



PCARA Update



Volume 9, Issue 12 Peekskill / Cortlandt Amateur Radio Association Inc. December 2008

Anchors away!

The PCARA Annual Holiday Dinner will take place on Sunday December 7, 2008 at *At the Reef* on Annsville Circle. The dinner will start a bit later than usual this year, at 5:00 p.m., to allow more of our friends to be able to join us. If you've decided that you'd like to join us, just make sure you e-mail Marylyn, KC2NKU and Ray, W2CH **ASAP** at w2ch "at" arrl.net. We always have room for more!

over the items being offered. Just bring the best of your shack's detritus and sit back and watch the sparks fly! It's a great way of recycling gear to other members, and you just might find something you may like for yourself. Contact Malcolm, NM9J for further details.

To each of you, your families, and loved ones, I wish a very Happy and Healthy Holiday Season, and a most Joyous and Blessed New Year!

- 73 de Greg, KB2CQE



On December 7, cruise into Annsville Cove and drop anchor "At The Reef" restaurant for PCARA's annual holiday dinner...

PCARA Officers

President:

Greg Appleyard, KB2CQE, kb2cq 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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...then in January, bring your biggest boat anchors to the PCARA auction.

At the January 4, 2009 meeting we will be observing another tradition-in-the-making, the "PCARA Bring and Buy Auction" at Hudson Valley Hospital Center. Sothebys of Peekskill / Cortlandt will be on hand to mediate the bidding wars that will inevitably break out

Adventures in DXing

- N2KZ

The Lowdown

Sometimes you're high and sometimes you're low. It doesn't really matter which way you go, just as long as you have a good time! There are so many different places to be. Here are the most favorite bands for someone like me!

All of us operate on bands that mirror our personalities. If you are into working all the rarest and distant DX, chances are you know 20, 15 and 10 meters pretty well. Technician Class operators probably use 2 meters and 70 cm for day-to-day use and might find themselves DXing on 6 meters during the sunspot maxima. If you need a real challenge, necessitating skill, creativity and output power, 160 meters may be your cup of tea. Me? I like the low bands, a place to combine relatively good DX and meeting hams just like myself to exchange ideas and chat with.

I find the main ham bands, (20, 40 and 80 meters,) to be pretty miraculous. All you need is a wet noodle and about a watt of output power to work nearly everyone you hear (providing your noodle is resonant and efficient!) I use simple homebrew dipoles, but I have painstakingly tuned them to resonance to eliminate the use of an antenna tuner. My results have been (at least on a small scale) pretty remarkable. One of my favorite QSOs was working a friend in Nova

Scotia via QRP CW on 40 meters. The combined output power of our two transmitters did not exceed half a watt! It was enough fun to make you giggle!

I marvel at hams who really know how to gather DX and contest totals. I have learned a great deal from watching and listening to fellow PCARAns in action. Joe,



Flashback to Field Day 2008. L to R: Bob N2CBH, Joe WA2MCR, Jerry WA2ZOA, Marylyn KC2NKU and Ray W2CH erect the three element triband beam.

WA2MCR, Ray, W2CH and Malcolm, NM9J all have shown me the rewards of using 100 watts of brute force into directional antennas. Our Field Day efforts can certainly be quite a show. Great equipment and great operators equal great results. It's as simple as that!

I take a different perspective. I've never been one for working towards strict goals. I just don't have the competitive drive (or output power) needed to be the very best contester or the most proficient collector. It would be grand if, one day, I reached a certain level of expertise to earn a DXCC or VUCC, but I have so much fun getting there, it really doesn't seem to matter. I'm much better at long rag chews via CW than hit-and-run QSOs, with breakneck speed, during a sprint or contest. I am the tortoise not the hare! I know I'll eventually get there, just let me know when I arrive!

It's not that I haven't achieved some awards along the way. My very first award was the ARRL's quite basic membership in the Rag Chewer's Club. This discontinued award was issued simply to someone who liked to rag chew and wanted everyone to know! Shortly thereafter, I worked a sufficient amount of QSOs for introduction to The Morse Preservation Society (FISTS) club. A



couple of years later, I had amassed enough QSOs with fellow Fists members to earn membership in their Century Club. This is an honored certificate showing true patience and dedication to the CW craft.

My finest award to date is the ARRL's Worked All States award with CW endorsement. Nearly every state was contacted with rigs using single digit wattage (and in a couple of instances, even less than one watt!)



ARRL Worked All States certificate

Looking at my WAS and seeing the CW endorsement brings me a lot of pride. It says, in big bold letters: "I do know the code and I use it often." Corny as it may sound, it really is a confirmation to me of being a real ham with verified skills even more than holding an Extra Class or commercial ticket.

So, what is my favorite operating band? It has to be 80 meters, the band for which I built my very first dipole and operated exclusively during the first years of my amateur license. My old hangout is now obsolete creating one major problem. I am no longer resonant!

3700 kHz was the address where you would find me working many, many fellow new hams from Maine to Florida and out to the Midwest (especially when the night grew long.)

My 80 meter dipole is not very high above the ground. It is only about 30 feet up creating a device good for only near vertical incidence skywave (NVIS) transmission. Most of my catches were fairly nearby neighbors but we certainly heard each other well. 1, 2, 3 and 8s were the rule. Anything beyond that was gravy! I remember some early mornings working a 6 or 7 call and reveling in the great distance I achieved! On rare occasion, a small miracle would carry my signal to South America or the Pacific Rim. What a wonderful day that would be! One day, I'll get my dipole high into the sky (how about 75 feet?) and a new world will be mine!

Times change and so do frequency allocations. 80 Meter CW now ends way down at 3600 kHz and my old dipole antenna has become dramatically short. At band's edge, my little S&S TAC1 QRP transceiver only suffers a little, but even down 50 kHz, at 3550 kHz, the TAC1's final transistors overheat rapidly, due to high VSWR, and my signal starts fading away to all who listen. I have to build a new antenna, with much longer elements, to now match today's lower-in-frequency 80 meter CW band.

These days, I find myself living in the area from 3600 kHz down to around 3520 kHz or so. Below 3525 kHz, you'll find major-league CW ops looking for the rare ones heard just barely over the noise level holding court trying to work 100 needy stations an hour. Even if you can't find your way through the pile-ups, it's fun to listen in to the chaos! 3558 kHz is the hang-out for FISTS club members. You find the slower speed ops up at the edge of the 80 meter CW-only spectrum approaching 3600 kHz. Some die-hard slow speed ops continue to haunt 3700 kHz or so. It's still legal to exercise your straight key up there. All you have to do is dodge the LSB quacky-ducks chatting away using those things called 'microphones.'

Conditions on the low bands have been just amazing during the past couple of years. The bashing about of atmospheric QRN is now often quite quiet. How I miss the crashes and bangs that summertime would bring! Without a good 'static salad,' 80 meters is barely recognizable! The intensity of signals has been just as remarkable noted way down into the AM broadcast band. Transoceanic reception has become almost a daily occurrence, especially to BCB DXers near the seashore along the American East Coast. European, African and Middle Eastern stations have been logged over and over again.

The bottom of the sunspot cycle doesn't just help the amateur lowbands. Domestically, broadcast stations often thought of as distant are now robust and reliable.

Look for 830 WCCO Minneapolis, 870 WWL New Orleans, 1040 WHO Des Moines and 1120 KMOX St. Louis as indicators of potential potent amateur signals on 160 and 80 meters. It can be fascinating listening, as well! For a real stretch, try for 640 KFI Los Angeles, 850 KOA Denver and 1160 KSL Salt Lake City late at night. All the main stations from Chicago often reach my QTH stronger than 'local' stations from New York City in the hours of darkness!

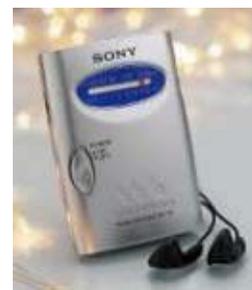
This weekend, I am reporting from Northern Virginia. Using my simple Sony SRF-59 Walkman, or even my very modest and trusty 12-730 Realistic Flavoradio, I can hear the big boys from New York (like WFAN and WCBS) on AM radio even during the day listening in a basement! The medium wave bands are truly amazing and so are 160 and 80 meters!

The days of low sunspots bring lots of daytime excitement to 80 meters. If you can find a willing correspondent several hundred miles away during the day, you can sometimes catch stations in dead-spot areas very difficult to work during normal conditions. Listen for scheduled nets, with check-ins from far-away places, to see just how far your 'ears' can hear! A good place to start is the Empire Slow Speed Net heard at 6 pm Eastern on 3576 kHz. Also listen for the Hit and Bounce Slow Speed Net at 7:30 am Eastern on 3590 kHz. Both nets will give you a good idea of how propagation will be setting up during the day or evening to follow. It's also a great place to listen to some slow code to brush off the cobwebs from your Morse memories of the past.

Speaking of slow speed code, a wonderful yearly event is coming up on New Year's Day. The ARRL's Straight Key Night runs from 7 pm December 31 through 7 pm January 1 celebrating code sent only by manual devices and often via vintage tube and/or homebrew gear. You'll hear the timbre and speed up and down the CW allocations change dramatically as we all revert back to the days before the advent of the electronic keyer and keyboard. This event encourages (and tries to recruit!) amateurs willing to give the mode of CW a try. We would love to have you join in! After a couple of easy-going QSOs, you might be hooked!

Something New

Digital Television is finally coming to maturity providing fairly reliable signals to my QTH 45 miles away from the Empire State Building. I still see momentary drops out and halts every once in awhile, but even when using an indoor two-bay UHF antenna and a granny box, I'm getting watchable reception most of the time. Some manufacturers are even offering portable



*Sony SRF-59 AM/
FM Walkman*

DTVs with built-in ATSC digital tuners. One huge problem: batteries just don't last very long when you are sending electrons through that much silicon. I'm sure these designs will improve, but it is a tall order right now.

Take a look at the Radio Shack Accurian 7 at: <http://www.radioshack.com/product/index.jsp?productId=2855063>. The reviews are very telling. People either love the little device or they hate it! The number one complaint is short battery life



Accurian 7" widescreen LCD portable TV

followed by poor reception. This is the harsh reality of DTV reception: It either works or it doesn't. Portable DTVs are important because you'll really need them when the lights go out in emergencies. All your old portable TVs just won't work after

February 17th and that's only three months away! Several other manufacturers have introduced DTV portable models. I'll report on their development in future issues of *PCARA Update*.

Another change that might seem frightening is the pending extinction of incandescent light bulbs. Congress has decided to mandate phasing-out the energy abusing glow-bulbs in the next few years. 100 watt bulbs will be taken out of production in 2012, 75 watt bulbs say 'sayonara' in 2013 and 60 and 40 watt bulbs will cease further production in 2014. Major manufacturers of light bulbs are gearing up to produce several other types of light-emitting devices in the name of saving energy. Old-timers: It's time to start hoarding now! There may be a black market for old light bulbs in just a few years!

Keep up-to-date with the world by joining us weekly on the PCARA Old Goat's Net Thursdays at 8 pm. You'll find us on the PCARA two-meter repeater at 146.67 MHz, with a -600 offset and a 156.7 PL. We would be glad to have you join us! Have a wonderful holiday season and happy New Year!

- 73 de N2KZ Karl

LED Lamps

On a recent visit to our local Walmart store, I saw that the lighting display now includes a new range of white LED (light emitting diode) bulbs.

Lamps based on white LEDs have been available from suppliers such as C. Crane (<http://www.ccrane.com>) for a few years, but prices have been



"Lights of America" LED lamps.

very high. Even today, a C. Crane 60-LED PAR 30 replacement bulb costs \$40.00. (PAR 30 means: parabolic aluminum reflector, 30 x 1/8" dia.)

The new "Lights of America" lamps from Walmart are significantly cheaper. For example, they have a "replaces 40 watt" round globe light bulb with 20 LEDs for \$5.87 and a "replaces 45 watt" reflector-style "down lamp" with 60 LEDs for \$9.87. These lamps all have standard E26 medium Edison screw bases suitable for most light fittings. I purchased one of each to try out.

Why would you want to choose LED lamps over their incandescent forefathers or the more recent compact fluorescent lamp (CFL)? These LED-based lamps do not contain toxic mercury, they do not flicker at start-up and they come up to full brightness immediately, instead of requiring a warm up time. Long life is promised, with up to 100,000 hours possible, and the electrical power consumption is very low. This is because the conversion from electrical energy to light energy is very efficient — 20-52% efficiency for an LED lamp, compared to 15-25% for a fluorescent lamp and 1-4% efficiency for an incandescent lamp. The new lamps that I bought only consume 1.5 watts and 3.5 watts of electrical power respectively.



1.5 watt LED globe lamp

For radio amateurs — who may be more interested in a quiet radio environment — 120 volt LED-based lamps have simple circuitry and should be less

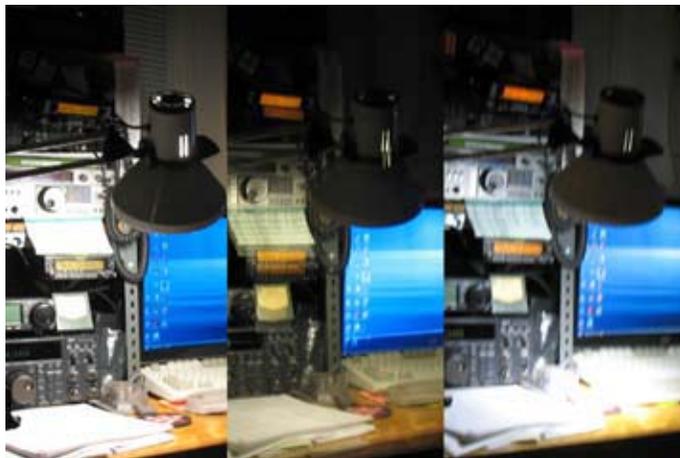
prone to generate radio frequency interference than the switch-mode power supply in a CFL. The circuitry for a 120 volt LED lamp can be as simple as a 1 k ohm current-limiting resistor, feeding a string of series LEDs.

However, the “Lights of America” lamps from Walmart did have a warning on the package as follows:

“NOTE: This product may cause interference with radios, televisions, telephones or remote controllers. If interference occurs move this product away from device or plug into another outlet.”

This was *not* encouraging, and I expected to hear all sorts of radio frequency emissions from the new lamps. However, when I turned each lamp on and held a Sony portable short wave receiver near the bulb and the power leads, there was no change in interference with the bulb switched on or off. Excellent!

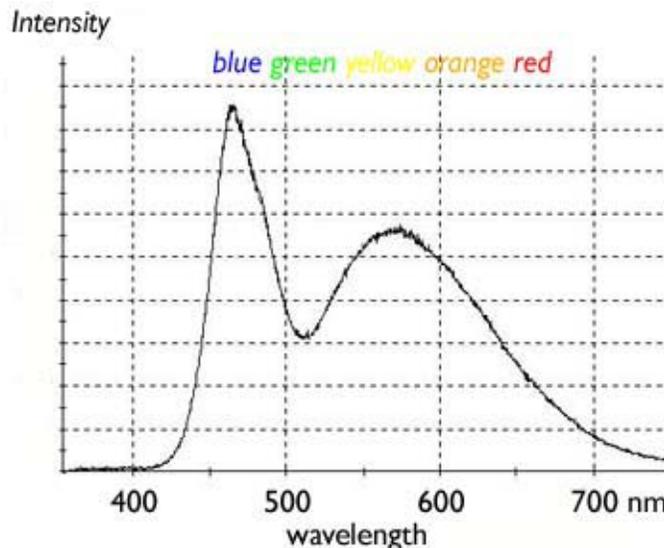
Unfortunately, the light output was a little disappointing. The round globe that “replaces 40 watt” had a weak light and a yellow color cast (see photo). The “down lamp”, which is supposed to replace a 45 watt bulb, had better brightness with a bluish light, but the radiation was highly directional, unlike the 40 watt tungsten lamp that it was tested against.



Comparison of light output from incandescent and LED bulbs in desk lamp. Left - GE soft white 40 watt incandescent bulb. Center - Lights of America 1.5 watt round globe LED lamp. Right - Lights of America 3.5 watt down lamp.

Essential, white

White LEDs are based on work by Shuji Nakamura of Nichia Corporation in Japan, who developed a bright blue LED in 1993 based on the semiconductors gallium nitride (GaN) and indium gallium nitride (InGaN). You may have seen these blue LEDs as backlights and indicators for recent electronic devices. With a bright source of blue light available, it was possible to coat the LED junction with a special phosphor that would convert some of the narrow-band blue light to a broad-spectrum yellow light. The yellow phosphor employed



Spectrum of light from a white-LED lamp. Sharp blue peak is from the gallium nitride LED, broad yellow peak is from the YAG phosphor.

in white LEDs is usually cerium-doped yttrium aluminum garnet (Ce:YAG) – you can easily see this yellow phosphor if you inspect the individual LEDs closely.

The combination of a yellow phosphor with a blue light emitting diode produces visible light which approximates white, but with very little green and almost no red content. The spectrum shows a spike at a wavelength of 465 nanometers (blue light), with a dip at 500 nm (green) and tailing off badly at 650 nm (red light). Compared with the broadband radiation from the sun or from an incandescent lamp, these white LED lamps produce poor color rendering. An additional red phosphor is sometimes included to provide a “warm white” LED.

It is still early days for these 120 volt white LED lamps. We do not know the lifetime of the low cost units, and there is still work to be done on improving the color and directionality of the light. Right now, I would say these lamps already have practical application as small spotlights and floods. With further improvement, their future could be very bright.

- NM9J

Field Day results

Full results from Field Day 2008 appeared on the ARRL members-only web pages on October 29. See http://www.arrl.org/members-only/contests/scores.html?con_id=155. The results also appear in the December issue of *QST*. PCARA's results were in line with the provisional score reported in the July newsletter. Just look at those increasing QSOs and points:

Peekskill/Cortlandt ARA, W2NYW

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2007 | 2008 |
|---------------|-----------|-------|-------|-------|-------|-------|-------|
| QSOs: | 450 | 718 | 733 | 968 | 853 | 1019 | 1109 |
| Power | 2 (<150W) | | | | | | |
| Participants: | 16 | 15 | 11 | 12 | 10 | 14 | 10 |
| Total score: | 1,540 | 2,096 | 2,328 | 2,996 | 2,798 | 2,906 | 3,460 |

Publication of the complete results allows a comparison of our score with the efforts of neighboring groups in the ENY section and Hudson Division. Overall, PCARA's position was similar to 2007.

In Field Day 2008, PCARA was...

- **Fourth** out of 5 entries in Category 2A, ENY section.
- **Tenth** out of 29 entries in the entire ENY section.
- **Seventh** out of 15 in Category 2A, Hudson Division.
- **23rd** out of 95 in the entire Hudson Division.
- **115th** out of 442 in category 2A nationwide.
- **457th** out of 2410 entries total.

Here's how PCARA fared compared with some of our friends and neighbors in East New York section:

| # | Call | Points | Cat | QSOs | Club |
|-----------|--------------|-------------|-----------|-------------|----------------|
| 1 | N2SF | 9100 | 4A | 2515 | WECA |
| 2 | W2MU | 8026 | 2A | 2566 | Hudson Valley |
| 3 | K2AE | 7456 | 5A | 1735 | Schenectady |
| 5 | K2QS | 4568 | 3A | 1189 | QSY Society |
| 6 | K2PUT | 4218 | 2A | 1153 | PEARL |
| 8 | W2YRC | 3700 | 2A | 809 | Yonkers |
| 10 | W2NYW | 3460 | 2A | 1109 | PCARA |
| 12 | W2HO | 3300 | 3A | 945 | Orange County |
| 13 | W2EGB | 3266 | 2A | 1120 | East Greenbush |



Flashback to Field Day 2008. Joe WA2MCR and Alan operate 20 meters.

Compared with 2007, we had more contacts and increased our score, but our position in the ENY table declined from 8th to 10th. A few hundred points would have raised us up to Yonkers, W2YRC. Closer examination of this set of results shows that our neighboring clubs had many more participants than PCARA – from 46 people for PEARL to 91 for QSY Society(!) – and they had “Get on the Air” (GOTA) stations that contributed more HF QSOs and possible bonus points.

ARRL reports that over 1.2 million contacts took place in Field Day 2008. The proportion of digital contacts using RTTY, PSK31 etc. rose to over two percent. Forty one percent of contacts used CW and fifty seven percent were on phone.

– NM9J

75 years of FM

December 26 is a significant date in the history of radio... it was on this date in 1933, 75 years ago, that Edwin Howard Armstrong was granted his first patents on wide-band frequency modulation.

A little feedback

Howard Armstrong was born in New York City in 1890 and grew up in Yonkers. He was fascinated by the early days of radio and while still at high school, built a 125 foot antenna mast at his parents' home in Warburton Avenue to hear weak signals better.



Edwin Howard Armstrong

At the time, RF signals could only be detected by sensitive instruments such as the magnetic coherer. It was essential to collect as much RF energy as possible from the original transmission, apply it to the detector then listen on sensitive headphones. Lee de Forest's audion triode tube became available, but it did not help increase the strength of received RF signals. In 1912, while studying at Columbia University, Armstrong developed a new, regenerative circuit that fed energy from the audion plate circuit back to the grid. This gave sufficient amplification for distant signals to be received and heard without headphones. Increasing the feedback even further produced a steady oscillation that could be used as a source of continuous-wave RF energy.

Super reception

By 1917, the USA had joined World War I and

Armstrong volunteered for service. He was sent to France with the U.S. Army Signal Corps. In Paris, he was given the job of detecting weak high frequency signals thought to be coming from the enemy. This resulted in his invention in 1917 of the superheterodyne circuit as a better way to amplify received signals. Here is Armstrong's own description of the technique from his U.S. Patent 1,342,885, issued on June 8 1920.

"This new method of reception consists in converting the frequency of the incoming oscillations down to some predetermined and lower value of readily amplifiable high frequency current and passing the converted current into an amplifier which is adjusted to operate well at this predetermined frequency. After passing through the amplifier, these oscillations are detected and indicated in the usual manner. The intermediate frequency is always above good audibility, but beyond this requirement there is no other limitation as to what it shall be. The method of conversion preferred is the beat method known as the heterodyne principle, except that in the present system the beat frequency is always adjusted to a point above good audibility."

Armstrong returned from France to Columbia University and in 1920 sold the rights to his two main patents – regenerative feedback and the superheterodyne receiver – to Westinghouse for \$335,000. In 1921 he was involved in the successful transatlantic tests sponsored by ARRL between Paul Godley in Scotland and the Radio Club of America transmitting station 1BCG in Greenwich CT. Armstrong went on in 1922 to discover the super-regenerative circuit, for which RCA paid Armstrong \$200,000 plus 60,000 shares of RCA stock. Meanwhile, a patent war had broken out and was being fought by Lee de Forest with AT&T and RCA on the one hand and Howard Armstrong with Westinghouse on the other hand over the invention of feedback. This war stretched from 1921 to a final decision in 1934 when the Supreme Court reversed an Appeals Court ruling for Radio Engineering Labs (REL), ending a 20+ year battle in favor of RCA and Lee de Forest.

Radio days

During the early 1920s, AM broadcasting was becoming popular and Armstrong's superheterodyne circuit was all set to make reception of amplitude modulation more reliable. In 1923, Armstrong demonstrated a 5-tube superhet receiver to RCA Vice President David Sarnoff. An updated design was put into production in 1924 and became a great success as the RCA Radiola Super-VIII.

There were (and still are) problems with AM broadcasting on medium frequencies. During the summer months, when lightning storms were passing through, reception could be wiped out by static. Man-made interference from electric motors was also a

problem. Armstrong realized that the static impulses were mostly amplitude modulated in the same way as the broadcast stations, and there was little hope of canceling out one without removing the other.

Narrow or wide?

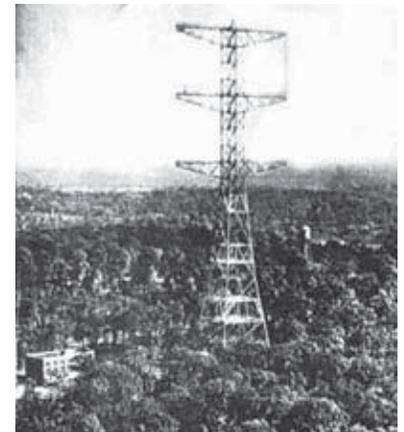
At this point in the history of radio, frequency modulation was already known about. In order to reduce the effect of noise with AM, it was possible to reduce bandwidth, reducing the amount of noise entering the receiver — but taking the same approach with FM would actually provide inferior performance compared to AM. As a result, FM was not being considered for noise reduction. From 1928, Armstrong worked on a new development – wideband FM – and as noted before, his first patents for FM transmitting and receiving were granted on December 26, 1933. They were entitled "Radio Signaling System" and "Radiosignaling".

Armstrong began practical tests of his new FM system in 1934 using NBC's early TV transmitter facility in the Empire State Building. In 1935 he gave a demonstration to the Institute of Radio Engineers in Manhattan, using the amateur radio station of his friend Randy Runyon, W2AG in Yonkers as the transmitting source. Not only did wideband FM overcome static, but the fidelity of reproduction was far better than with AM. (Note – that famous call W2AG is now held by Michael Troy of Carmel, NY.)

The Alpine tower

In 1937, RCA/NBC withdrew their experimental facility at the Empire State Building as they intended to pursue AM rather than FM and thought that television would be the real future.

Armstrong decided to build his own transmitting station at a site high on the Palisades in Alpine, NJ with a good view of downtown Manhattan, and of his family home in Yonkers. The famous 400 foot tower with three 75 foot cross arms looks much the same today as when it



Alpine Tower long before the surrounding area was built up.

was built 70 years ago. The tower was completed in early 1938, and Armstrong's experimental FM radio station first came on air in April that year with the call W2XMN, later KE2XCC. The first day of regular broadcasting was on July 18, 1939 with programs fed by high fidelity land-line from radio station WQXR in New York

City. Armstrong's station was then running 20 kW output on 42.8 MHz, wideband FM.

Special Event

To celebrate the 75th anniversary of the invention of FM radio by Armstrong in 1933, The Major Edwin H. Armstrong Memorial Radio Club and Palms West ARC will operate special event stations W2XMN & W2XEA, on December 13 & 14, 2008, 1400-2200Z in Royal Palms Beach, Florida. Frequencies are 7.270 & 14.270 MHz SSB and 29.600 & 52.525 MHz FM. If you work the station, send a stamped addressed envelope for a special QSL to Major EH Armstrong FM Association, PO Box 1584, Loxahatchee, FL 33470.

- NM9J

WDFH move

Ossining local radio station, WDFH is about to move to a new transmitting site with better coverage. WDFH first came on-air as an FCC licensed station in July 1995 after a prolonged struggle to find a suitable frequency. Soon afterward, the station lost its Ossining studio location and went off-air until 2003 when a new alliance with Mercy College in Dobbs Ferry turned it into a campus broadcaster offering media experience to students. The alliance ended in 2006 and WDFH had to find another location for its studio.

WDFH has been using a transmitter location just



off Pinesbridge Road, near Ossining, 617 feet above sea level. The station's 12 watt ERP transmitter did not reach very far, and the FCC 60dB service contour map only stretches from Croton on Hudson to Briarcliff Manor.

WDFH – operated by Hudson Valley Community Radio Inc — now has a construction permit for a better location, between Hardscrabble Road and the Saw Mill River Parkway in Mount Pleasant. The site stands 640 feet above sea level, with an existing tower that is 125 feet high. WDFH will be placing its new antenna on a 40 foot mast above the tower, for a total height of 161 feet above ground.

Transmitter ERP will increase from 12 watts to 53 watts. Predicted coverage will then stretch from Mount Kisco to Tarrytown. With an external antenna, listeners in Peekskill, Yorktown, New City and White Plains should also hear the signal.

According to the station's web site, <http://www.wdfh.org>, the new location could be on the air by the end of 2008 or by early 2009. The station is also soliciting contributions. Keep an ear on 90.3 MHz FM for their new, stronger signal.

- NM9J

Auction time approaches

It's still a few weeks away, but here's an early reminder that PCARA will hold its second "Bring and Buy Auction" at the January meeting, scheduled for 3:00 p.m. on Sunday January 4 at HVHC.

At this time of year, there is a general absence of local hamfests. The last event was organized by Bergen ARA on October 4 and we will have to wait until March 28, 2009 for Orange County ARC's hamfest at Middletown.



So... take a look around your shack and storage area for items you have not used in a while. Anything that has not been on the air for a year or two will not be missed.

Dust it off, plug it in, check that it works, then set it to one side, ready for the "Bring and Buy" auction



Location of the new transmitter site for WDFH.

next month.

If you need a rough idea of the second hand value, you can always check on eBay. But remember — auctions with real equipment and real-life people to bid against are always more exciting! That was certainly the case for PCARA's first "Bring and Buy" in January 2008.

Holiday Meal

Ray and Marylyn have been organizing the upcoming Holiday Meal, planned to coincide with the December meeting on Sunday December 7. Location will be as before, "At the Reef", located at Annsville Circle. The start time has been adjusted to **5:00 p.m.** to accommodate members who are working that day.

The menu will be as follows:



DINNER MENU

Tossed green salad

Choice of entrées with Baked Potato and Vegetable:

Chicken Cordon Bleu

Boneless Breast of Chicken Marsala

Penne à la Vodka with grilled breast of Chicken (no potato or vegetable)

Broiled Stuffed Filet of Sole

Broiled Filet of Salmon

Prime Ribs of Beef (\$\$extra)

Cake of the Day, Coffee or Tea

Unlimited soda

A standard choice from the menu complete with unlimited soda, plus tax and gratuity will be \$28.75. If you would prefer the beef, the price increases to \$32.50.

If you think you will be coming to the holiday dinner, and you were not able to prepay at the November meeting, please inform Ray W2CH and Marylyn, KC2NKU in advance and bring your payment to the actual meeting on December 7.

Practice exam site

Hamilton, KDOFNR has provided details of his new web site for amateur radio practice exams. Just point your browser to <http://copaseticflow.blogspot.com>.

At the site, you can pick a trial test for the Technician, General or Extra class license. The questions are presented one by one — if you choose an incorrect answer, you can have another try or take a look at the online study material. Linked articles related to the particular question are available, and if you don't like the selection, you can add your own. For questions requiring mathematics, an on-screen calculator is available.

Make a New Year Resolution to upgrade in 2009!

Siren success

The new electronic warning sirens for the Indian Point nuclear power plant passed an important test on November 20. A four-minute full volume test revealed only one siren in Cornwall that failed to operate correctly. The other 171 performed as expected.

Following this third successful test, Entergy has officially brought the new alert notification system into full service. FEMA is expected to allow the previous 1970s-vintage siren system to be dismantled in 2009.

The new system can be activated by radio signal, by cell phone or by an Internet-based method. The system also has back-up power supplies for each component, including the sirens themselves. Each siren is battery driven to ensure operation—even during a local power outage—as required by the Energy Policy Act of 2005.

The new sirens have no rotating or moving parts, reducing the chance of mechanical failure, can be activated and communicated with via three pathways versus one pathway in the old system, and are mounted on steel poles versus wood.

To supplement the new siren system, residents in selected areas have been offered Tone Alert Radios. Some 2000 homes that do not receive a sufficiently loud sound from their nearby siren are affected. The radios are tuned to WHUD and are tested on a regular basis by the station.



New (left) and old sirens at Toddville School



Tone alert radio

Peekskill / Cortlandt Amateur Radio Association

Mail: PCARA, PO Box 146, Crompond, NY 10517

E-Mail: w2nyw@arrl.net

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

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

PCARA Update Editor: Malcolm Pritchard, NM9J

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Newsletter contributions are always very welcome!

Archive: <http://home.computer.net/~pcara/newslett.htm>

PCARA Information

PCARA is a **Non-Profit Community Service Organization**. PCARA meetings take place the first Sunday of each month* at 3:00 p.m. in Dining Room B of the Hudson Valley Hospital Center, Route 202, Cortlandt Manor, NY 10567. Drive round behind the main hospital building and enter from the rear (look for the oxygen tanks). Talk-in is available on the 146.67 repeater. *Apart from holidays.

PCARA Repeaters

W2NYW: 146.67 MHz -0.6, PL 156.7Hz

KB2CQE: 449.925MHz -5.0, PL 179.9Hz

(IRLP node: **4214**)

N2CBH: 448.725MHz -5.0, PL 107.2Hz

PCARA Calendar

Sun Dec 7: PCARA Holiday Dinner, "At The Reef" restaurant, **5:00 p.m.**

Sun Jan 4: PCARA New Year bring and buy auction, 3:00 p.m. Hudson Valley Hospital Center, 3:00 p.m.

Hamfests

Sun Jan 11: NY/Long Island Section Convention/ Ham Radio University, Briarcliffe College, Stewart Ave, Bethpage, NY.

VE Test Sessions

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

Dec 11: WECA, Westchester Co Fire Trg Center, 4 Dana Rd, Valhalla NY. 7:00 p.m. Contact: Stanley Rothman, (914) 831-3258.

Dec 15: Columbia University, 2960 Broadway, 115 Havemeyer Hall, New York. 6:30 p.m. Contact Alan Crosswell (212)854-3754.



Peekskill / Cortlandt Amateur Radio Association Inc.
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