% Yaesu, 12% Alinco, 6% Kenwood and the remainder other brands.)

So why this liking for mobile radios, and Icom in particular? To answer that question, I'll have to take you back through a little history.

My very first mobile radios back in the UK were converted ex-government and PMR (Private Mobile Radio) transceivers from companies such as Pye Telecommunications. Commercial mobile radio in the UK was almost inevitably AM on the low and high VHF bands, with FM only appearing on UHF. When FM became popular with radio amateurs and the first VHF repeaters appeared on the 2 meter band in the early 1970s, ex-PMR equipment was not so suitable, so I invested in my first mobile transceiver from a commercial supplier.

Thanks to Thanet

The radio I chose was an Icom IC-22A, imported into the UK from Japan by Thanet Electronics. Thanet was founded in 1974 by David Stockley G8ELP (now G4ELP) and partner Paul Nicholson G3VJF. They sold amateur radio equipment from several manufacturers, including Japan's Inoue Communications Corp, from G3VJF's home in Whitstable, Kent. Later they opened a retail store in Beltinge, Herne Bay and became the sole distributor of Icom equipment in Britain and Ireland. Thanet Electronics changed its name to ICOM (UK) Ltd in March 1987. By then, Inoue Communications had changed *its* name to ICOM Inc., back in 1978.

David Stockley G4ELP.

The IC-22A was a mobile radio for two meters with 22 crystal-controlled channels. Thanet Electronics was selling this model in 1975 for £125.00, complete with crystals for ten UK simplex and repeater channels. Power output was selectable as 10 watts or 1 watt. For UK use, Thanet installed an automatic tone burst generator, which provided around 1 second of 1750Hz tone at the beginning of each transmission for repeater access.

THANET ELECTRONICS

PAUL G3VJF DAVE G8ELP

INOUE FOR VHF AND UHF

What channels are most popular in VHF mobile use today?

IC22A

£125.00 + VAT

AGENTS

APPOINTED STOCKISTS

THANET ELECTRONICS

NOTE OUR NEW ADDRESS DURING EXTENSIONS TO OUR WHITSTABLE PREMISES

34 Cliff Avenue, Herne Bay, Kent CT6 6LZ Tel. (02273) 63846

Thanet Electronics' advertisement for the IC-22A in RSGB's RadCom *for Oct 1975.*

As recorded in the April 2012 *PCARA Update,* I had the Icom IC-22A mounted in my VW Beetle, where it provided reliable service on the weekday commute from Southport to Kirkby, Liverpool. As FM activity grew, the only down-side was the limited number of channels and relatively low power of 10 watts. I kept this radio until I moved up to a VW Polo in Rochdale and installed a synthesized FDK Multi-700EX transceiver for two meter FM.

New state

When I was moved by my employer to the USA in 1986, I was the last of the group to arrive in Illinois. I already knew — from an earlier visit — that European FM equipment was unlikely to be suitable for the USA, since frequency allocations were different and PL tones were employed for repeater access in place of the 1750 Hz tone burst. My colleague Arthur, G4UTB had already assessed the amateur radio marketplace in Chicago and advised me to choose Icom equipment for VHF/UHF. The reason was — Icom incorporated a PL tone encoder as standard equipment, while other manufacturers were still charging extra for this option at the time. I began with an Icom IC-02A handi-talkie for use on two meters from the temporary apartment. This was followed by an Icom IC-3200A dual-band mobile transceiver, which I installed in my Plymouth Horizon. I can vividly remember hanging upside-down below the Horizon's dashboard, installing the lockable wrap-around mobile mounting bracket provided by Icom.

That particular Icom IC-3200A mobile radio lasted a long time, being transferred from vehicle to vehicle, surviving a move from Illinois to New York, then relocated into the radio shack for fixed station

Icom IC-3200A dual-band mobile FM transceiver for 144 and 440 MHz is still working.

use. You might wonder why I would use a mobile radio from within a fixed station — let me explain.

Permanent fixture

Some PCARA members have multi-mode HF/VHF/UHF transceivers such as the Icom IC-706, IC-7000 and Yaesu FT-857. These radios can be programmed for FM operation on amateur simplex and repeater frequencies — but they are not best suited for fixed station FM. Changing from HF to a specific VHF frequency, setting the repeater offset then selecting the correct PL tone requires a lot of maneuvering around the controls and the menus. Monitoring of FM channels is not possible while the transceiver is being used on the HF bands. Squelch and microphone settings could be different for SSB and FM. Memory operation is also more complicated on a multi-mode transceiver than on a dedicated mobile or portable radio.

Some members make use of their hand-talkies from within the shack, but that is also far from ideal. The average HT's rubber duck antenna has no gain, signals are shielded by the walls of the house and the HT only has limited output power. The built-in loudspeaker has low fidelity and — worst of all — the battery can run down part way through a transmission.

Most of these problems can be overcome with a mobile transceiver running from a 12 volt DC power supply and connected to an efficient, external antenna. Mounting the transceiver permanently in the radio room and leaving it switched on allows constant monitoring of desired channels while other activities are being undertaken in the shack. Audio quality can be enhanced by connecting an external loudspeaker. In my view, this is a much better arrangement than using a handi-talkie or an expensive, multi-mode radio on FM.

Latest acquisition

During the recent BARA Hamfest, I made another mobile radio acquisition. This time it was an Icom IC-2350H, from one of the tables in the car park. The IC-2350H is a dual band mobile FM transceiver covering 144 and 440 MHz with simultaneous reception on VHF and UHF. The radio has two separate tuning knobs, with independent volume and squelch controls for each band — an arrangement that I prefer.

After I brought the radio back from the hamfest, I followed my usual routine and unpacked it in the radio shack so I could check operation. The radio was in good condition with no scratches, and what looked like a brand-new Icom HM-95 hand microphone. The vendor had told me the microphone had been recently replaced. I connected a test antenna and RF power meter, plugged in 12 volts DC from one of the radio room power supplies, and checked operation of the radio. The memory channels were occupied with a bunch of 146 and 440 MHz Northern New Jersey repeaters, some packet radio frequencies, plus a selection of aeronautical frequencies between 118 and 136 MHz AM. The radio seemed to be receiving with good sensitivity and transmitting with the correct power levels — 5, 10 and 50 watts output on 2 meters. Audio quality on transmit sounded good in another receiver.

Icom IC-2350H dual band transceiver.

From past experience with mobile radios, I popped the cover off the IC-2350H and made sure that it was clean inside. Just to be sure, I picked up my "canned air" to give the heat sink, cooling fan and vent holes a gentle blast, in order to blow out any dust, tobacco debris, cobwebs or whatever else tends to get into our ventilated electronics these days. I also made sure that the fan was spinning freely, so that it would have a good chance to cool the radio while transmitting. With the cover off, I carried out a quick visual inspection for any unofficial modifications — nothing was visible, and the transmit range did not seem to have been expanded. (Good!)

The next step was to reset the radio to factory default conditions. A total reset is available by holding

down the "SET" and "S.MW" buttons while powering up the radio with the "POWER" button. This clears out the contents of all the memories, allowing me to program my own selection of frequencies into the memories on the VHF and UHF sides of the radio. I was careful to set the power level to "Low" for fixed station use and to change the display lighting to the lowest setting in order to prolong life of the incandescent bulbs behind the front panel.

Less than perfect

The IC-2350H is a little too old to allow cloning from another radio, or remote programming from a connected computer. This is not a huge loss because setting up the memories of Icom mobile radios of this vintage is pretty simple and did not take me very long. All you need for fast loading of memories is a table listing channel number, receive frequency, direction of TX offset (or none for simplex), PL tone and — for my own benefit — a description.

There was one thing missing from the IC-2350H which the previous owner had warned me about. This was the optional UT-89 Tone Squelch unit, which provides tone squelch and tone scan capabilities, also known as PL decode. (PL or Private Line is a trademark of Motorola).

In the early days of the PCARA two meter repeater, when we were sharing the 146.67 MHz frequency with a neighboring repeater in Connecticut, PL tone decoding was almost a necessity. Each repeater's transmitter carried the sub-audio tone that was required for access — 156.7 Hz for PCARA and 100 Hz for our Connecticut neighbors. If you only wanted to hear your own club's activity, activating PL decode — also known as Tone Squelch — would open your transceiver's squelch for just the desired repeater. I had two channels programmed into my mobile radio for the PCARA repeater — one with Tone encode only (T) and the other with Tone Squelch (T SQL).

Fortunately, the need for tone squelch capabilities in our area has reduced. Our neighbors found a different frequency for their repeater and everyone was able to coexist more amicably. There are no other shared frequencies where I find the need for PL decode, and use of "tone scan" to determine the PL required for accessing a new repeater is reduced by having an ARRL Repeater Directory or the Internet as sources of PL tone information. I still use tone squelch occasionally while mobile, to prevent interference from computers, LED traffic signals and Verizon FIOS network terminals, which open the squelch on 146.67. It's not needed very often at home, but this is just as well, since the optional UT-89 Tone Squelch unit for the IC-2350H is no longer available from Icom — and a quick check on the Internet did not reveal any other source.

Buyer beware

Accessories can be one drawback to purchasing older, secondhand equipment. The radio may be working well and in good condition, but if you need accessories, they may not be readily available. Even if you find an accessory, it might be expensive.

But not as expensive as buying a new radio! Icom's current dual band mobile, the IC-2820H costs around $660-$670 new, which is more than five times the price of my second-hand IC-2350H, or my original IC-22A. If you want the optional UT-123 D-Star Digital Voice/GPS unit for the IC-2820H, that's another $300.

I still like Icom, especially their simpler, less expensive FM radios. If you decide to purchase an older model, just keep your eyes open. Recognize the strengths and weaknesses, and figure those into your bargaining price. I hope you find a radio that's right for you.

- NM9J

Door jamb cable - W2CH

Ray, W2CH has sent information about his experiences with the Comet CTC-50M "Window/Door Feed-Thru Jumper" and the Diamond MGC50 "Through Window/Door Cable Set".

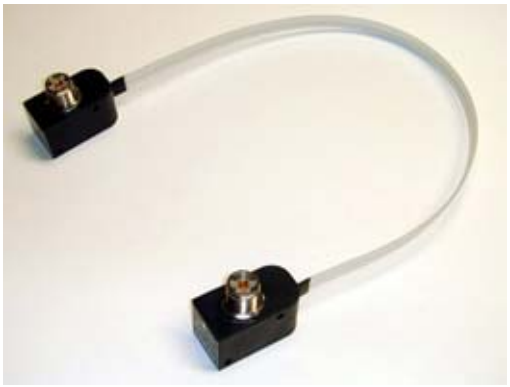
Both devices are made of flat, shielded cable which can be folded around a door jamb or a window frame, allowing the door or window to be fully closed.

Comet CTC-50M and Diamond MGC50. [Photo W2CH]

Comet says that their CTC-50M will allow you to get your antenna coax into the radio room without drilling holes in a wall or leaving a door/window open. The center core of their flat cable is made of copper-clad steel, chosen to withstand bending and metal fatigue. The surrounding conductor is made of aluminum foil and polyethylene terephthalate (PET) film. The cable is terminated with gold-plated SO-239 connectors. Screws and double-sided adhesive tape are provided to fasten the connectors to the wall or window frame.

The Diamond MGC50 has a very similar design, with clips that can be screwed to the wall, before

fastening the SO-239 connectors using tie-wraps. Power rating for the Diamond cable is 150W SSB or 50W FM/CW up to 50 MHz. Power ratings are reduced to 40W on 144 MHz and 30W on 440 MHz. The Comet has a slightly higher power rating on VHF/UHF. Insertion loss is less than 0.5 dB up to 500 MHz.



Close-up of the Comet CTC-50M.

Ray used these devices to feed HF and VHF/UHF coaxial cables through the terrace door to antennas located out on the balcony of Ray and Marylyn's apartment in White Plains. This means Ray no longer has to leave the door open, keeping the cold out in the winter and the heat out in the summer. The feed-throughs seemed to work well with the antenna cable connected outdoors and a jumper cable running indoors from the feed-thru to the radio.

Cable feed-through in use at W2CH.

Ray reports that power handling and SWR seem to be just the same as when he ran his coaxial cables directly through the door opening.

Further details of the cable sets are available at: http://www.cometantenna.com and at http://www.diamondantenna.net .

Holiday Dinner

PCARA's holiday Dinner will be held at "Table 9", the restaurant that succeeded "At the Reef", on Annsville Circle, Cortlandt Manor. "At the Reef"closed down shortly after PCARA's 2011 holiday dinner, reopening as "Table 9 Food + Drink" in June 2012.

The newly restyled restaurant has a giant "9" on the outside. The "9" motif continues into the revamped interior decor. The menu has also been revamped, though there are still some favorites from the old "At the Reef" days. Here are choices from the Dinner Package, for parties of 12 or more.

Starters (choose two)
Fried Mozzarella Wedges
T-9 Nachos
Fried Calamari
Asian Mussels

Salads (choose two)
Choice of: House salad; Cranberry, pecan and blue cheese; Tomato and red onion; Caesar; Greek; Roast beef and goat cheese.

Main courses (choose three)
Parmesan Crusted Chicken
Rigatoni Marsala
Chicken Madeira
Penne ala Vodka with Chicken
Shrimp Scampi
Grilled Simple Salmon
Skirt Steak
Marinated Pork Chops
Chilean Sea Bass, NY Strip Steak or Filet Mignon (additional charge)

Homemade Desserts (choose two)
New York Cheesecake
Tiramisu
Warm apple crisp
Vanilla or chocolate Ice Cream

Cost is $29.95 per person plus tax and 18% gratuity. Coffee, tea and soda included. If you would like to discuss choices, please come along to the November meeting.

Peekskill / Cortlandt Amateur Radio Association

Mail: PCARA, PO Box 146, Crompond, NY 10517
E-Mail: w2nyw@arrl.net
Web site: http://www.pcara.org

PCARA Update Editor: Malcolm Pritchard, NM9J
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
N2CBH:	448.725MHz -5.0, PL 107.2Hz

PCARA Calendar

Sun Nov 4: PCARA monthly meeting, Hudson Valley Hospital Center, 3:00 p.m.
Sun Dec 2: PCARA holiday dinner, "Table 9" Restaurant, 92 Roa Hook Road, Cortlandt Manor, NY. 5:00 p.m.

Hamfests

Sun Oct 28: LIMARC Hamfair, Levittown Hall, 201 Levittown Parkway, Hicksville, NY. 9:00 am.
Fri Nov 23: Fair Lawn Radio Emergency Service Auction, Fair Lawn Senior Center, 11-05 Gardiner Rd, Fair Lawn, N.J. 6:00 pm
Sat Dec 1: Boy Scout Troop 139/Venture Crew 7373 Hamfest, Conlon Hall, 19 N William St, Bergenfield NJ. 7:00 am

VE Test Sessions

Nov 3: Yonkers PAL Ham Radio Club, 127 N Broadway, Yonkers NY. 2:00 pm. Contact: M Rapp, 914 907-6482.
Nov 4: Yonkers ARC, Yonkers PD, Grassy Sprain Rd, Yonkers. 8:30 am Contact D Calabrese, 914 667-0587.
Nov 8: WECA, Westchester Co Fire Trg Cen, 4 Dana Rd., Valhalla, NY. 7:00 p.m. S. Rothman, 914 8313258.
Nov 19: Columbia Univ VE Team ARC, 2960 Broadway, Columbia University, 115 Havemeyer Hall, New York NY. 6:30 pm. Contact Alan Crosswell, 212 854-3754.

Peekskill / Cortlandt Amateur Radio Association Inc.
PO Box 146
Crompond, NY 10517