



# PCARA Update



Volume 11, Issue 2

Peekskill / Cortlandt Amateur Radio Association Inc.

February 2010

## Brought and bought

The annual PCARA Bring and Buy Auction was held at the January meeting. There was a lower than anticipated turnout, but we saw a few old friends that we hadn't seen for quite a while. Regardless of turnout, everyone had a great time. Much Thanks to Malcolm, NM9J for his auctioneering expertise!



*Malcolm, NM9J moving the merchandise at PCARA's third annual bring and buy auction.*

The topic of the PCARA 10<sup>th</sup> Anniversary Special Event Station was addressed at the January meeting. The consensus of those present was that we should try and coordinate something with the City of Peekskill during their 70<sup>th</sup> Anniversary Celebration, maybe at the Riverfront Green. This would make for a good public relations opportunity and remind the City of Peekskill Office of Emergency Management (OEM) that we're still around and available to assist if ever needed. We need some volunteers to spearhead this effort, so if you're feeling so inclined please let us know.

Our next meeting is on February 7, 2010 at Hudson Valley Hospital Center. I look forward to seeing each of you there.

- 73 de Greg, KB2CQE



*Pleased participants at the January auction: L to R Clint KB2ZRJ, Kevin N2KZE, Greg KB2CQE, Mike N2EAB and Mike N2HTT. (Just out of shot was Adam KC2JNW.)*

## PCARA Officers

President:

Greg Appleyard, KB2CQE, kb2cqe at arrl.net

Vice President:

Joe Calabrese, WA2MCR; wa2mcr at arrl.net

## Net night

Peekskill/Cortlandt Amateur Radio Association holds a weekly net on the 146.67 MHz W2NYW repeater on Thursdays at 8:00 p.m. Join net control Karl, N2KZ for neighborly news and technical topics.

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# Adventures in DXing

– N2KZ

## More?

It's like an endless banquet on a cruise ship. Just when you thought there could be an end to the food and dancing, another brand new round appears! More? Oy vey! All digital TV and big flat screens are so 2009.

Welcome to an entire new decade of high-tech madness! (Certainly you have more money to spend on electronics!) It's 2010! Welcome to the world of Ultra-HD and 3D HD television!

You've made it through the 2009 holiday season. I know what you are thinking: 'My 72 inch 1080p flat screen is getting boring. It still looks a little soft and blurry. Isn't there anything that can be done to improve the picture?' Yes, there is more! Have you heard of 4K by 2K? This is 4096 by 2160 resolution supported by the new HDMI 1.4 cable standard. (Our current HD maximum is 1920 by 1080 pixels.) 4K by 2K should be coming to living rooms just as soon as someone devises a plan to record and distribute some program material to watch. Today's broadband will

begin to seem like a narrow pipe!

4K by 2K is only an interim standard! Japan's NHK Network is developing 'Super Hi-Vision' also known as Ultra-HD. Compare a viewing area of 7680 ×

4320 pixels to today's 1920 by 1080 pixels. Imagine 16 times the picture resolution compared to the best available HDTV of today. Add 22.2 sound for the most complete surround sound possible. You need a big living room! Go find a place for 22 different speakers and two sub-woofers! According to NHK, 'Super Hi-Vision images are so detailed, so convincing, you'll feel that you yourself are right there where the camera is.' My question: Does it come with a VHS player?

Progress is moving forward fast! NHK continues to record their major programs in Super Hi-Vision and can now transmit this 'ultra' format live instead of waiting for a long download. While they are developing this product, let me distract you with another.

## Where are my glasses?

The motion picture industry has been flooding America's movie screens with 3D as a competitive response to home HDTV. It didn't take long for the ball to come back over the net. 3D is now finding its way onto residential TVs, as well. In 2010, you will see quite a variety of new HDTV sets capable of 1080p resolution with 120 Hz (or faster) screen refresh rates.

At least twice as much picture information must reach home viewers to create a good 3D effect, so the quicker you can refresh the screen, the better depth you will see.

Of course, no standard is our standard! So far, every manufacturer of 3D-ready HDTVs has their own standard of presentation which requires very specific 3D viewing glasses. See if you can follow this: There are four basic methods of encoding 3D material: Red – green, polarized light, electronic shutters and auto-stereoscopic. There are at least a dozen manufacturers offering 1080p 120 Hz 3D-ready sets, each with their own system of resolving the 3D. You need the exact stereoscopic glasses to watch the particular set you've purchased. (Panasonic glasses won't be useful with a Sony set.) Cross-conversion between these standards is not yet possible. You can watch polarized light 3D with electronic shutter glasses. Broadcasters can't convert one system to another. What a mess! See what I mean?

Nevertheless, ESPN and The Discovery Channel are launching 3D services for your enjoyment in 2010 and 2011. We suspect that these channels will employ the electronic alternating shutter approach. Viewers will wear glasses capable of rapidly closing one lens, then the other, automatically in sync with the material being seen on screen. The commands for shutter activity will be fed to the glasses wirelessly similar to Bluetooth technology. Each pair of glasses will be quite expensive ranging from \$75 to over \$200 a pair. Don't sit on them!

Look for occasional 3D shows from ESPN as early as June 2010. Discovery's 3D channel will operate 24/7 and should appear in late 2010 or early 2011. It will be a joint effort with Sony and IMAX as partners. It should be quite a scene!

As an informed observer, it looks like motion pictures usually rely on either polarized light or old-fashioned red-green encoding for achieving 3D. Electronic shutter glasses and alternating field projection is simply too expensive to present movies to large audiences.

Home TVs are being designed with the more expensive electronic shutter technology with RF-linked glasses. The end result? ESPN will air only material it creates. Discovery/Sony/IMAX will only air material it creates. Major movies created for the polarized light method won't be seen at home until a compatible transmission system is launched and until all viewers have special glasses for that system too! Who says modern life is complicated? So now that you know that everything you own called a 'television' is obsolete...

## Morse Code?

Talk about enduring technology! Let's jump back



174 years to 1836! It's the original method of digital communication.

Morse code is still being used daily all over the world. One group of hams, The Straight Key Century Club, keeps the brass-pounding beat going with good old-fashioned hand keys. During January 2010, they have been celebrating on the air with a very special call sign K3Y. (Turn the '3' around and you'll get the pun!)

Hundreds of hams have worked K3Y. SKCC members across the country have participated as K3Y operators. I caught up with K3Y while Dan, W9DLN was operator from Crivitz, Wisconsin on 30 meters. I used my QRO 5 watt Oak Hills Research OHR-100A transceiver to a homebrew dipole to snag Dan. Of course I was using a straight key!

### Happy New Year

The ARRL's Straight Key Night 2010 was quite a party at this QTH. All sorts of very unusual stations were heard using lots of vintage equipment. Everyone on the air was using hand keys only and the resulting code sounded universally slower and distinct. There were many surprises: I

worked 13 year old James, K3ROI, from Aston, PA. Using just 150 milliwatts, Bob, W1IS was an easy catch with solid signals from Stow, Massachusetts. My best QRP catch was Mike, AA1TJ, from Roxbury, Vermont. Mike was pushing 84 milliwatts and I still heard him!

His entire transceiver utilizes just one transistor and is simply an amazing marvel. See his 'Reggie' at: <http://mjrainey.googlepages.com/reggie>.

Throughout SKN, I used my trusty 50 watt Heathkit HW-16 CW transceiver circa 1968 and an authentic Navy flameproof straight key. All my contacts were completed on 80 meters. This day also marks ten years, to the day, of my being an active ham! A great day it was!



### Net the Net!

It's easier than ever to enjoy PCARA's Old Goat's Net. All you need is a computer! Tune in Thursday nights at 8 pm using this link: <http://www.radioreference.com/apps/audio/?feedId=3186>. You can also listen in the old analog way: Tune in the PCARA 2 meter repeater on 146.67 MHz. If you want to participate, the repeater uses a -600 offset (you transmit on 146.07 MHz) and use a 156.7 Hz PL tone. We would love your company!

Have a Happy Valentines' Day and remember to check out your local groundhog on February 2<sup>nd</sup>! 73 de N2KZ Karl dit dit



## Return to the airwaves

### -Lee Towater, KF4NZV

The West Tennessee Amateur Radio Society (<http://www.wtars.org>) is pleased to announce the return of Gary King, W4WKZ, to the amateur radio waves. Gary, who is legally blind, has been off the radio for almost two years. Gary had been a very active part of the amateur radio community. He was an active participant in the daily weather reporting of conditions from his home in Medon, TN to the National Weather Service in Memphis, TN. He has not been able to make reports via ham radio due to damage to his antenna system nearly two years ago.

The story began back in November 2008 when a long time friend, Bob Alper, W6KT, came to visit Gary. He noticed the damage to Gary's 60 foot tower and antenna array. Gary, not being able to make the repairs himself, was left with no way to use his ham radio equipment. Bob quickly got in contact with Philip Julian, KG4NVN, the treasurer of West Tennessee Amateur Society (WTARS) here in Jackson. Bob and Philip worked together to make a plan for repairing Gary's tower and antenna system.

During the summer heat of July 2009, a group of WTARS members assembled at Gary's home to begin the repair project. The group mixed and poured more than 880 pounds of concrete, by hand in a 5 gallon bucket, to make a new base for the existing tower. During the next four months a new antenna system and other tower installation items were purchased.

On December 5, 2009, the group reassembled at Gary's home to complete the repairs. Philip, KG4NVN, contacted local crane owner and operator Randy Rushing of Rushing's Crane Service. Randy happily agreed to bring his equipment out for the installation



"Reggie" 1-transistor 80m transceiver.

of the new antennas. All of Randy's expenses were donated to the project which helped tremendously due to the fact WTARS was operating basically on a \$0 budget for this project. Randy is known throughout the community for his willingness to serve others during local emergencies and disasters. Randy is a part of the Baptist Disaster Relief Ministry.

The group installed a Diamond X50 dual band vertical. This antenna will give Gary the coverage he needs to reach the local repeaters and ample simplex coverage. They also installed a home brew HF multi-band wire antenna built by Randy Bennett, W4RFB. The wire antenna was installed on a pulley system allowing for easy lowering and raising, eliminating the need to climb the tower, to tune or make adjustments as needed.



West Tennessee ARS members assemble the multi-band HF wire antenna for W4WKZ's refurbished tower. Photo tnx: <http://wtars.blogspot.com>

At the end of the day Gary was back on the air. WTARS has given Gary back the joys he once had in the amateur radio hobby. WTARS would like to give a special thanks to Philip Julian, KG4NVN, for taking the lead on this project. Philip spent a countless number of hours in preparation for this project. We also give a special thanks to Randy Rushing of Rushing's Crane Service in Jackson, TN for providing the bucket crane to complete the installation.

— ... —

*From the ARRL Club News Editor:* The WTARS example above shows what a dedicated club can do to assist fellow members and Hams. Even a quick, visual inspection of an antenna system can save life and property. Maybe there are hams around your club who could greatly benefit from simple assistance so that they may fully enjoy all that Ham Radio has to offer?

Credit: *ARRL CLUB NEWS* and The American Radio Relay League.

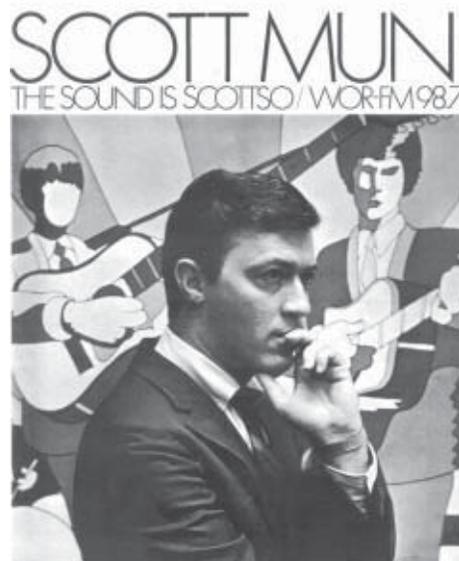
## Hunting pirates - N2KZ

Back in the early 1970s, the FCC mandated that broadcasters could no longer simulcast their AM stations on FM, so wild experimentation began. FM became a new and popular medium filled with free-form radio. Many young broadcasters suddenly had the opportunity to be on the air and create an all-new listening experience! Somebody *was* listening, right? Great adventure awaited!

My earliest memories of FM were received via my family's first TV set. My Dad brought home a Pilot 15 inch black and white TV back in 1950. Connected to a classic V-beam antenna in our attic, it featured continuous tuning in three bands: VHF low (channels 2 through 6), VHF high (channels 7 through 13) and FM. This TV was my only connection to FM radio when I started listening around 1966. It was primitive, but it opened a whole new world of radio!

The very first New York City station to enter this new world was WOR-FM or simply OR-FM. Their lead personality was the legendary Scott Muni who later went on to rule the roost at WNEW-FM. NEW-FM had a lock on rock radio for years and years. If you were into radio, you wanted to be a high-profile DJ like Muni. With very limited amounts of jobs available at local stations and no public access to the airwaves, many, many people entered the fray by setting up personal radio stations of their own.

Personal broadcasting, without a license, was, of course, illegal. Pirate stations often waited until late night when professional stations would sign off (and FCC inspectors were sound asleep) to go on the air. The New York City Board of Education station, WNYE on 91.5 MHz, signed off nightly around 10 pm. From ten until dawn, this frequency was alive with pirates. 87.9, one frequency below the bottom of the American FM band, also served as roost to many pirates. Any open frequency was an invitation to go on the air!



DJ Scott Muni was at WOR-FM from 1966 until leaving for WNEW-FM.

Pirates followed irregular schedules and often switched broadcast frequencies to avoid being caught. It seemed like the FCC was always listening. FCC busts would occur regularly, sometimes arriving at your door during the daytime when your station was



not even on the air. News of a bust would travel fast: All unofficial stations would disappear for weeks until the heat was off.

Pirate programming varied from highly distorted incongruous nonsense to quite professional stereo broadcasts with phone-in request lines and jingle packages. Obscene and randy records were often aired and much of the DJ chatter was of a personal nature towards local friends. It was

harmless and innovative. Many stations had quite a following. I remember one station, operating in lower Manhattan, claiming to not only moving from night to night but actually broadcasting mobile from time to time to avert being caught.

Many of my friends and I were great fans of pirate radio and budding radio nerds ourselves. We had begun on Citizen's Band. Our first move to the dark

side was realizing that if you swapped the receive and transmit crystals on a Lafayette walkie-talkie set for Channel 10 you would find yourself on a Civil Air Patrol channel (26.620 MHz.) Unlike CB, this frequency was crystal clear and we could talk to each other much,

**NEW! LAFAYETTE HE-29C 9-TRANSISTOR CB "WALKIE TALKIE"**



**2 for 21.00**

**25<sup>95</sup>**

**2 for 49.95**

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- Push-To-Talk Operation
- Crystal-Control on Both Transmit & Receive
- 115V to 9V Power Pack Optional At Extra Cost
- Complete with Earphone, Leather Case, Antenna and Penlight Batteries
- No License Required (FCC Reg., Pt. 15)

Imported

much farther instead of fighting the continuous drone of CB heterodynes. One day, a booming voice came to us on 26.620 yelling "Hey, who are you kids?" We were never really good with authority!

Some of us built little FM transmitter kits made by companies like EICO. One or two of my pals actually went legit and became licensed radio amateurs. Some of their ham radio transmitters found their way down to 1620 kHz (at the very top of the AM band) broadcasting from time to time to impress local girlfriends and mates. All of our experimentation was minor league using, at best, small battery-powered microphone mixers or simply microphones aimed at

stereo speakers. We were all fascinated by 'the big boys' with powerful transmitters and fancy equipment.

Late at night, we would listen and listen and listen. I kept a pencil and paper log of who I had heard and when. Stations would come and go and you never knew what you would hear. Things became really interesting after we became old enough to go to college. Some of us managed to get our own cars, or borrow our parent's. Our first move would be installing FM converters (typically the Audiovox variety) that would open up factory-installed AM pushbutton car radios to the new world of FM.



*Audiovox tunable FM converter.*

Having FM in the car was the beginning of a new sport: FM pirate hunting. For excitement and adventure, it could not be beat! The first step would be listening carefully to your target. Chances are they would make references to local high schools, colleges or other landmarks. Find a friend or two, hop into a car with FM radio and start driving! Armed with a good street map book of New York City, you could localize the pirate in quick stead.

The real fun was locating the exact location and obtaining verification. I had an Antenna Specialists FM antenna booster wired to my car's FM converter. This device served dual purpose. I could really pull in DX, like Channel 6 audio on 87.75 MHz, when it was on. Turned off, the amplifier module acted as a useful attenuator pad for traveling in Manhattan where field strength was enormous. It also helped greatly when locating pirates.

My friends and I did not have anything that would qualify as authentic radio location equipment. Along with my souped-up FM car converter, we would use a very simple hand-held FM transistor radio to continue to localize when you were close to the target station. We would ride around making circle after circle around blocks in a neighborhood until we had a really good idea of where the signal was unstoppable. It took a little time, but we always had results.

Hot on the trail, we would park our car and set out on foot. Every roof top and garage would be viewed and studied during a slow walk around the neighborhood. Most often, a very new-looking omnidirectional crossed dipole or two would be seen as the signal became powerful. Discovery was always sweet. Our method of verification was clever. We would drive our car to the front of the suspect house and wait for the homebrew DJ to open his microphone. If we could hear our car horn beep over the air, we knew we had

found our catch! QSL!

Time and time again we would hunt down pirates for our own amusement. Finally, I decided to take it to the next step! I had a summer job in a public library's reference room. I learned how to research nearly anything, including telephone numbers! In the days before the Internet, a huge volume was published in the New York City area called Cole's Directory. This was a meticulous cross-reference of the standard telephone directory by phone number and address. What a wonderful reference material!

One particular pirate really snagged my interest. An inventive guy named Tony had built a great sounding station in his home in Springfield Gardens, a modest neighborhood of small one-family houses in southeastern Queens. He had a great sounding station and a lot of equipment and he was in *stereo*. This was a big deal back in 1970. Some of the 'real' stations did not have stereo!

We triangulated Tony and found he was using a five-element Yagi antenna. The car horn test verified our catch. He must have been using a reasonable amount of power because he could be heard over a huge area for miles and miles around. We wondered why he decided on a directional antenna and then it occurred to us that he was aiming towards Manhattan

to maximize his audience. We had his address and he gave a phone number over-the-air for requests. Cole's Directory? Here I come!

I now had his full name and verified his address. Even better, we had a second telephone number for his house.

Friday night came and we waited for him to go back on the air and there he was. It was time for fun! His broadcast got going and he finally called out for requests and listener comments. I called his other house telephone number and I could hear the phone ring over the air. He answered immediately putting a record on the air. Tony's request line did not ring over the air, but his house phone did. I had entered the belly of the beast!

"Hi, Tony? Jeez, I love your station. What kind of a transmitter and stereo generator do you have? Man, it sounds great!" Response: "WHO IS THIS? HOW DID YOU GET THIS NUMBER?" Check and checkmate! The station immediately went off the air and we laughed until we cried. Oh, did we make this poor soul paranoid! We might as well have been formal FCC inspectors. It was weeks before we heard him on the air again. By then, we suspect, he thought the heat was off!

The FCC were celebrities on their own. Inspectors Judah Mansbach and Al Zimny were very well known

within the New York City pirate community. These were the men in the bad suits who would knock on your door when you were about to be busted. They were the personification of all evil and authority seizing your equipment and delivering your summons. These were people you did not want to meet in person.

Adding to their notoriety, many pirates also worked in legitimate broadcasting and would encounter Mr. Zimny and Mr. Mansbach as they inspected licensed facilities. This would be a double heart-stopper for those engineers that led double lives! They were tough inspectors. Every wire needed to be in place and every FCC commandment had to be met. Those who did not comply received citations hard to explain to upper management.

Some people grew to know the FCC more than others. Most notable was the dynamic duo: Al Weiner and J.P. Ferraro. Prolific broadcasters, Al and J.P. pushed the limit many times and actually found themselves locked up briefly.

WXMN and WSEX (Yes, I'm not kidding) were the pirate stations of Yonkers pirates J.P. Ferraro and Al Wiener. They were quite advanced in their equipment and sophistication. They had huge signals and even networked their stations together forming 'The Falling Star Network.' J.P. lived very close to the historic home of FM and super-heterodyne legend Edwin Armstrong.

The call WXMN is a truncated version of the call sign Armstrong used when he established his first experimental FM station at the Alpine candelabra tower across the Hudson. Armstrong's call was W2XMN. It broadcast on the original American FM band at 42.8 MHz at 40 kilowatts. It could be heard



*Radio station WXMN on 87.9 MHz FM and 1620 kHz AM.*

throughout the Northeast. J.P. and Al thought of Armstrong as their hero and used a version of Armstrong's call sign as their own.

Later, this team (along with a pack of followers)



*Cole Directories still provide address and resident information.*

became legendary by building a radio station aboard the good ship Sarah and broadcasting from the open seas off Long Island's south shore. Their adventures even made the front page of The New York Times!



*MV Sarah*

Much later, in the 1990s, Al and J.P. eventually went legitimate. J.P. Ferraro now manages a delightful and eccentric AM station in the mid-Hudson valley: WHVW 950 AM. Al built an impressive international shortwave station, WBCQ in Monticello, Maine, broadcasting on several frequencies daily. Lately it occurs to me: What a long, strange trip it's been!

To this day, a pirate broadcaster pops up from time to time and the urge to hunt grabs me again. You never forget how much fun it can be, but now I am armed with tight-pattern long Yagi antennas, radios with signal meters and useful attenuator switch boxes all packed into a mini-van with lots of room for gear. Unlike an amateur radio fox hunt with short transmission lengths, FM pirates just stay on and on. An easier catch you'll never find! My only request: Put on some good tunes while I am hunting you down! My advice to casual listeners: Just keep tuning! You don't know what you might hear! Radio Free Peekskill might be on right now!

- Karl, N2KZ

## Radio Cortlandt TC part 2

Inspired by Karl's article on hunting FM pirates, I was spurred into action to track down the source of Radio Cortlandt TC! I think I might have found it.

You may remember that last time, I had been trying to locate the cause of poor HD Radio reception for WNYC-FM on 93.9 MHz. HD Radio's digital sidebands are at a very low power level and the reason for my problem seemed to be an unauthorized transmission on the adjacent channel of 94.1 MHz FM. This "station" seemed to be rebroadcasting Sirius-XM Radio. We had various reports from PCARA members indicating coverage from Lexington Avenue on the east, across the Cortlandt Town Center to the Bear Mountain State Parkway behind Jacobs Hill on the west.

One month later, the transmission is still on the air at 94.1, but the format has changed to continuous 1980s-style middle-of-the-road music with no announcements — perhaps someone's favorites are being shuffled on an iPod.

One weekend afternoon, after the cold weather had relented, I drove around with my trusty Radio Shack DX-398 AM/FM/SW receiver. The advantage of this re-badged Sangean ATS-909 is the 7-segment S-meter and the relatively poor FM sensitivity. I kept the telescopic antenna



*Radio Shack DX-398 receiver*

retracted, so sensitivity inside the car was reduced even further.

Using the S-meter, I was able to confirm that signal strength was strong around Home Depot at Cortlandt Town Center, and around the east side of Rubbo Drive, between Route 6 and the Bear Mountain Parkway. However, I could not get a really strong signal peak, so I carried on looking. Signals were also strong around the Town of Cortlandt Highway Depot at Arlo Lane, but then I noticed some houses nearby, higher up the hill. I followed around Route 202 and Maple Row to the east side of the "Mohegan Colony", an area founded in the 1920s as a home for left-leaning idealists and early advocates of an alternative lifestyle.



On one street near Lincoln-Titus Elementary School, the signal on 94.1 MHz was pinning the S-meter. It was still very strong when I tuned 200 kHz above and below the FM channel. In fact, WNYC on 93.9 MHz was completely wiped out. I spotted an odd looking antenna on top of a travel trailer at the center of the signal strength pattern... it looked like a vertical ground plane with sloping radials, perched on top of a horizontally polarized amplified TV antenna.

The topo map of this location shows a height of 400 feet, overlooking the Cortlandt Town Center, just

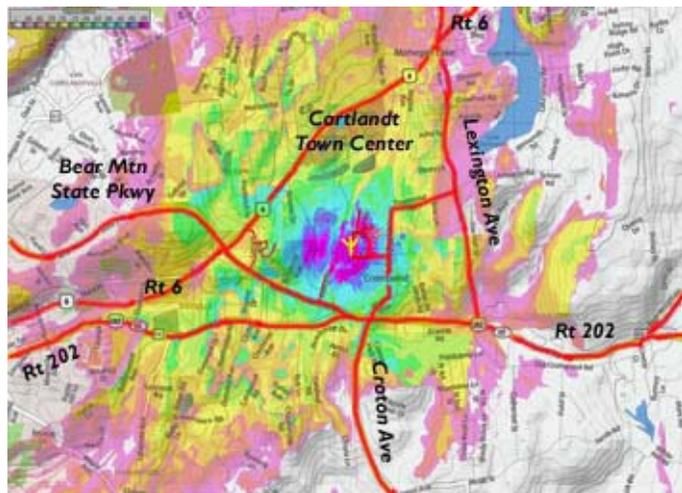
half a mile away and 100 feet lower down. It's also line-of-sight to Rubbo Drive. I suspect that if I stood on my roof it might be line of sight to my own location as well, just  $\frac{3}{4}$  of a mile away.



*Vertical ground plane antenna at the center of things.*

I fired up that excellent RF coverage software "Radio Mobile" by Roger Coudé VE2DBE (<http://www.cplus.org/rmw/english1.html>) and asked it to predict the mobile coverage for a 100 mW transmitter located at this same spot, feeding a no gain antenna with a height of 5 meters above ground. The results were encouraging, reproduc-

ing quite closely the coverage experienced along Route 6, Route 202 and the Bear Mountain Parkway. High signal strengths were predicted for Home Depot, Rubbo Drive and the Highway Depot. I could even see a hot spot at one end of my own driveway!



*Radio Mobile predicted coverage map for a 100 milliwatt transmitter on 94.1 MHz.*

So there you have it. At the time of writing, the signal is still on the air, far in excess of the FCC Part 15 permitted strength of 250 microvolts per meter at a distance of 3 meters. I imagine that anyone within a few hundred feet of the location is suffering significant interference to reception of WNYC-FM. Splatter interference to WNYC-FM extends further out, over the blue areas on the coverage map. Not only that, but I can't help feeling that the owners of WHUD-FM might take exception to another station within their own coverage area, offering similar music, but without any commercials, and without paying any royalties for performance of the music.

## Technician question pool

A new question pool for the Technician exam was released by the National Conference of Volunteer Examiner Coordinators on Monday January 4. The new question pool will take effect from Thursday July 1, 2010, shortly after Field Day.

How would *you* fare on the new Technician exam when July comes around? Here are a few sample questions.

**T1A07 (C) [97.3(a)(45)]**

**What is the FCC part 97 definition of telemetry?**

- A. An information bulletin issued by the FCC
- B. A one-way transmission to initiate, modify or terminate functions of a device at a distance
- C. A one-way transmission of measurements at a distance from the measuring instrument
- D. An information bulletin from a VEC

**T1C06 (D) [97.5(a)(2)]**

**From which of the following may an FCC-licensed amateur station transmit, in addition to places where the FCC regulates communications?**

- A. From within any country that belongs to the International Telecommunications Union
- B. From within any country that is a member of the United Nations
- C. From anywhere within in ITU Regions 2 and 3
- D. From any vessel or craft that is documented or registered in the United States

**T1F12 (B) [97.5(b)(2)]**

**How many persons are required to be members of a club for a club station license to be issued by the FCC?**

- A. At least 5
- B. At least 4
- C. A trustee and 2 officers
- D. At least 2

**T2B04 (D)**

**What common problem causes you to be able to hear but not access a repeater even when transmitting with the proper offset?**

- A. The repeater receiver requires audio tone burst for access
- B. The repeater receiver requires a CTCSS tone for access
- C. The repeater receiver may require a DCS tone sequence for access
- D. All of these choices are correct

T2C03 (C) [97.113]

**When is it legal for an amateur licensee to provide communications on behalf of their employer during a government sponsored disaster drill or exercise?**

- A. Whenever the employer is a not-for-profit organization
- B. Whenever there is a temporary need for the employer's business continuity plan
- C. Only when the FCC has granted a government-requested waiver
- D. Only when the amateur is not receiving compensation from his employer for the activity

T3A01 (D)

**What should you do if another operator reports that your stations' 2 meter signals were strong just a moment ago, but now they are weak or distorted?**

- A. Change the batteries in your radio to a different type
- B. Turn on the CTCSS tone
- C. Ask the other operator to adjust his squelch control
- D. Try moving a few feet, as random reflections may be causing multi-path distortion

T3C07 (B)

**What band is best suited to communicating via meteor scatter?**

- A. 10 meters
- B. 6 meters
- C. 2 meters
- D. 70 cm

T4A01 (B)

**Which of the following is true concerning the microphone connectors on amateur transceivers?**

- A. All transceivers use the same microphone connector type
- B. Some connectors include push-to-talk and voltages for powering the microphone
- C. All transceivers using the same connector type are wired identically
- D. Un-keyed connectors allow any microphone to be connected

T6A10 (B)

**What is the nominal voltage of a fully charged nickel-cadmium cell?**

- A. 1.0 volts
- B. 1.2 volts
- C. 1.5 volts
- D. 2.2 volts

In case you had not noticed, the "correct" answer is indicated by a capital letter within parentheses on the line that designates the question pool number.

## Fairly unbalanced

Your editor believes we are continuing the trend of testing newcomers very deeply on highly complex licensing issues while trivializing the technical side of amateur radio. The problem is that the current Technician exam grants newly licensed radio amateurs the right to build and run high power equipment using multiple modes on nearly all bands from HF to microwaves. There is a huge amount of material in the Technician Question Pool Syllabus, but how much of it is directly relevant to a newly-minted ham is open to question.

Ye editor is still in favor of a more gradual licensing scheme, similar to those being adopted in the UK and other countries. The initial examination covers a limited amount of material, with a strong practical element, and grants a reduced set of privileges (low power, limited modes, limited frequency bands, commercial equipment).



*Successful candidates from a UK Foundation class sponsored by Bath Amateur Radio Club. (Tnx <http://batharc.org.uk/>)*

As the new licensee progresses, subsequent elements expand on this basic understanding, adding privileges on additional bands, modes and higher power. Why not here?

- NM9J

# 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

(IRLP node: **4214**)

**N2CBH:** 448.725MHz -5.0, PL 107.2Hz

## PCARA Calendar

**Sun Feb 7 2010:** PCARA monthly meeting, Hudson Valley Hospital Center, 3:00 p.m.

## Hamfests

**Sun Feb 28:** LIMARC Indoor Hamfest, Levittown Hall, Hicksville, NY. 9:00 a.m.

**Sun Mar 21:** Southington ARA Flea Market, Southington HS, 720 Pleasant Street, Southington, CT. 8:00 a.m.

**Sat Apr 10:** Orange County ARC Spring Hamfest, Town of Wallkill Community Center, 2 Wes Warren Drive, Middletown, NY. 8:00 a.m.

**Sat Apr 10:** BSA Venture Crew 7373 Hamfest, St John Church Hall, 19 William St., Bergenfield NJ.

## VE Test Sessions

**Feb 7:** Yonkers ARC, Yonkers PD, 1st Precinct, E Grassy Sprn Rd, 8:30 a.m. Contact D. Calabrese, (914) 667-0587.

**Feb 11:** WECA, Wetchester Co Fire Trg Cenrter, 4 Dana Rd., Valhalla, NY. 7:00 p.m. Contact Stanley Rothman, 914 831-3258.

**Feb 15:** Columbia Univ VE Team, 2960 Broadway, 115 Havemeyer Hall, New York NY. 6:30 p.m. Contact Alan Croswell, (212) 854-3754.

**Feb 19:** Bergen ARA, Westwood Regional HS, 701 Ridgewood Rd, Washington Township, NJ. 7:00 p.m. Contact Donald Younger, 201 265-6583.



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