

PCARA Update



Volume 25, Issue 11 Peekskill/Cortlandt Amateur Radio Association Inc. November 2024

Vectoring in

The October 2024 PCARA Membership Meeting was held on Saturday October 5, 2024 at the Putnam Valley Free Library in Putnam Valley, NY. PCARA received a donation of vintage Kenwood equipment from a gentleman from Pound Ridge whose uncle was an Amateur Radio Operator. The equipment includes a Kenwood R-1000 receiver and TS-130S transceiver. A suggestion was made to bring the donated equipment to the Annual PCARA Bring and Buy Auction in January of 2025. On behalf of the membership of PCARA, I would like to offer our sincere thanks to Richard Porter and appreciation for the donation and thinking of us! [For donation in memory of his uncle Roland Porter K3PK].

In 2025, PCARA will be celebrating its **25**th **Anniversary**, our Silver Jubilee! There have been many suggestions as to activities to commemorate this milestone. Picnic, barbecue, banquet, special event station(s), POTA, SOTA, even a club excursion to the Dayton Hamvention. Do some brainstorming and share your thoughts, ideas and suggestions.

On October 12, 2024 several of our members attended the **Bergen ARA Hamfest** in Washington Township, NJ. Bob N2CBH had a table and was able to sell the remaining vintage radio items from the estate of Henry KB2VJP (SK). Thank you, Bob.

Saturday October 19, 2024 saw another PCARA Breakfast take place at Uncle Giuseppe's Marketplace in



Bob N2CBH took a table at the Bergen ARA Hamfest on Saturday October 12.



Vincent KD2VAV provided communications support for the Run Against Hunger at Water Stop #3. [KD2ITZ pic.]

Yorktown Heights, NY. We packed out 2 tables with about 10 members and had a great time!

On Sunday October 20, 2024, PCARA along with our friends at WECA provided communications support for the 44th Annual **Harry Chapin Memorial Run** / **Walk Against Hunger** at the Croton-Harmon High School in Croton-on-Hudson, NY. This was the 10th year that we have participated in this most virtuous endeavor. A total of 15 amateur radio volunteers participated. The events were thankfully uneventful with a record number of runners this year. Thank you to all that helped make the day a success!

A **PCARA Foxhunt** was held on Saturday October 26, 2024 at FDR Park in Yorktown Heights, NY. The winner was Steve KD2OFD with Rob AD2CT in second place. Well done! *Continued on page 2* ⇒

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Please mark your calendars with these upcoming events:

- Saturday November 2: Monthly meeting and VE Test Session (see below).
- Saturday November 16, 2024 at 9:00 a.m.: PCARA Breakfast at Uncle Giuseppe's Marketplace in Yorktown Heights, NY.
- Sunday December 8, 2024 at 5:00 p.m.: Annual PCARA Holiday Dinner at the Cortlandt Colonial Restaurant in Cortlandt Manor, NY. Price is \$50.00 per person (same as last year). The menu can be found in this month's edition of the *PCARA Update*. Please contact Malcolm NM9J if you are planning to attend.

Our next **PCARA Membership Meeting** is scheduled for Saturday November 2, 2024 at 10:15 a.m. at the Putnam Valley Free Library. A presentation entitled: "Introduction to VNAs (Vector Network Analyzers)" will be given by PCARA Vice President Bob N2CBH, and the **election** of two PCARA Board Members will take place. Incumbent directors Bob Tarsio and David Fredsall will be standing for re-election. Also, a PCARA ARRL VEC Test Session will follow the meeting at 11:30 a.m. Please contact Mike W2IG to register (w2igg'at'yahoo. com). I look forward to seeing each of you there.

- 73 de Greg, KB2CQE

PCARA Board

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

Bob Tarsio, N2CBH; bob 'at' broadcast-devices.com Secretary:

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Mike Dvorozniak, W2IG

Vice President Emeritus: Joe Calabrese, WA2MCR.

Net night

Peekskill/Cortlandt Amateur Radio Association holds a roundtable net on Tuesday evenings at 8:00 p.m. and a directed 'Old Goats' net on Thursday evenings at 8:00 p.m. Both events take place on the 146.67 MHz W2NYW repeater, offset -0.600, PL 156.7 Hz.

Join the roundtable to find out what members have been doing or join the Old Goats with net control Karl N2KZ for news and neighborly information.

VE Test Session

PCARA's latest V.E. Test Session took place on Sat-

urday October 5, following the monthly meeting held at Putnam Valley Library. There was one candidate, John Pokluda of New Canaan CT, who successfully passed



October 5 VE Test Session took place at Putnam Valley Library.

the Element 2 Technician Exam — and qualified for **General**.

"How can that be?", you might ask. Answer: John had been previously licensed as youngster. The 1969 Fall Callbook reveals that John Pokluda was licensed as General Class **WA2GMP** in N Bergen NJ.

"FCC Rule 97.505(a) offers partial credit to an examinee that has an expired General, Advanced, or Extra license. If an applicant held a General or Advanced license, and has proof, the FCC will afford credit for the General (Element 3) written exam only." (ARRL web site.)

§ 97.505 Element credit.

(a) The administering VEs must give credit as specified below to an examinee holding any of the following license grants:

Operator class	Unexpired (or within the renewal grace period)	Expired and beyond the renewal grace period
(1) Amateur Extra	Not applicable	Elements 3 and 4.
(2) Advanced; General; or Technician granted before March 21, 1987	Elements 2 and 3	Element 3.
(3) Technician Plus; or Technician granted on or after March 21, 1987	Element 2	No credit.

At press time, John Pokluda's new call sign had not yet been assigned.

PCARA's next VE Test Session is scheduled for Sat-

urday November 2, 11:30
a.m. at Putnam Valley Library. This will be an ARRL-VEC session, candidates should contact Mike W2IG beforehand using e-mail: w2iggʻat'yahoo.com.



Get your amateur ratio incense and discover...
Cameroderie – Community Service
Emergency Preparedness – Fun
Science – Technology
ARRL Volunteer Exeminers: \$15 Test Fee

must RSVP: w2/gp@yahoo.c





Adventures in DXing

Here Comes the Sun

We live in strange times. Early in the evening on Thursday, October 10th, we experienced another powerful solar storm. The effects became prominent and obvious as early as 7:30 p.m. local time here in New York. Displays of the Aurora Borealis were again seen all across North American skies during that night.



Aurora picture by Noble Harper KC8PGG on October 10 2024, Deckerville, MI. [KC8PGG pic used with permission.]

Propagation effects on 10, 6 and 2 meters shifted, bringing in very unusual skip from over the North Pole. CW and voice transmissions showed the signs of their rare auroral journeys. Morse Code notes took on a mechanical rusty sound. Voice transmissions were also wildly distorted if not unreadable.

My friend John McIlwraith, GM4ZTO, in Ballantrae, Scotland shared similar experiences on high band HF. John scored some fantastic catches from New Zealand, Australia and China that were of enormous strength but quite sporadic. Stations would come in with authority only to quickly disappear like a spectre in the night.

Medium wave "AM Radio" reception also reacted dramatically. It seemed like someone had opened a big knife switch instantly removing all sky wave reception. Only stations within a short arm's reach still made it through via local ground wave. Most remaining signals exhibited classic fast flutter, the signature of auroral disturbance. The silence on AM radio lasted for six nights finally returning to "normal" on October 16th.

When all night time skywave is greatly attenuated, new and remarkable remainders are revealed. Local WLAD 800 kHz Danbury is usually bombarded overnight by 50,000 watt CKLW from Windsor, Ontario (Detroit.) At night, WLAD drops from a daytime power of 1,000 watts to 286 watts, radiating through their

single tower just to the east of Danbury Airport and the Danbury Fair Mall. There are small mountains of leftover glacial rock between my QTH and the WLAD tower. Their reduced night signal never stands a chance against



blowtorch CKLW transmitting directional east from 600 miles away... unless, of course, if nature decides to turn off skywave! For the next few nights, I heard WLAD 800 loud and clear.

There were exceptions to this wild change in atmospheric behaviour. WFED/WTOP on 1500 from the Washington, DC area continued to find its way to New York. Was this just extended ground wave? Maybe its high band position? Serious auroral flutter beleaguered their broadcasts but they always pulled through even long past local sunrise.

What was left behind on AM radio was fascinating and bewildering. Could there be some odd trans-equatorial effects, as well? In example, from 1100 miles away, ZNS-1 from Nassau in the Bahamas on 1540 kHz was widely heard in the clear, all over the eastern half

of North America, one evening for hours at a time. 1540 kilohertz, in the New York Metro, is usu-



ally clogged with Toronto's CHIN and Philadelphia's WNWR. ZNS-1 arrived with a commanding signal free of all competition.

Adding to this adventure was another odd quirk. Although single hop medium wave skywave reception was missing, weaker stations from far, far away were magically revealed. What on Earth? (Exactly!) Long research revealed some possible answers.

Let's do some analysis. My usual limit of regular medium wave one-hop skywave night-time reception reaches to powerful stations in New Orleans (1170 miles away,) St. Louis (888 miles,) Des Moines, Iowa (1125 miles) and Minneapolis/St. Paul, Minnesota (1016 miles.) When all one-hop station propagation was negated, we started hearing everything beyond those limits — for the most part — away from the far northern affects (and viewing) of the aurora. The usual skywave was not in the way!

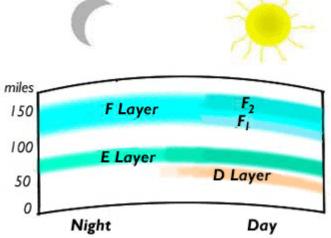
Ace DXer Mark Connelly, WA1ION, logged these areas on October 12 from Cape Cod: Dominican Republic, Venezuela, Colombia, Cuba, Mexico, Puerto Rico and The British Virgin Islands. On the night of October

11th, Mark commented: "I haven't had much deep South America (Brazil, Argentina) yet as Cuba, Puerto Rico, and Colombia have things pretty cluttered up. 940, for instance, seems to be WIPR-PR over WINZ-FL on most of my "grabs." I did notice the Peru growl against WFED." Is there any validity to the "only first hop negated" theory?

After many conversations with friends and fellow DXers — and long research of articles and studies journaling the experiences over the last century — I learned a great deal about solar flares and disturbances. The term SID — Sudden Ionospheric Disturbance — has now entered my vocabulary. I gained a new and quite detailed understanding about how solar storms effect our radio listening habits.

Here is a concise summary of what I discovered. There are three layers of the ionosphere that create the behavior of radio reception known as the D, E and F layers. All three layers have the ability to catch and carry radio signals just like mirrors behave with light. We delight when signals reach the highest F2 layer. The signals you then receive can originate thousands of miles away.

Daily AM Radio reception depends on the D layer, the closest layer to the Earth's surface carrying ionospheric particles. Think of it as like a piece of photosensitive glass you may have in your sunglasses or eyeglasses. When the sun's rays hit the D layer and energize its particles it creates a very stark and effective attenuating filter. When it is dark outside and the sun has retired for the day, the layer is not energized and it allows more distant signals to travel to your radio.



Solar radiation is blocked at night, resulting in changes to the ionosphere between night and day.

For a wonderful and concise introduction to medium wave DXing visit: https://mwcircle.org/1-introduction/.

Amateur radio operators tend to enjoy propagation provided by the higher regions of the ionosphere. This is where your deep DX reflects to your QTH. The E layer is famous for phenomenal skip in the VHF and

even the UHF ranges. Fully energized, the E layer can bring in extraordinary reception from 600 to about 1800 miles away. The highest F layer can deliver signals from thousands of miles away.

When solar activity is quite strong, signals can skip multiple times just like when you skip a flat rock on the surface of a pond. All of these ionospheric layers can disappear or return in a flash. Random? It's a big part of the fascination we all share when we get on the air.

Great Conversations

Strange times inspire grand conversations. With a tip of the hat to Joni Mitchell: "You don't know what you've got 'til it's gone!" Suddenly, the energy from a solar storm reached Earth. We began experiencing a whole new world on our most familiar listening band. A major attribute responsible for our nightly distant AM radio reception had been extracted and removed! I spoke to many good friends around the world about their thoughts, theories and conclusions. What was going on?

Most interesting was a brilliant note sent to me by Martin Hall, GM8IEM, the *Medium Wave News* DX Loggings Editor and a mainstay of the 'Medium Wave Circle' AM radio DXers club. His QTH is in a little village called Clashmore overlooking the northwestern shores of Highland Scotland.



Medium Wave DXer Martin Hall GM8IEM in his Scotland radio room. [GM8IEM pic used with permission.]

Martin is the most scholarly and experienced medium wave DXer I know. Here are his fascinating comments:

"I have experienced the phenomenon you describe on a few occasions in the past, with enhanced reception from Brazil and from west Africa (Nigeria) at the same sorts of distances. There is a similar case when signals from the far east (Japan, Asia) can be heard on low angle paths on a winter afternoon, during which interference from European stations is still being absorbed by the D Layer, although this often occurs during quiet conditions, primarily just before the onset of a geomagnetic disturbance.



Location of Martin GM8IEM in a remote part of northwest Scotland. [GM8IEM pic used with permission.]

"If we describe the phenomenon you've observed, it is that high angle ionospheric propagation is not supported under these conditions, presumably because the D Layer absorption is very high. This permits ground wave signals to be received free of interference, which is no surprise. The question really is, what propagation mechanism permits low angle skywave reception from stations on a southerly beam heading, often at enhanced levels? The simple answer is that I don't know, as is the case with much anomalous propagation, though I can offer some suggestions. We might also ask ourselves what happens to the electron gyrofrequency when conditions are highly disturbed.

"Although we talk about signals "bouncing" off the layers of the ionosphere, the D, E, and F layers aren't mirrors, they are all part of a continuum of regions of varying electron density which refract and absorb signals rather than reflect them. Refraction is essentially the activation and re-radiation of signals by electrons. When the ionosphere is greatly disturbed the normal variation in density, leading to the concept of layers, probably breaks down completely.

"We also carry a mental picture of signals being weakened each time they pass through the D layer as they bounce between the F layer and the earth in a series of hops. However, this is clearly untrue of dawn enhancements and so-called "grey line" propagation. In these cases, there is probably an entry and exit mechanism from the ionosphere, with something akin to chordal hop or duct between layers on the path between, supported by a "focusing" effect by the curvature of the ionosphere at the dawn and/or dusk end which amplifies the signals. One thing I am quite convinced of is that the signals do not travel along the "grey line" itself but are orthogonal to it and that there is a string element of antipodal focusing. Under normal conditions, MW DX reception is always enhanced best when paths are orthogonal to the grey line.

"In the specific case of anomalous propagation you re-

fer to, the electron density variations under the influence of strong geomagnetic disturbances probably produce a very low angle single-hop path due to refraction, without being absorbed by the ionosphere. A single hop path would have less attenuation than a multi-hop path because there are fewer or no reflection points from the earth's surface. Maybe under these conditions it's possible for the lower part of D-layer itself to gradually refract a signal at these kinds of distances, I don't know.

"Nevertheless, as a DXer, I know this happens, and if I'm on the ball I'll take advantage of such conditions to catch some rare DX I've not been able to hear before! My observations whilst operating on the 160m amateur band are consistent with the comments made above in relation to MW. What can happen is clear, how it happens remains unclear."

Behold all the mysteries of life! We agree to agree that we don't have a concrete understanding of all of these natural phenomena. This won't stop us from trying to answer all our questions as we study and observe into the future. One thing we can do immediately: Take advantage of any and all changes in propagation and try to make your signals reach the most exotic places! Keep your eyes (and ears) to the skies!

My further studies will concentrate on the chemical changes that occur in each layer during ionization and its resultant effects to our reception. Also requiring mastery are the many mathematical formulas used to chart and predict minimum and maximum frequencies for HF use and how solar activity can be predicted. Another aspect is at the receiving end. Antenna modeling can make profound differences in what you receive.

Until next month, Happy Thanksgiving! Please join us on Tuesday and Thursday nights at 8:00 pm for the PCARA chat nets: 146.67 MHz — minus 600 kHz offset

73 and dit dit de N2KZ 'The Old Goat.'

— 156.7 PL.



Requiem for a Radio Station - N2KZ

The year 2024 may go down in history as the moment when AM radio changed forever. Whoever thought WCBS – Newsradio 88 would leave the air? Local stations all over the country are calling it quits. Entire networks of AM stations are leaving the air in the United Kingdom and the rest of the world. Norway has even retired all of their FM radio stations in favor of DAB digital broadcasts. It hurts even more when darkness comes so close to home. **WFAS 1230** White Plains is now off the air for eternity.



WFAS station signboard. [N2KZ pic.]

WFAS began its long goodbye on May 24, 2021 when owner Cumulus Media decided to switch the station to an all-digital HD Radio transmission system. From that day forward, listeners could only hear WFAS if they owned a digital HD radio or listened online at http://am1230digital.com or other streaming providers like TuneIn. Anyone still listening with an analog radio

would only hear a beehive of digital data noise. A stateof-the art. brand new and beautiful, Nautel NX3 digital transmitter went on the air — vet so few people could enjoy it. Their broadcast schedule also changed to

mostly satel-



Nautel NX3 AM/HD Radio transmitter.

lite delivered syndicated talk shows with little if any lo-

cal programs. The audio quality was often poor and the content was also sub-standard.

The all-digital station was not well embraced by local listeners and WFAS became a technological anomaly and curiosity at best. The once-dominant **analog** signal on 1230 kHz AM served with much better signal coverage and resilience to interference. Being **all-digital**, instead of hybrid-digital (broadcasting both analog and digital) was a technological spectacle more than a

way to reach an audience. Lacking a simultaneous analog transmission, when you lost lock on the digital signal you heard only silence. Listening to WFAS had become quite difficult, to say the least. Cumulus gave up the ghost on



WFAS AM all-digital as displayed on a car radio. [N2KZ pic.]

October 7, 2024 when they finally handed in the WFAS broadcast license to the FCC and turned off the digital transmitter forever.

WFAS was nearly a century old. Its legacy began when radio was in its infancy in 1926. It actually was originally based in Brooklyn as WBRS on 760 kcs* with 100 watts. The Brooklyn facility was merged with another station, WCDA on 1250 kcs and in March of 1928 the WBRS assets were sold to the new Westchester Broadcasting Corporation based in Yonkers and became WCOH. The transmitter was first located at 110 Highland Avenue in Yonkers. A multi-sectioned tall brick apartment complex now occupies that space.

[*Karl is using a historic abbreviation for kilocycles per second (kc/s), nowadays known as kilohertz. -Ed.]

Two years later, in 1930, Yonkers resident Selma Seitz purchased WCOH and renamed it in memory of her late husband Frank A. Seitz. Her son, Frank Jr., be-

came station manager. WFAS settled into the Roger Smith Hotel at 123 East Post Road (on the corner with Chester Avenue) in White Plains and erected a 190 foot tower on the roof. seven floors up. The building still exists



Former Roger Smith Hotel building in White Plains was once home to WFAS and is now a health facility. [N2KZ pic.]

and is now a facility of the Westchester Community

Health Center.

In 1930, 100 watt WFAS shared their newly assigned frequency of 1210 kcs with WGNY Newburgh, WBRB Red Bank, New Jersey and WGBB in Freeport, Long Island and even 10 watt WMRJ in Jamaica, Queens. On June 28, 1939, the Seitz family sold WFAS to Macy Westchester Newspapers. Frank Seitz Jr., remained station manager. They were granted a power increase to 250 watts daytime in June of 1940 and in March of 1941, WFAS was reassigned to 1240 kcs and finally moved to 1230 kcs in March of 1943. The station moved to their current 7-acre studio and transmitter location on 365 Secor Road in Greenburgh back in 1947. Finally, they were granted 1000 watts day and 250 watts night authority in September of 1958.



WFAS studio and transmitter building in Greenburgh, NY. [N2KZ pic.]

In their heyday, WFAS used the slogan "The Spirit of Westchester" and it certainly was! It had a lock on the listeners in Central Westchester with top quality news and sports coverage and an affiliation with ABC Radio Network for hourly national and international news. During snow days, large storms and other peril — and — when you wanted to hear top notch sports event play-by-play, nearly everyone tuned to WFAS. Back in the days of the famed coach Jim Valvano, WFAS had an exclusive contract covering both home and away Iona College basketball games. 1230 AM was the place to be!

It was sad to see such a once-dominant station leave the air. I am a WFAS alumnus from the mid 1970s — one of my very first jobs in broadcasting. As a staff engineer, I knew every inch of their facility. WFAS is named after Frank A. Seitz Sr. and Jr. but insiders casually referred to it as "We Fade At Secor" — the road where the station is located on, right across from the cemetery.

So vital was this station at its peak — Bob E. Lloyd in the mornings, Murray Bennett in his plane watching the traffic day and night drive-times. An absolutely amazing news team. Vince Lupiano keeping all the music and DJs in order. That old Gates BC-1T transmitter, installed in 1962, had the greatest bottom end fidelity! Their FM sister station at the time, WWYD 'Wide 104,' ran Schulke SRP beautiful music via one of the very first analog automation systems. My very humble thanks to my mentors — chief engineer Jack Pearson, W2JDE, and his brilliant assistant Bill Holder — both now silent keys.

Now that the big switch has been turned off and the license has been turned in, what will be the fate of the facility and transmitter tower? First dibs for purchase always belonged to Ferncliff Cemetery and Mausoleum across the street from the WFAS facility. The broadcast facility, the auxiliary barn that housed the large backup generator and the tall guyed tower will all be razed. The acreage will eventually be used as expansion land for the cemetery. Just wait until they try to remove all the buried ground radials spanning out from the tall tower!

Bob Tarsio, N2CBH, visited WFAS after the sign off and reported its status.

"Not much left. The transmitter, a brand new Nautel 3 kW model, sits idle. It needs to be 3 kW to make the 1 kW output for digital. Peak to average ratio and all that. The studios are more or less gutted. The consoles and furniture remain for now. The transmitter room is intact but a lot of that will be dismantled and carted away soon... A sad end to a once great station. They are gone. WVOX (1430 New Rochelle) is gone and now WLNA (1420 Peekskill) is programming all syndicated talk from Fox and Westwood. The house and tower of WPUT (1510 Brewster) has been razed. WVIP is now gone (1310 Mt. Kisco now re-broadcasts a Spanish-speaking Christian station in the Caribbean), so the only Westchester stations left are the Pamal operations WHUD 100.7 FM and WXPS* 107.1 in White Plains. These are the only two I worked for. I never worked for any of the others. WXPS was WRNW which later became WZFM when I worked there. All long in the rear view mirror at this boint."

[*WXPS 107.1 is now known as WXPK 'The Peak', -Ed.]

Rest in peace WFAS. When it was good... it was really good! I still miss the beautiful orange glow of the final and modulator tubes. I remember the frequency verification tests with a firm in Boston once a month. Our Saturday night into early Sunday morning engineering maintenance sessions were always an adventure. Good times. Good times! and the groundhog that ran in the building one Sunday afternoon when I was there all by myself! (I'll tell you that story one day!)

WFAS: 98 years and 49 days — a nice run. Thanks for the memories.

- Karl Zuk N2KZ

NY QSO Party 2024

Preparations for the New York QSO Party were a little late this year. The list of plaque sponsors had not been updated since 2023 and inquiries from David KD2EVI regarding plaques that PCARA would like to sponsor were taking a long time to be answered. Contest rules for 2024 also took a while to appear on the NYQP web site, https://nyqp.org.

Joe WA2MCR was unable to offer his sun room this year as a location for PCARA's multi-operator club entry so members were encouraged to mount individual efforts — then submit entries with the Club nominated as "Peekskill/Cortlandt ARA".

David K2WPM had intended to activate Trump State Park (WES) during daytime followed by Fahnestock Park (PUT) in the evening. Unfortunately, David had a work emergency and was unable to take part in NYQP. One other member, Scott KE2CNS mounted an individual effort.

Joe WA2MCR was operating from his basement shack using club call W2NYW. He skipped the 9:00 a.m. PCARA Breakfast to begin operations promptly at 10:00 a.m. on Saturday October 19. I paid a visit to Joe around 1:15 p.m. and found him operating 20m SSB. QSO Party stations were mixed in with Boy Scout Jamboree on the Air and DARC's 'Worked All Germany' contest. In order to find more NYQP activity, we switched to 40 meters where I worked some new stations on CW.



Joe WA2MCR operating W2NYW in the New York QSO Party on 20 meter SSB. [NM9J pic.]

I broke off to prepare for Sunday's Run Against Hunger then returned to WA2MCR-W2NYW for more operating on 40 meter CW around 4:00 p.m. My final visit was later in the evening, by which time propagation was bringing in German contest stations on 40 meters — so Joe made the move down to 80 meters. He

was using the IC-7410 transceiver and G5RV wire antenna

Here are results from Joe's W2NYW entry as calculated by N3FJP contest log software:

Total Contacts = 569 Total Points = 61,207

Total Contacts by Band and Mode:

Band	CW	Phone	Dig	Total	%
80	28	25	0	53	9
40	34	261	0	295	52
20	0	221	0	221	39
Total	62	507	0	569	100

Below is a comparison with W2NYW (multi-operator) scores from previous years. Note the record 2024 claimed total score.

QSOs	Point	ts Multiplier	Claimed total
300	345	83	28980
463	548	100	54800
292	359	81	29079
352	441	86	37926
432	612	87	53244
392	564	73	41172
330	400	90	36000
206	266	68	18088
410	473	89	42097
269	292	84	24528
569	631	97	61207
	300 463 292 352 432 392 330 206 410 269	300 345 463 548 292 359 352 441 432 612 392 564 330 400 206 266 410 473 269 292	463 548 100 292 359 81 352 441 86 432 612 87 392 564 73 330 400 90 206 266 68 410 473 89 269 292 84

Additional stations

Scott KE2CNS provided PCARA's second entry in the New York QSO Party. He made 39 contacts from his home station on 160, 80, 40, 15 and 10 meters, for 40 QSO points — times a multiplier of 26 — for 1,040 total points. Well done Scott! One other PCARA callsign heard during the event was when W2NYW worked Lou KD2ITZ.

Results should be available on the New York QSO Party web site, https://nyqp.org, sometime around March 2025.

- NM9J

Run Against Hunger 2024

The 44th Harry Chapin Memorial Run Against hunger took place on Sunday October 20, 2024. This was the **tenth** time that Race Organizers had asked PCARA to provide communications support after our first participation in October 2014.



The very first Run Against Hunger commemorated singer-songwriter Harry Chapin who had died in a car accident on the Long Island Expressway in July 1981. Harry Chapin had been raising money to combat hunger since the mid-1970s, with benefit concerts and other activities. Citizens of Croton-on-Hudson decided to commemorate his work by creating an annual race in his name to fight hunger and provide food for children and adults in need.

Race Director Mike Grayeb had contacted Greg KB2CQE and WECA's Kathleen KC2VCT in September 2024. David KD2EVI and Kathleen attended a pre-race meeting at Cortlandt Town Hall on October 10 for inter-agency planning with Police Departments, Fire Departments, EMS and other agencies taking part. A record number of runners was anticipated. David, Greg and Kathleen produced a combined list of operators from PCARA and WECA located at Croton-Harmon High School, plus Mile Points and Water Stops around the course. Greg provided maps and lists to members.

Sunny start

Sunday October 20 dawned with a low temperature of 42°F. Mist was forming around bodies of water, but the sun was shining and temperatures above 70°F were forecast. The Westchester County RACES Emergency Communications vehicle arrived at Croton-Harmon High School and was soon set up in the driveway



Westchester County's RACES truck arrived at Croton-Harmon High School on a misty Sunday morning. [KD2EVI pic.]

in front of the school. WECA members at the school included Alan N2YGK, Public Service Director Kathleen KC2VCT and Robert N2TSE. They were joined by David KD2EVI who would be acting as Net Control.

Your editor headed for the first assigned post at the north end of the Croton Gorge Trail. I was joined by Jim KD2WSU, who was experiencing his first Run Against Hunger.

5k Run/Walk

The first event of the day was the 5k Run/Walk, starting at 8:30 a.m. from Croton-Harmon High School, proceeding down Old Post Road South, via Truesdale Drive to Cedar Lane. The route turns north on Nordica Drive, onto Truesdale Drive to the start of Croton Gorge Trail at the Silver Lake Parking Lot. The Water Stop at this location was once again manned by Robert N2TSE. The route continues north on Croton Gorge Trail to the Mile 2 marker at Trail's End where Jim and



I were waiting. From Mile 2, the race follows Cleveland Drive, past Gerstein Street where Greg KB2CQE was located at Stop 3, then back to the High School.

At Mile Point 2, Jim and I had been warned by dog walkers that there was an oily patch near the rock that blocks vehicle access to the trail — Jim covered the oil with a layer of dirt. Another discovery — ARRI's magnetic "Radio Communications" signs would not stick to Jim's aluminum truck body.

We were joined by a group of cheerleaders, Croton

EMS cyclists, members of Croton EMS with the Montrose FD Polaris off-road vehicle, the official photographer and two more young photographers.

We knew the Mile Post, located on the side of a deep gorge, would allow handi-



Cheerleaders welcome 5k Runner #1204 at the north end of the Croton Gorge Trail.

talkie reception of the WECA 2 meter repeater, but a mobile radio with efficient vehicle antenna would be required to reach Net Control.

The first runner, bib number 1204, was reported by Robert N2TSE entering the trail at 8:40 a.m. A few minutes later, the leaders reached Mile 2, followed by the bulk of runners. We also heard from WECA's Ramon KC2RB who was with the walkers following behind.

At 8:58 a.m. a runner slipped near the Mile 2 marker. He saved himself with his hand — then gashed his palm on a sharp rock. Fortunately, we had two members of Croton EMS plus the off-road vehicle who patched him up and sent him on his way with the runners. There was no need for a radio call, but we did mark the offending rock with a safety cone.



Croton EMS volunteers patch up a 5k runner who had slipped and fallen on the Croton Gorge trail. [NM9J pics.]

Runners and walkers accompanied by dogs and youngsters in strollers continued past Mile 2. Robert N2TSE reported last walkers # 1313 and 1314 passing Mile 1 at 9:07 a.m., followed by a single 'lost' runner #1015 who wanted to continue unsupported. The last walkers passed mile 2 at 9:16 a.m. and the post was secured.

First male and female runners in the 5k event out of 292 total were Liam Rudden #1204 in 19 min 39 sec and Stephanie Prozora #1184 in 24 min 49 sec.

10k Run

The main event of Sunday was the 10k run, beginning from Croton-Harmon High School at 10:00 a.m. The route goes north on Cleveland Drive to Gerstein Street, crossing Route 129 at Wood Road then proceeding along Batten Road into the Town of Cortlandt and across the New Croton Dam. The route then turns south along Quaker Ridge Road, crossing the river at Quaker Bridge Road, then returns to the High School via Route 129, Jacoby Street and Cleveland Drive.

Jim and I drove to my 'traditional' post at Peter Beet Lane, close to the Mile 6 marker on Cleveland Drive. This year Elizabeth KD2QYL had been allocated to this Mile Point by Kathleen KC2VCT to give me time to reach the next post. Jim and I introduced ourselves to Elizabeth, who was parked at Alexander Lane, opposite the Croton Free Library.

Additional stations around the 10k course included Greg KB2CQE at Water Stop



Elizabeth KD2QYL contacts Net Control from 10k Mile Point 6, near Croton Free Library.

#1 on Batten Road and David K2WPM at Water Stop #2 on the East end of Croton Dam. Callum KE2BWA a student from Water Stop #2 who approached Lou KD2ITZ last year — was located at Mile Point 3 on Croton Dam Road. Vincent KD2VAV and Lou KD2ITZ were at Mile Point 4 outside the former Danish Home on

Quaker Ridge Road. After the course crosses the Croton River, WECA's Russ N2AMP and Bob AD2HL were at Mile Point 5 on Quaker Bridge Road. The last Water Stop (#4) in Jacoby Street had Robert N2TSE.

During the pause between 5k and 10k events Jim and I walked down to Croton-Harmon High School — which was a hive of activity in the warm, fall sunshine. Westchester County's RACES Truck was adjacent to the lawn where runners were assembling and the race commentary was taking place with assistance from Organizer's Shadow Alan N2YGK.



RACES truck.



Race Director Mike Grayeb (left) provided a running commentary while being shadowed by members of WECA (right).

Inside the RACES truck, Kathleen KC2VCT was welcoming visitors while David KD2EVI was operating the Net Control radios.



David KD2EVI was operating Net Control from inside the RACES truck while Kathleen KC2VCT coordinated volunteers and welcomed visitors. [NM9J pics.]

I had missed PCARA runner Masa JR1AQN who was reported to be in the vicinity of the RACES truck, but I did encounter Scott KE2CNS who was also preparing for the 10k run.

Down at the Start Line on Old Post Road there was a long blast from an air-horn and I informed Net Control that the 10k Run had begun. Around 244



Scott KE2CNS was waiting for the start of the 10k Run in front of Croton-Harmon High School.

runners set off, with times recorded by bib-tag monitor as they crossed a line in the road.

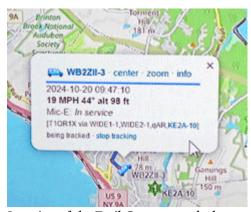


They're off! More than 200 runners in the 10k event set out from the start point on Old Post Road near Croton-Harmon High School.

They continued to Veterans Corners where the course turns left onto Cleveland Drive. The last runners were followed by the official Trail Car, containing Larry W2UL with 2 meter mobile radio and APRS transmitter

WB2ZII-3. This allowed Trail Car location to be monitored by voice and using web site: https://aprs.fi.

Radio reports on runners' progress began arriving. Two male runners, #1547 and #1559 were



Location of the Trail Car was tracked using web-site aprs.fi at Net Control and on Smartphones around the 10k course.

reported tied in first place at Water Stop #1 by Greg KB2CQE. First female runner #1671 was not far behind. These positions were maintained through the subsequent mile posts.

At 10:40, Robert N2TSE reported two late runners behind the Trail Car — fortunately they caught up later. At Mile 6, Jim and I were watching with Elizabeth KD2QYL, where we saw lead runners #1547 and #1549 pass by at 10:32 a.m., followed by lead female #1671 at 10:44 a.m. Elizabeth called these results into Net Control so the organizers could be forewarned of their arrival at the Finish Line in front of the school.

Meanwhile the Trail Car with Larry W2UL was making its way around the course following the last runners/walkers. David KD2EVI was following progress using the large APRS monitor in the RACES truck and saw WB2ZII-3 cross the Croton Dam at 10:53. As the Trail Car passed each Water Stop and Mile Point, their

radio operators were given permission to secure.

First male runners over the Finish Line were Aidan Mayer, bib #1547 and Sean Gardiner #1559 in 34 min 53 sec and 34 min 54 sec respectively. First female runner was Abby Reisner #1671 in 45 m 34 sec.



10k first male runner Aidan Mayer #1547 (center), closely followed by #1559 Sean Gardiner at Mile Post 6. First female runner Abby Reisner #1671 approaches the post.

For PCARA, Scott KE2CNS arrived at 54 min 53 sec, being placed ninth out of eighteen in his division, while Masa JR1AQN finished in 1 hr 2 min 9 sec, placed third out of seven in his division (age class) and rewarded with a medal.

One Mile Fun Run

The final event of the day was the One Mile Fun Run which begins on Cleveland Drive south of Veterans Corners, then folstein Street and the turn-around at CET



Masa JR1AQN, #1413 (right) receives medal and prize for third place in his age-class alongside lows Cleveland to Ger- second place winner George Riggs #1504. [JR1AQN pic.]

(Carrie E Tompkins) Elementary School. Back at Mile Post 6, I had been keeping a close eye on the clock, with the 11:45 a.m. Fun Run start time fast arriving and 10k runners still heading south on Cleveland Drive. Jim and I decided to leave Elizabeth KD2QYL monitoring 10k contestants while we drove slowly, past runners, to our designated 5k station at CET Elementary school on Gerstein Street. A friendly officer from Croton PD allowed us to park nearby.

At 11:52 a.m. the first Fun Run youngster reached CET School and we informed Net Control. He was followed by a wave of young runners and a second wave of older runners plus parents making their way to the Elementary School.



Fun runners make the turn from Cleveland Drive into Gerstein Street, meeting runners coming the other way.

Meanwhile final 10k participants had turned from Jacoby Street into Cleveland Drive and were making their way past Gerstein Street back to the High School, where they were surrounded by Fun Runners on Cleveland Drive. The Trail Car arrived at 11:58 a.m. and our Croton PD officer advised the car to avoid runners in Cleveland Drive by returning to the High School down

Gerstein Street and Rt 129. Via Net Control, I advised Elizabeth KD2QYL that she would not see the Trail Car pass by at Mile Point 6.



10k Trail Car containing Larry W2UL was diverted off Cleveland Drive onto Gerstein Street by Croton PD to avoid Fun Runners.

Once the Trail Car was back at the school, and the last Fun Run participants had turned around, David KD2EVI advised all stations that they could secure, Net Control closed down, and the repeater was returned to normal use.

Final thoughts

The 44th Harry Chapin Memorial Run Against Hunger went fairly smoothly from a radio point of view. The warm, sunny weather and wonderful fall colors attracted a large crowd of participants for all three events, with the race organizers reporting another record-breaking turnout. My auxiliary mobile station was once again powered by a Bioenno LiFePO₄ 12 Ah battery, this time with a power monitor, which reported voltage falling to 13.29V after 41/2 hours use, and overall consumption of 2.62 Ah. Coverage of WECA's 2 meter repeater was good for most of the course apart from Croton Gorge where mobile antennas are a necessity. David KD2EVI handled Net Control and the occasional station seeking a random contact with aplomb.

I asked members for their thoughts on PCARA's 10th Harry Chapin Run Against Hunger. Well done to Scott KE2CNS and Masa JR1AQN for their participation and completion of the the 10k event.

Masa JR1AQN reported as follows: "Today I ran the 10k race. I won 3rd place in my age group (same as last year), Thank you very much for supporting race safety! It was beautiful weather and I had fun in the 10k race!"

Scott KE2CNS replied: "I finished the Harry Chapin 10k no. 92 overall and no. 9 in my age group, so unlike Masa, no prizes for me. But I crossed the finish line under my own power and did not require any emergency medical assistance, so I think it was a great success."

Lou KD2ITZ sent the following report: "At the site of the former Danish Home on Quaker Ridge Road, numerous members of Girl Scout Troops 1233 and 2953 were present to hand out refreshments at Water Stop 3. Lou KD2ITZ and Vincent KD2VAV set up a Kenwood TM-V71A mobile radio running 15 watts to a magmount antenna attached to the top rail of a chain link fence."



Vincent KD2VAV was located with two Girl Scout Troops at Water Stop #3 on Quaker Ridge Road. [KD2ITZ pic.]

"Despite the pleasant weather, one of the scouts was wearing ear muffs. As the runners approached it

soon became evident that the motive for the ear protection may have been to muffle the sounds of the other scouts who were screaming, cheering, and waving pom-poms at the passing runners. Despite the ambient noise, Vincent had no trouble com-



Masa JR1AQN #1413 passes Water Stop #3 on his way around the 10k course. [KD2ITZ pic.]

municating with David KD2EVI who did an excellent job as the net control station."

A few words from your Editor... thanks to Jim KD2WSU who kept me company during the three events — while cheering on all runners passing by. I was grateful that Croton EMS were on-hand to look after the fallen 5k runner. And it might be worth finding a way to separate late runners/walkers in the 10k event from the 1 Mile Fun Runners.

- NM9J

Fall Foxhunt 2024

PCARA's Fall Foxhunt took place on Saturday October 24th at FDR State Park. Unlike previous events, this foxhunt was *not* preceded by a PCARA Breakfast in nearby Downing Park. Instead, hunters were advised to enter FDR Park after 9:45 a.m., ready for a 10:00 a.m. start time.

Following a successful spring hunt in May 2024, your editor was playing the role of fox operator/observer this time around. I was accompanied by Greg KB2CQE — we met at the Rt 202 entrance then proceeded to the planned location well before any members entered the park.



Greg KB2CQE assisted NM9J in selecting a location then setting up the fox and monitoring equipment. [NM9J pics.]

A light attendance was expected as several successful hunters had said they would not be available — including previous fox Vincent KD2VAV and Lou KD2ITZ.

Hunters began gathering at the Pool Parking Lot from 9:45 a.m., preparing their direction-finding equipment for the scheduled start time of 10:00 a.m. The two hunters at the start were Rob AD2C and Steve KD2OFD.

Steve and Rob were both using tape-measure Yagis. Rob's Yagi had only just been completed and he had no RF attenuator connected to it yet.

On the stroke of 10:00 a.m. your editor switched on the fox transmitter. The Byonics MicroFox PicCon came on air using 146.565 MHz FM and was received at good strength. Rob and Steve set off, with signals appearing to come from the lake.

In a break from previous hunts where observers were located at a picnic table, Greg and I were sat on one of the park benches overlooking Mohansic Lake. Below us at the edge of the lake was the boat rental shed and fishing pier. The weather was sunny, cool and breezy with lots of leaves swirling around. We had al-

ready seen a group of runners and walkers passing behind us on the road to the pool.

First sight of the hunters came at 10:45 a.m. when Steve and Rob could be seen approaching on the footpath, cresting the hill and heading downward.



Steve KD2OFD and Rob AD2CT seen in the distance, following the footpath alongside the Pool Approach Rd.

A couple of hints transmitted on 146.565 had suggested the fox was enjoying a view of the lake and the hunters were moving down toward the water.



The hunters moved down the clearing toward the edge of Mohansic Lake.

Steve was using a VK3YNG Sniffer 4 receiver (http://www.fox-hunt.com.au/2m_sniffer/manual.htm) with automatic attenuator and a variable audio tone dependent on signal strength. He was soon heading toward a tree on the west side of the clearing where our fox transmitter was tied on with Velcro.



VK3YNG Sniffer 4 DF receiver.

Rob AD2CT took a little longer to find the source of the RF as he did not have any attenuator to prevent receiver overload. He continued along the side of the lake then realized that the fox direction had swung around behind him. Rob retraced his steps and climbed back up the clearing, finding the fox 5 minutes after Steve.



Rob AD2CT found the fox (far left, tied to tree) a few minutes after Steve KD2OFD.

Arrival times at the fox transmitter were recorded as follows:

Steve KD2OFD 10:52 a.m. Rob AD2CT 10:57 a.m.

Hunters and fox observers discussed their strategies, admired Steve's versatile receiver and took photographs. Hunters then made their way back to the Pool Parking Lot, ¾ mile due east of the fox location.

Here's to the next PCARA Foxhunt in Spring 2025 when Steve KD2OFD will be invited to hide the transmitter in a new location.



Map shows the starting point at FDR State Park - Pool parking lot and the fox location near the boat rental shed.

- NM9J

Essential₂ generating

In *PCARA Update* for June 2007 "Essential₂ Field Day" described the problems that can happen when fuel is left in the tank of a small gasoline engine. These engines are employed in generators, lawn mowers, leaf blowers etc. and may be stored during the winter months until needed again in spring — or for Field Day.

Small gasoline engines employ a carburetor to va-

porize liquid gasoline that is drawn from the fuel tank into the combustion chamber. The mixture of gasoline and air is then exploded by a spark.

The carburetor employs one or more narrow jets to evaporate the liquid fuel. These jets can become blocked by tiny particles of dirt and by

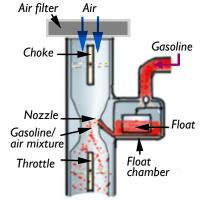


Diagram of simple carburetor.

gummy deposits, left behind by the evaporation of old, decomposing gasoline.

In the 2007 article, I suggested three ways to avoid this problem...

- At the end of the season, empty the fuel tank then run the engine until the carburetor is dry.
- If fuel *has* to be left in the tank, be sure to add a **fuel stabilizer** such as STA-BIL®, which will slow down the formation of gum and varnish when added to fresh fuel.
- For a generator, run the engine at regular intervals to move fuel through the carburetor and make sure engine and electrical circuitry are still performing well.

I speculated on the "proprietary or trade secret" ingredients that are listed on STA-BIL's material safety data sheet. They might include an-

tioxidants, metal chelator and a water-absorbing compound.

Disaster strikes

I had been following my own advice for quite a while. I would run the lawn mower and snow-blower dry at the end of their seasons, then add fresh fuel with STA-BIL when they were needed again. I would leave STA-BIL-treated fuel in the generator tank ready for

emergencies, running the engine for 5 minutes once a month to check operation.



Run your generator once a month to check operation.

All was well until the end of summer 2024. I prepared for the end-of-month generator test, started the Honda engine as usual, then flipped the "Eco Throttle" switch to "ON" to save fuel and reduce noise from the exhaust. (When the electrical load is

light, Eco
Throttle
"ON" idles the
generator at
the lowest
speed that will
keep the engine running.)
Bad news —
with Eco
Throttle ON,
the engine



Honda Eco Throttle switch lowers engine RPM when there is a light electrical load.

was "hunting", lowering revolutions until it almost stalled then raising them again with a surge. At each of these stalls the whole generator would shudder and turn around a little. This was not normal!

I guessed the hot summer weather had accelerated gasoline decomposition so I emptied the generator tank, purchased fresh gasoline from the nearby Mobil station then added fresh gas plus STA-BIL to the generator tank. Oh no! No improvement.

Calling Dr Google

I checked online and found several people suffering from the same problem with this particular model of generator. The cause was given as a blocked low-speed jet in the carburetor. I watched a couple of YouTube videos showing how to remove the carburetor, remove the jets and clean them out. This did not look too easy, with the possibility of making matters worse,

so I checked for other solutions.

One correspondent on goodsam.com advised...

"Been there, done that. I had been using STA-BIL, and had the hunting rpm in ECO mode, stopped in non-ECO mode. Solution was to use a big dose of Sea Foam, run for an hour or so in non-ECO mode, that fixed it."

The correspondent suggested that the carburetor's low-speed jet gets gummed up and the small orifice is hard to clean. Running in non-ECO mode pulls fuel through the main jet and the Sea Foam® slowly cleans out both jets. https://community.goodsam.com/t5/technical-issues/why-do-my-eu2000s-surge-in-eco/td-p/2070412

Other correspondents praised "Sea Foam Motor Treatment" so I paid a visit to my local 'Auto Parts' store and was amazed by the wide selection of remedies for misbehaving engines, from Heet, Howes, Lucas Oil and Red Line to Star Tron and Sea Foam.



Enormous selection of gasoline additives at a Cortlandt Town Center store includes Sea Foam.

I purchased a can of "Sea Foam Motor Treatment", noting the secure closure to keep water out and pre-

vent evaporation. I added the suggested amount of 2 fluid ounces per gallon to the generator fuel tank, started the engine then left it to run with Eco Throttle off. After one hour, there was no improvement, so I left the engine running for a further 30 minutes. This time, flipping the Eco Throttle switch to "ON" reduced engine RPM without constant surging. Subsequent checks suggest that the fix was permanent. The generator starts easily and switching to Eco Throttle ON results in smooth running at low engine revolutions.



What's in it?

Sea Foam was originally formulated in the late 1930s by Fred Fandrei, a district manager for the Sinclair Refining Company, while trying to overcome fuelrelated problems in the outboard motor of his boat.

I wondered what the ingredients might be in the clear, colorless liquid and how they function. According to the Sea Foam web site (https://seafoamworks.com), their additive works through fuel injectors and carburetors, removing harmful residues and deposits from fuel passageways, intake valves, pistons, and chamber areas. A recent Safety Data Sheet states that the product contains: Isopropanol (<25%) and a "Hydrocarbon blend" (<95%) with exact composition of the blend withheld.

On the Sea Foam web site, Conner Kranz states that isopropanol (isopropyl alcohol) is well-known for its ability to effectively solubilize water in fuel. It is also an excellent fuel residue cleaner. Jim D. states that Sea Foam Motor Treatment does not have harsh detergents or abrasive chemicals, but is a blend of three petroleum cleaning and lubricating oils that work together as

cleaner, lubricant and fuel stabilizer. A "Made for the Outdoors" video shows the manufacturing process: https://youtu.be/sgWuaB2X6 s.

A 2010 Material Safety Data Sheet for Sea Foam Motor Treatment gives



Sea Foam Material Safety Data Sheet describes the composition of ingredients.

the composition as: Pale Oil 40-60%, Naphtha 25-35% and Isopropyl Alcohol 10-20%. Gregory Hildstrom suggests a homebrew alternative containing 4 parts diesel fuel, 2 parts naphtha and 1-part anhydrous isopropyl alcohol. (https://hildstrom.com/projects/2010/01/seafoam/index.html)

In this formulation the pale oil (diesel) acts as lubricant, the naphtha (C_5 - C_6 hydrocarbons) acts as cleaner and the isopropyl alcohol is a drying agent, solubilizing any water.

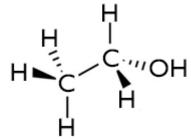
Gasoline cocktails

The Environmental Protection Agency requires that gasoline supplied for vehicle use in the New York metropolitan area is 'reformulated' to reduce toxic pollutants and must include "oxygenates" – compounds containing oxygen in addition to the car-



bon and hydrogen of any hydrocarbon fuel. These oxygenates promote full combustion, reducing smog-forming pollutants. An early oxygenate was methyl tertiarybutyl ether (MTBE), but this was banned when it was discovered that gasoline leaks were contaminating groundwater. The most popular oxygenate nowadays is **ethanol** (ethyl alcohol), manufactured by fermenting

corn or sugar cane, followed by distillation. The EPA requires reformulated gasoline in NYC, LI, Westchester, Orange, Putnam and Rockland Counties.



Honda generator Ethanol (ethyl alcohol) C_2H_5OH .

The manual for my Honda generator states that it can use

regular, unleaded gasoline containing **no more than 10% ethanol** (E10) by volume. Use of fuels with greater content of ethanol may cause starting and/or performance problems.

The Mobil station and the new Shell station on Route 6 near the Bear Mountain Parkway currently

supply gasoline containing 10% ethanol. This is good for the atmosphere, good for corn growers and good for ethanol manufacturers.

The presence of ethanol allows water to dissolve in the



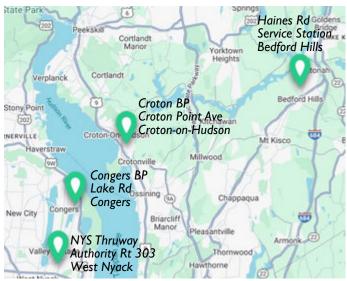
Mobil gasoline pump is clearly labeled with percentage of ethanol.

blended fuel to a greater extent. A fuel blend containing sufficient water may then separate into two phases (layers), with a 50/50 water/ethanol mix at the bottom. Separation is more likely at low temperatures. Water may then be drawn into the carburetor, causing a stall — or the water-ethanol mixture could reach the engine, causing engine and fuel system damage.

No gasoline additive can fix the problem *after* phase separation. Instead, the tank must be emptied and filled with fresh gasoline. A high-quality fuel additive should then be introduced to prevent sediment, gum and varnish buildup, control moisture and prevent fuel system corrosion. Be sure to store your E10 fuel in an **airtight** container, kept in a safe, **dry** location.

Gasoline containing *more* than 10% ethanol is on the way. In 2019, New York Department of Agriculture

and Markets finalized a rule to allow sale of a 15% ethanol blend (E15). You can find a map of gas stations selling this fuel and E85 at: https://getbiofuel.com/ .



Local sources of ethanol-containing **E15** and **E85** fuel. [Credit: https://getbiofuel.com/]

E15 fuel can be used in most motor vehicles later than model year 2001 — but you should check your User's Manual before filling up. E85 fuel can only be used in 'Flex Fuel' vehicles.

Small gasoline engines are a very different matter. Unless specifically permitted in the owner's manual, E15 fuel is **not** recommended for motorcycles and nonroad engines including boats, snowmobiles, lawnmow-

ers, leaf blowers and generators. E15 fuel used in these devices can increase operating temperature, cause erratic running and enginepart failure.

Hint: If
your vehicle or
generator does
not already
have a label
on the fuel
cap, check the
User Manual
then fix a label
nearby showing minimum
octane rating
and maximum



Filler cap labels for vehicle and generator.

ethanol percentage.

Holiday Dinner

PCARA's 2024 Holiday Dinner has been organized for the same location as in previous years — the Cortlandt Colonial Manor Restaurant. The event begins at 5:00 p.m. on **Sunday December 8**th.



Cortlandt Colonial Manor Restaurant.

The restaurant is located at 714 Old Albany Post Road in Cortlandt Manor. Take the Bear Mountain Parkway to the Highland Avenue exit, then proceed north down Highland Avenue and across the bridge. The restaurant and parking lot are immediately on the left.



The dinner menu is as follows:

Soup and Salad
Soda, iced tea and soft drinks (unlimited)
choice of:
Prime Ribs of Beef
Grilled New York Strip Steak
Grilled Pork Chops
Jumbo Shrimp with crabmeat stuffing
Chicken Marsala
Penne ala Vodka - traditional or w/grilled chicken
Custom cake

Cost will be approximately \$50.00 per head including service but not including alcoholic drinks. (Our Treasurer requests cash be brought to the event.) All are welcome — family participation is encouraged. Please let the Editor know if you will be attending by e-mailing your head-count to: nm9j'at'arrl.net

WWVB power restored

PCARA Update for July and September 2024 reported on NIST's standard frequency and time station in Boulder, Colorado **WWVB**, operating on 60 kHz.

"Official Notice: Commencing from 0000 Coordinated Universal Time (UTC) on April 7, 2024, the southern antenna of WWVB has been rendered non-operational due to damage sustained from wind gusts exceeding 90 MPH. Please be advised that WWVB continues to function at a diminished overall power, utilizing only its northern antenna."

"Update 01 July 2024: The components necessary for the refurbishment of the southern antenna's triatic are currently being manufactured and shipped. The projected timeline for the completion of these repairs is tentatively set for the latter part of September 2024. We would like to emphasize that this is an estimated timeline and may be subject to alterations based on a variety of factors. We greatly appreciate your understanding and patience during this process."

A further announcement appeared on October 11.

"**Update 11 October 2024:** As of 10 October 2024, 2300 UTC, WWVB is operating at full power."

During normal operation with both north and south antenna in use, WWVB has an effective radiated power of 70 kW. With only one antenna in use, ERP is reduced to 30 kW. This power level should still be sufficient to synchronize clocks and watches overnight in our part of the world. But — if you experienced difficulties since April 7 2024 — it could be worthwhile reorienting the device so its internal antenna faces toward Boulder, CO then moving it further away from any sources of electrical noise such as switch mode power supplies or other digital electronics.



Four 400 ft towers support each WWVB antenna. [Credit NIST.]

An updated report on the outage and repair by Dave Swartz W0DAS is on the WWV Amateur Radio Club site at: https://wwvarc.org/WWVB_wind_damage_2024. This includes some excellent photos by Chief Engineer Matt Deutch, N0RGT and Dave Winnett, W0DDZ.

Peekskill / Cortlandt Amateur Radio Association

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

E-Mail: mail 'at' pcara.org **Web site:** http://www.pcara.org

PCARA on Facebook: https://www.facebook.com/pcararadio

YouTube Channel: https://www.youtube.com/

@peekskillcortlandtamateurr7670

PCARA Update Editor: Malcolm Pritchard, NM9J

E-mail: NM9J 'at' arrl.net

Newsletter contributions are always very welcome! Archive: http://nm9j.com/pcara/newslett.htm

PCARA Information

PCARA is a Non-Profit Community Service

Organization. PCARA meetings take place every month (apart from July/August break). See http://www.pcara.org for current details.

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

Sat Nov 2: PCARA meeting, 10:15 a.m. Putnam Valley Library, 30 Oscawana Lake Rd., Putnam Valley, NY.

Introduction to VNAs - by Bob N2CBH.

Sat Nov 2: PCARA V.E. Test Session, 11:30 a.m. Putnam Valley Library. See below.

Sat Nov 16: PCARA Breakfast, 9:00 a.m., Uncle Giuseppe's, 327 Downing Dr. Yorktown Heights, NY. **Sun Dec 8:** PCARA Holiday Dinner, 5:00 p.m., Cortlandt Colonial Restaurant, 714 Old Albany Post Rd, Cortlandt Manor.

Hamfests

Check with organizers before leaving.

Sun Nov 10: Long Island Hamfest, Levittown Hall, 201

Levittown Parkway, Hicksville, NY. 9:00 a.m.

Fri Nov 29: Fair Lawn ARC Auction, Fair Lawn Senior Center, 11-05 Gardiner Rd, Fair Lawn, NJ. 5:30/6:30 p.m.

VE Test Sessions

Check with the contact before leaving.

Nov 2: PCARA, Putnam Valley Library, 30 Oscawana Lake Rd., Putnam Valley NY. 11:30 a.m. Must contact V.E. Mike W2IG, w2iggʻat'yahoo.com.

Nov 2, 9, 16, 23, 30: NYC-Westchester ARC, 43 Hart Ave, Yonkers NY. 12:00 noon. Must contact VE., k2ltm'at'aol.com. **Nov 14:** WECA, Westch Cnty Fire Trg Center, 4 Dana Rd Valhalla

NY. 7:00 p.m. Contact: N2gdy'at'weca.org.

Nov 15: Orange County ARC, Munger Cottage, 40 Munger Dr, Cornwall NY. 6:00 p.m. Contact: w2bcc'at'arrl.net.



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