



PCARA Update



Volume 27, Issue 6 Peekskill/Cortlandt Amateur Radio Association Inc. June 2026

Watch this space

There was plenty of PCARA radio activity in May. In order to avoid weekend vehicle entry charges at FDR State Park, Lou KD2ITZ had scheduled the spring Foxhunt for Saturday May 2. This was preceded by an outdoor PCARA Breakfast at Downing Park. Thirteen members and one dog took part in the Foxhunt — see the full report on page 8.



Successful hunters at the May 2 Foxhunt, FDR State Park.

Sunday May 3 was the date for Orange County Amateur Radio Club's Hamfest at Black Rock Fish & Game Club. PCARA had a club table under the pavilion, courtesy of OCARC. The weather was better than 2025 — though wind gusts were threatening to blow over our club signs. David KD2EVI was busy selling items from the club table and reported a contribution to club funds from the sale of books, wattmeter and membership renewals. (Your editor won a door prize.)



David KD2EVI had lots of customers at the OCARC Hamfest — including Hudson Division Director Ed N2XDD.

Rob AD2CT has made his video of Jasper NK2Y's recent presentation on the National Traffic System available on YouTube. See PCARA's YouTube Channel: <https://www.youtube.com/@peekskillcortlandtamateurr7670>. Direct link: <https://www.youtube.com/watch?v=qy5rt7JtI3Q>.

On Saturday May 16 a VE Test Session took place at Putnam Valley Library. The result was two new Technicians and one upgrade from Technician to General. See the report on page 2. Incidentally, VE Ken W1YJ donated a notebook computer for use on PCARA contests and special events.

On April 29 several members paid a visit to Granite Knolls Recreation & Sports Complex, 2975 Stony Street in Mohegan Lake. The location had been pro-



Members checked out Granite Knolls Recreation and Sports Complex on April 29.

posed by Jay NE2Q as an alternative to George Washington Elementary School for Field Day 2026. Joe WA2MCR had already obtained permission for use of the Elementary School from Lakeland Central School District. Meanwhile, Jay NE2Q had approached the Town of Yorktown along with David KD2EVI. Jay subsequently presented his case for *Continued on page 2* ⇨

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the Granite Knolls site at PCARA Breakfast on May 2.

At the time of writing, no decision has been made on the Field Day site. The topic is likely to be discussed at PCARA's next membership meeting, scheduled for Saturday June 6, 10:15 a.m. at Putnam Valley Library.



Please make a note of the following items in your calendar.

- Saturday June 6 – **PCARA Membership meeting**, 10:15 a.m., Putnam Valley Library, 30 Oscawana Lake Rd., Putnam Valley, NY.
- Saturday June 6 – **PCARA VE Test Session**, 11:30 a.m., Putnam Valley Library, 30 Oscawana Lake Rd., Putnam Valley, NY. Contact Lou KD2ITZ.
- Saturday June 20 – **PCARA Breakfast**, 9:00 a.m., Uncle Giuseppe's, 327 Downing Dr, Yorktown Heights.
- Weekend of June 27-28, **ARRL Field Day**, location to be announced.

Suggestion — attend the monthly meeting, listen to nets or watch for an announcement on the Google Group for further details of PCARA activities in June 2026.

PCARA Board

President:

Greg Appleyard, KB2CQE; kb2cqe 'at' arrl.net

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Treasurer:

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Director:

Robert Gill AD2CT

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 May

PCARA's latest Volunteer Examiner Test Session was held on Saturday May 16 in the meeting room at Putnam Valley Library. There were three candidates and each had a successful outcome.



The May 16 VE Test Session took place at Putnam Valley Library.

John Thompson of Cortlandt Manor passed Element 2 and qualified for Technician. His new call sign **KE2IMG** was issued by FCC on May 19. (John is already a member of PCARA — from his location, he should have line-of-sight to the 2 meter repeater.)

Gregory Larangeira of Montrose also passed Element 2 and qualified for the Technician license. His new call **KE2IMP** was assigned by the FCC on May 20, 2026.

Eugene Pryslak KE2HUQ of Putnam Valley passed Element 3, upgrading from Technician to General. Well done! The change was recorded by FCC on May 18.

Volunteer Examiners for this ARRL VEC Test Session included Lou KD2ITZ, Ken W1YJ, Joe WA2MCR and NM9J. Once again, the examinations were conducted and evaluated using Examtools.org on tablets and notebooks.

Last chance - old pool

PCARA's next VE Test Session is scheduled for Saturday June 6 at 11:30 a.m., following the 10:15 a.m. meeting at Putnam Valley Library. Lou KD2ITZ points out that this will be our **last PCARA session** to make use of the Technician Question Pool for July 1, 2022 - June 30, 2026. From July 1, 2026 tests must make use of the *new* Technician Question Pool which expires on June 30, 2030.

Adventures in DXing

- N2KZ

Welcome to Hawai'i

Can you imagine a place where you could just get away from it all? Hop onto a plane and, in less than 12 hours, you could be surrounded by tropical weather with endless sunshine and cool breezes. Find yourself a comfy beach chair and spend the afternoon listening to the sounds of a soft surf. Enjoy a restful nap and just enjoy life. It's easy and it could be yours!



Big sky of North O'ahu. [All pics by N2KZ unless indicated.]

Could it be any better? Yes. In the morning, at lunch, and all through the evening, your radio will also be in a new world. All of the endless domestic activity, traffic and clutter would be miraculously gone. You might hear occasional transmissions from inside your state but your equipment will usually be straining to hear faraway places thousands of miles away. Does a place like this actually exist?

Believe it or not, you don't even need a passport to get there. All you need is an acceptable driver's license and a boarding pass! Sit back and watch three or four movies, have a couple of meals and you'll be there before you know it! Aloha! Welcome to Hawai'i!*

During this visit, I spent all of my time in Honolulu on the island of O'ahu. The first thing you will meet is the very warm and mildly humid environment and the multiplicity of palm trees everywhere. Skyscraper condominiums and apartment buildings line the waterfront beaches all along Waikiki to the airport. Tourists gather here visiting from all over the world. It's quite an exciting place to be!

Surrounding this crowded cluster of modern buildings is a vast and sprawling medium-sized urban city combining quite individual neighborhoods. One great attraction is historic Pearl Harbor memorializing the site of the infamous attack on December 7, 1941. Today, the area also serves as a pivotal center for America's Navy and Airforce: *Joint Base Pearl Harbor-Hickam*. Pearl Harbor is a city in itself with over 100,000 residents.

*Karl is using the modern spelling for the islands and State of Hawaii, incorporating the 'okina. This character indicates a glottal stop between adjacent vowels. —Ed.

Hawai'i is an expensive place to live. Nearly everything you might buy is imported from the outside world. You'll continually see massive container ships shuffle in and out the Honolulu receiver ports.



Matson container ship sailing from Honolulu.

Prices are greatly inflated from what you expect stateside. Common sliced bread can cost over \$10.00 a loaf. A gallon of milk sells for \$8.99. Regular gasoline approaches \$6.00 a gallon with diesel as much as \$7.00. Honolulu has a well-developed local bus system but having a car is completely essential for life on O'ahu.

Possibly the most popular places on the island are enormous Costco outlets that everyone flocks to for nearly everything they need and especially very inexpensive gasoline. At the Costco in Honolulu, 24 pumps continuously dispense gas at \$4.69 a gallon and the lines go back a couple of blocks waiting for the bargain of the century!

While you are waiting on line at Costco, look up! There is great eye candy sitting just a few blocks away. A beautiful and sturdy tower hovers above, complete with an old-fashioned capacitive high-hat and an ERI SHPX-2AC-HW auxiliary two-bay FM array to boot! It is the transmission center



for popular news-talk KHVH 830 AM "Hawai'i's News Leader" and the

KHVH AM transmit tower with two-bay FM antenna under the capacitance hat.

backup site for sister FM KUBT 93.9 "The Beat" with a rhythmic contemporary format. The tower sits on the soggy banks of the Kapālama Canal — a perfect place to find an exceptional ground plane for medium wave transmission. The high hat shortens the antenna height necessary due to the tower's proximity to Hawai'i's main airport — The Daniel K. Inouye International Air-

port (HNL) — named after a legendary senator who served for an amazing 49 years.

Honolulu television and FM broadcasters don't rely on a central master antenna for transmission. Look over the multitude of high rise buildings and you'll see a sea of individual red and white rooftop towers. My home base was in the Ala Moana neighborhood adjacent to Waikiki.



A multitude of broadcast towers in the Ala Moana neighborhood of Honolulu, Hawai'i.

Look out the window and you could almost touch the impressive ERI 8-bay SHPX-8AC FM antenna of



Tower for KHCM-FM has an 8-bay antenna stack.

KHCM-FM 97.5 FM "Hawai'i's Country" pumping out a full 100 kilowatts ERP. According to Nick Langan's indispensable Radioland app, KHCM plows a field strength of 135 dBmV/m into my Air B'n'B QTH. Pow!

I also analyzed NOAA weather radio coverage on O'ahu. You might think that there would be a central transmitter right in the center of Honolulu. NOAA had another idea. KBA99 on 162.550 MHz broadcasts from high atop Mount

Ka'ala — the highest peak on O'ahu at 4,026 feet — 26 miles away. It's just west of the Dole pineapple plantation in the northwest corner of the island. Filling in the area behind the Ko'olau Range along the southeastern shore of the island is WWF39 from Hawai'i Kai on 162.400 MHz. Together, these two stations' coverage overlaps, serving the entire island. Listen to WWF39 if you happen to find yourself behind the signature peak known as Diamond Head. It is a landmark like no other in Hawai'i! Take a look... you might recognize it!

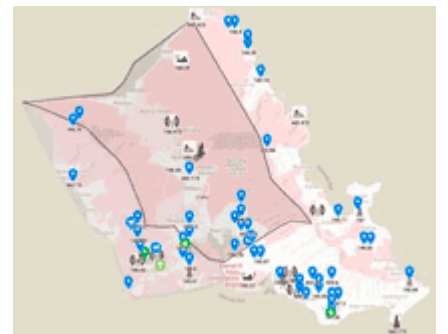


View of Diamond Head, familiar from numerous movies and TV shows.

Repeat After Me

Speaking of Diamond Head, it is also the site of the dominant two-meter repeater on the island: WH6CZB/R — output 146.880 MHz with a negative 600 kilohertz offset and an 88.5 Hz PL. O'ahu amateurs gather every night (except Sunday) at 7:30 p.m. for a traffic and chat net — and simply just to say 'hello' to everyone else. The Diamond Head repeater custodian is Wayne Greenleaf — KH6IN — who is a grand old ham in every sense of the word. Wayne has been a ham since 1988 and is a mainstay in O'ahu amateur radio.

Another notable amateur on O'ahu is Darren 'Stacy' Holbrook, KH6OWL. Stacy's website, <https://www.hamradiohawaii.com/>, includes nearly everything you might want to know about operating (and much, much more!) in the State of Hawai'i. One terrific feature is Stacy's very detailed virtual map of all the repeaters and associated communications installations complete for every island. Tap on the legend 'Hawaii — all islands frequencies' at the top of his homepage to see the map. You'll gain an immediate appreciation of how accomplished and ambitious the amateur radio community is in Hawai'i.



KH6OWL website includes an interactive map of Island repeaters.

Hello World!

Operating on HF in Hawai'i is challenging and exciting! Think of all the possibilities: the nearest civilization is California about 2,400 miles away. Having a QSO with DX stations can happen but it really helps to have a good amount of power and good 'ears.' No antenna is too big!

Fear not! If your Hawaiian signals travel far, your presence on the dial will become very popular, very fast! Pray for good tropospheric ducting and double-hop (or more) E-skip especially on 6 meters FT8 —

50.310 MHz. Hawai'i's hams have a credo: "Everything is DX from here!"

Hawai'i's long distance water paths seem to enhance nearly all frequencies. In a town called Hana on the eastern tip of Maui, I could regularly hear AM radio stations from all over America's west coast with the simplest of receivers after dark. Historic strong openings on VHF could be yours if you catch the right time and the right season. Hawaiian VHF hams love to mountain-top to reach out as far as they can. Wouldn't you love to have BK20 and BK21 grid squares in your log book?

High Floors = High Towers

The key to VHF/UHF (and maybe even HF) success on O'ahu is only an elevator ride away. If you stay in a high rise hotel or condominium, try for a high floor apartment especially with an eastern exposure. Even better, find one that also has a *lanai* or balcony so you can operate outside apartment windows. If you are on the 40th floor, it's like you are atop a 400



Tower block at sunset.

foot tower! What a great place to have fun with RF!

Another option is to hop in your car and head for isolated seashores with low man-made noise levels. Simply spectacular catches can be had when you have the entire Pacific Ocean to aid the transmission of your signals. Who knows what might come in especially at sunrise and sunset.

Try EchoLink

EchoLink is still an option on O'ahu. For a quick search, use the EchoLink app and go to Stations — then type in Hawaii and search. I found activity on the Hawaiian KH6JPL-R and WH6CEN-L links. If you have never tried EchoLink, it is a voice-over-IP solution going back to the year 2002. Free-to-download EchoLink apps are available for both Apple and Android cellular phones. Install the app and then follow the simple steps for validation. Great! You are now an EchoLink client and you can connect to EchoLink nodes all over the world. Here's a quick and easy way to communicate with amateurs wherever you go.

You Can Finally Log Hawai'i

Are you stateside longing to add Hawai'i to your 'Worked All States' award? Here are some terrific options:

Possibly the most famous amateur radio station on Hawai'i is KH6BB installed in Radio Central aboard the historic *USS Missouri* moored at Pearl Harbor. Legendary amateur Chuck Malefyt, KH6DL, leads the vol-

unteer group that operates and maintains the station. If you would like to work Hawai'i, the *USS Missouri* station may be your ticket. Send an e-mail to: kh6bb@yahoo.com and ask if you can schedule a QSO. You can also try these alternatives to work Hawaiian amateurs:



Chuck Malefyt, KH6DL.

The annual Hawai'i QSO Party will be on the air from noon August 22nd to 10:00 p.m. August 24th, New York Time. Full details at: <https://www.hawaiiqsoparty.org>

The Battleship *USS Missouri* (KH6BB) will participate in Museum Ships Weekend, 7:00 p.m. June 5th to 6:59 p.m. June 6th New York Time. Full details at: <https://www.facebook.com/groups/museumshipsweekend/>

Working the State of Hawai'i is always a challenge: It is 5,000 miles away from New York.

Be Prepared!

The emergency agencies in the State of Hawai'i are continually prepared to respond to quite a collection of potential disasters: tsunamis, hurricanes, earthquakes, wildfires, flash floods and volcanic events including lava flows and very toxic fumes called 'laze' — (lava and haze — a plume of hydrochloric acid combined with steam containing fine glass particles.) Avoid breathing this at all cost! It is no wonder that the pre-eminent ham club is called The Emergency Amateur Radio Club of Honolulu.

Over decades of service, the very active amateur radio community on O'ahu has created an amazing interconnected network of repeaters insuring continual communication during whatever may ail the islands. The members of the EARC are well prepared and experienced with organized plans for passing traffic and providing support where and when necessary.

For example: O'ahu is a small island. It is 44 miles long and 30 miles wide — about twice the size of New York City proper. Yet, the Diamond Head repeater on 146.880 MHz is linked to six other O'ahu repeaters: 146.68 .76 .86 .88 .90 and .98 MHz! Needless to say... the island is well-covered.

Be Alert!

All sorts of exciting and dangerous events can occur without a moment's notice along the Hawaiian islands. Hawai'i emergency alerts are distributed from a variety of sources. It's hard not to miss the very loud sirens placed all over the islands. Those strange stacks of dark green frisbees high up on poles around town are actually the sirens that will really get your atten-

tion. Beware! The sirens are tested on the first day of each month at 11:45 a.m.

NOAA All-Hazards weather radio also covers the state well with eight transmitters across the islands. Some weather radios are equipped to alarm and announce urgent announcements automatically. Most cell phones are equipped to receive notifications for AMBER Alerts and public safety and all other emergency warnings, as well.



Emergency warning sirens on a pole.

The O'ahu Department of Emergency Management is in constant touch with their free subscribers via the very effective HNL Alert System informing the populace about severe weather, ocean conditions, up-to-date traffic reports and other possible peril. You'll know when the Waikiki Beach is troubled with stingy box jellyfish or sharks! It will also warn you of traffic jams and road work wherever you go. Take a taxi or Uber in Honolulu and you will see dashboard cell phones ready to receive HNL Alerts.

An essential radio station is poised to distribute immediate alerts: 5,000 watt KHKA "CBS 1500" AM. It serves as the primary National Public Warning System emergency broadcasting facility in Hawai'i. Their transmitter site is fortified to withstand any disaster, ready with a substantial power generator, solar panel array and emergency food rations. KHKA can partner with FEMA on a moment's notice instantly becoming the authoritative station on Hawai'i for up-to-the-minute news and guidance.

Listen In!

You will hear some very unusual and interesting programming while listening to the broadcast radio in Honolulu. Two Honolulu stations truly dominate the dials. iHeart Radio's KSSK 92.3 FM and 690 AM capture an enormous 18 share of listeners with their clean and uncluttered "feel good" format of very recognizable pop music. KSSK has three times the listeners of their nearest competitors in the Hawaiian state capital. KSSK's Perry and The Posse morning show, featuring Hawai'i legendary broadcaster Michael W. Perry, has been the centerpiece of Honolulu media for decades. Listen to Michael and his crew using the iHeart Radio app or TuneIn from 11:00 a.m. to 4:00 p.m. New York time weekdays — or — just go to: <https://ksskradio.iheart.com/featured/iheartradio-live/>.

If you like the sound of ukeleles... eight stations

on the local FM dial feature Hawaiian music in many varieties — most notably KDNN 98.5 "The Island" and KCCN 100.3 "The Legend" — both playing a blend of Hawaiian and Caribbean Reggae music. KINE 105.1 "Hawaiian 105" holds court as the number two station in overall popularity.

Rounding out the top 5 stations in Honolulu is the statewide National Public Radio outlet, Hawai'i Public Radio. HPR is heard with a very powerful signal on 88.1 FM in Honolulu and many other frequencies throughout the surrounding islands. HPR presents very impressive and inspiring listening featuring locally produced programming celebrating Hawaiian culture and traditions. A second network called HPR-2 broadcasts an all-classical music format. Listen in to both varieties at: http://files.hawaiipublicradio.org/player/listen_hpr1.html — or — via the TuneIn app.



Fun Facts

The time difference between New York and Hawai'i is 6 hours from EDT. Just subtract six hours from Eastern time to sync with Honolulu. Hawaiian business hours (10:00 a.m. to 6:00 p.m. HST) converts to 4:00 p.m. to midnight on our East Coast. NYC 6:00 a.m. is midnight in Hawai'i. By the way, Hawai'i does not support daylight savings time. They never change their clocks!

Watching American television network shows in Hawai'i is interesting, too. What is seen in New York is replayed for Hawaiian viewers five hours later. TV prime time in Hawai'i runs from 7:00 p.m. to 10:00 p.m. just like Central time zone stations stateside. Late night news is seen at 10:00 p.m. with late night talk shows starting at 10:35 p.m.



Hawaii News Now appears on CBS affiliate KGMB and on NBC affiliate KHNL.

PBS Hawai'i devotes their 7:30 p.m. to 8:00 p.m. time slot Monday through Thursday nights to fascinating and educational locally-produced Hawaiian cultural programming. This is a great opportunity to embrace the history and traditions held sacred all over the islands.



Dole Whip. [Credit: Dole].

Looking for delicious refreshing treats while you sun under the palm trees at the beach? Treat yourself to a tasty cup of Dole Whip® — a creamy concoction made from famous Dole pineapples. Originally created as a special product for Disney World, you'll find it wherever you go all across Hawai'i. Yum!

More Hawaiian treats?

Try some shaved ice! There must be thousands of small street stores, food trucks and snack shops that sell ice literally shaved before your eyes and then anointed with your favorite and colorful juices and purees. These people know how to live and we enjoy every minute of it!



Shaved Ice. [Credit - Tobi's Shaved Ice - Maui.]

License plates are permanently affixed for the lifetime of vehicles in Hawai'i and are guarded by quite strict laws. Theft proof screws with black bumpers are common. It seems people love to scarf plates as souvenirs. Fraudulent use of plates or tags is a misdemeanor, punishable by fines up to \$500. In addition, license plates must be absolutely free and clear to be easily read. Use of covers, shields, or devices that hide a plate is a violation, with fines between \$500 and \$1,000. Use of electronic or mechanical plate-flipping devices brings a fine of \$250 to \$2,000.

Long life for all cars in Hawai'i! You'll never see snow on the ground (except on very high mountain tops.). No use of salt on roads in Hawai'i. No endless rust on vehicles in Hawai'i. 20 year old cars look brand new. Biggest downfall of cars? Hot sun can mire auto paint jobs!

SPAM®! SPAM! SPAM!

Who would think a product containing canned cooked meat, (primarily made from pork and ham, with salt, water, potato starch, and sodium nitrite) would be the inspiration for a magnificent annual technology show? If you are looking for the most unusual, mesmerizing and dazzling light show you have ever seen... head for the Waikiki SPAM Jam!

Through an amazing coincidence of event scheduling, I found myself right in the heart of this colossal annual spectacle. Drawing crowds from places all over the world, the Waikiki SPAM Jam is everything you could imagine and more.



Special characters encountered at the SPAM Jam. [N2KZ pics.]

The end of the SPAM celebration culminates in a 20 minute-long full-color flying drone light-show presenting animated dolphins, turtles, SPAM characters and brilliant flying messages including all things SPAM. Crowds cheer after each and every element. It is wild and wacky unlike anything you have ever seen before... and it can be seen high in the sky for miles and miles around. What a show!



Flying drones presented a light show for the crowds attending Waikiki SPAM Jam.

The next SPAM Jam Block Party will be held in Waikiki on Saturday, April 24, 2027 from 4:00 - 10:00 p.m. with the two-week Dine-In SPAM Event running from April 17 to May 2, 2027. Bring your fork, knife and bib and join the crowd! See? Hawai'i can be almost everything you could ever imagine!

A hui hou kakou — (until we meet again)

I will miss Hawai'i's birds, seals and great turtles, the fluffy clouds that always seem to be hovering over the mountain tops, the almost daily show of rainbows and the warm welcomes from every part of Hawai'i's diverse and unique communities. What a wonderful place to be!



- 73 es mahalo de Karl N2KZ/KH6

Spring foxhunt 2026

PCARA's latest foxhunt took place on Saturday morning, May 2. The hidden transmitter hunt followed the 9:00 a.m. PCARA Breakfast at Downing Park, next door to the foxhunt location.

Around 10:15 a.m. Greg KB2CQE and your editor broke away from Breakfast to set up the hidden transmitter in FDR State Park. Hunters were not allowed to enter the park until 10:30 a.m. to avoid accidentally discovering the transmitter site.

Lou KD2ITZ provided the following list of hunters who checked in at the north end of the Pool Parking Lot, ready for the 10:45 a.m. start time.

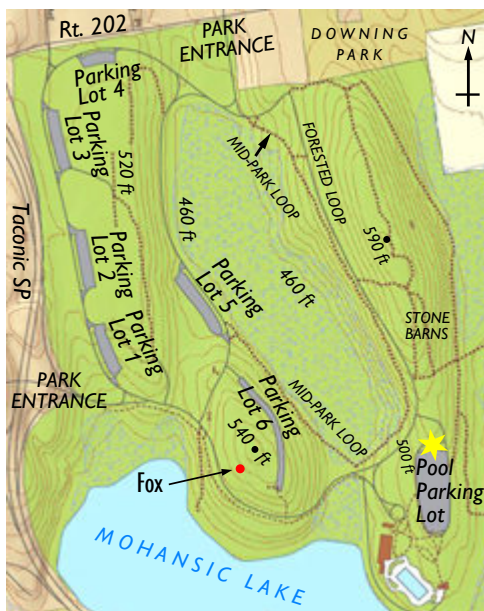
David KD2EVI
Jim KD2WSU
Lou KD2ITZ, John KE2IMG and Scott KE2CNS
Mary Ellen KE2GNZ and Rob KE2GOF
Mike N2EAB
Ray W2CH and Marylyn KC2NKU
Zee KE2FRX

At exactly 10:45 a.m. I flipped the switch to turn the fox transmitter on — and *nothing* happened. I had forgotten to remove the plastic protection strip from the AA batteries. A few seconds later the problem was corrected and the Byonics MicroFox PicCon TX came on-air using 146.565 MHz FM.

From the north end of the Pool Parking Lot, bearing to the fox transmitter was due west and most hunters set off in that direction.

Meanwhile, at the fox location, we spotted two people sweeping around with “antennas” then digging at the top of the hill. At first we thought they might be hunters — but their “antennas” turned out to be metal detectors and they were seeking buried treasure in FDR Park.

The Fox transmitter was located among the picnic tables on the side of the hill west of Parking Lot 6 — a point not quite line-of-sight to the Pool Parking Lot. The first PCARA foxhunters were spotted cresting this



Bearing to the fox was west from the Pool Parking Lot. [Base map NYS Parks].

hill around 11:08 a.m. A few minutes later Lou, KD2ITZ and his team were closing in on the fox transmitter. Here is Lou's description of the experience.

From Lou KD2ITZ

I enjoyed participating in this foxhunt and enjoyed demonstrating direction-finding techniques to a pair of new participants. I was joined by Scott KE2CNS and John (new call KE2IMG). John attempted to use his Malahit DSP2 SDR receiver, which covers nearly the entire spectrum from 50 kHz to 2 GHz. John had demonstrated the unit earlier that morning during breakfast at Downing Park, but had trouble receiving NOAA Weather Radio with a whip antenna. At the event's start, there was also no reception of the hidden transmitter from the pool parking lot when fitted with a tape-measure Yagi.



Malahit DSP2 receives a variety of modes up to 2 GHz.

We made the decision to proceed without the SDR and John forged ahead using the same Yagi attached to a Baofeng UV-5R. Scott was loaned a Yaesu FT4-X with a WA5VJB Yagi antenna optimized for 70 cm. At the start, we had solid reception on the fundamental transmitter frequency, but no copy on the third harmonic 439.695 MHz. Although there is a signal strength meter on the Baofeng, we chose to ignore it and move the receiver away from 146.565 MHz until the fox transmitter was audible, but weaker.

This allowed us to determine that the most likely direction was somewhere to the west. I encouraged the team to walk briskly and only stop to check the receivers approximately every 100 yards. I likewise explained that the terrain in the park could reflect radio waves causing hunters to follow the wrong path. It was also discussed that plotting intersecting vectors would lead to better accuracy, at the cost of tak-



Close up of Fox location between the Playground and Pool Approach Road.

ing more time.

We proceeded along the road heading south-west and carefully considered whether to check out the yellow trail to the north-west, but the signal seemed weaker in that direction. As we continued along the road south of Lot 6, we were able to hear the transmitter on 439.695MHz. This was also an opportunity to attach the stock whip antenna to the Baofeng and attempt body shading. The device was held close to the chest and the listener turned the entire body to locate the area of highest signal strength. At this point, all indicators suggested somewhere to the north-west. Because it seemed like a favorable location to get another bearing, we ascended to the area of high ground near the playground.



L to R: John KE2IMG, Lou KD2ITZ and Scott KE2CNS ascend to high ground near the children's playground.

From there, Malcolm NM9J and Greg KB2CQE were visible to our west. We carefully approached them and took the antenna off the Baofeng as we got closer.



Greg KB2CQE was sitting near a barbecue grill.

As we walked past the table where they were sitting, we looked and listened in every direction. When we spotted an antenna protruding from the barbecue grill, we knew we had located the transmitter.

- Lou, KD2ITZ



Lou KD2ITZ (right) spots the fox transmitter inside the barbecue grill. Scott KE2CNS is close behind.

Back to the hunt

The fox toy plus Microfox transmitter were located inside a plastic bag with Nagoya NA-771 dual-band antenna poking out through the grill's steel grate.



More hunters approached and fanned out around the surrounding area. They included Mike N2EAB who had teamed up with Zee KE2FRX.



Zee KE2FRX (left) and Mike N2EAB use their folded-up tape measure Yagi to locate the Fox.

Next on the trail were Robert KE2GOF, Mary Ellen KE2GNZ and their K9 sniffer dog. By this point, the fundamental fox signal on 146.565 MHz and its harmonic on 439.695 MHz were very strong and signal attenuation was called for. Robert and Mary Ellen were using loop antennas, with "body fade" technique to reduce signal strength in the direction of the fox.

As 11:30 a.m. approached, the first hint was handed out during a pause in fox transmissions: "Look



Mary Ellen KE2GNZ (plus sniffer dog) discovers the fox transmitter with its whip antenna poking through the steel grate of the barbecue grill.

for the children’s playground”. This was followed by another tip: “We’re having a barbecue”. Hunters continued to arrive up to 11:50 a.m. when David KD2EVI appeared over the hill and relayed the news that Jim KD2WSU, Ray W2CH and Marylyn KC2NKU were behind him and dropping out.

David explained that he and Jim KD2WSU had followed a reflection from the Pool Parking Lot then proceeded along the gravel path toward the Stone Barns. They were followed by Ray and Marylyn. (David reported an encounter with a park visitor who asked about the antennas and was given one of the PCARA foxhunt cards designed by Rob AD2CT.)

Here are the times for successful hunters in order of arrival:

Lou KD2ITZ, John KE2IMG, Scott KE2CNS	11:10 a.m.
Mary Ellen KE2GNZ	11:14 a.m.
Mike N2EAB	11:17 a.m.
Rob KE2GOF	11:26 a.m.
Zee KE2FRX	11:28 a.m.
David KD2EVI	11:49 a.m.

Hunters gathered around the picnic tables to com-



Successful hunters gather around the picnic table to discuss their experiences and compare antennas.

pare notes and inspect individual receiving equipment. The group then headed back to the Pool Parking Lot to retrieve their vehicles.

Thanks to everyone who took part and to Greg KB2CQE for keeping me company at the fox location.

The next hunt is likely to take place in the fall, when first place winner Lou KD2ITZ will be invited to take over the role of fox.

- NM9J

Yaesu FTX-1 update

As reported in the May 2026 newsletter, Ray W2CH has acquired a “Yaesu FTX-1optima’ HF/VHF/UHF multimode transceiver to replace the FT-891 HF/6m radio in his Jeep Renegade. Since then, Ray has made a few changes to the mobile installation. He explains that the Lido ball-and-socket cup mount did not work out and the heavy FTX-1 head unit is now mounted on the dash, where it is easier to see and make adjustments.



Ray’s Yaesu FTX-1 head unit is now mounted on the dash rather than on the Lido cup-holder mount. [W2CH pics.]

The Yaesu microphone and MFJ-1922B controller for the Tarheel screwdriver antenna are conveniently at the side of the driver.



Yaesu microphone and MFJ antenna controller nearby.

The SPA-1 amplifier which is part of the Yaesu 'FTX-1optima' package is still mounted in the trunk, now with a shortened coaxial cable for the VHF/UHF antenna on the hatch.



Yaesu SPA-1 amplifier mounted in the trunk of Ray's Jeep.

Foxhunt hints

During this year's Spring Foxhunt, Lou KD2ITZ posed the question — how does a hunter's choice of radio affect performance for direction-finding? Here is one answer, plus some general hints for finding the fox faster.

Top transceivers

Most amateurs take their everyday handi-talkie (HT) to the foxhunt and connect a directional antenna to the external antenna connector. In the past, that external connector might have been an SO-239 or female BNC. Nowadays it is more likely to be an SMA-female socket on a Japanese radio or a male SMA socket for a Chinese manufacturer. If your external antenna does not fit the radio, adapters are available.



Handi-talkies with their antennas and connectors. L to R: older Icom with male BNC antenna; modern Yaesu with male SMA antenna; BFDX with female SMA antenna.

Thanks to a well-designed RF front-end plus adequate filtering, a \$200+ Japanese HT will usually have better sensitivity, selectivity and overload resistance than a \$25.00 Chinese HT. The inexpensive Chinese HT with single integrated circuit for RF/IF will be more prone to overload, more responsive to spurious responses and may desensitize near strong local signals.

The Japanese HT will probably have more segments on its S-meter display, making it easier to detect peaks and nulls of signal strength. Its user-interface will be better suited to amateur-style operation.

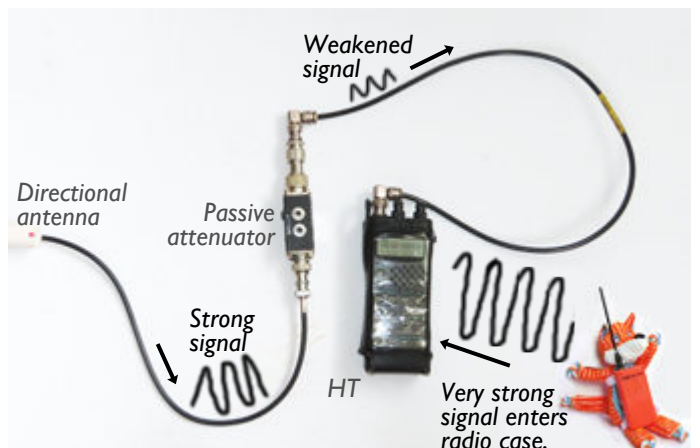


Handi-talkie from a Japanese manufacturer may have more segments on the S-meter (arrowed).

Specialized foxhunt equipment is available that provides a continuous readout of bearing and signal strength. For example, the MK4 Foxhunt Sniffer by VK3YNG indicates signal strength and attenuator setting by audio tone. (See <https://foxhunt.com.au/> and <https://www.rdfantennas.com/>). Component shortages are currently making these receivers out-of-stock. Mobile foxhunts can employ a Doppler Direction Finder antenna array, for example: <http://www.kn2c.us/>.

Less is more

Another aspect of low-cost transceivers is the amount of RF shielding. This is important when signals are strong and an attempt is made to reduce incoming signal strength by inserting a passive attenuator in the antenna lead. Even though the attenuator might reduce signal strength within the coaxial cable by 30 – 40 dB,



With a passive attenuator, leakage of strong signals into the plastic radio case can overwhelm the weakened signal that passes through the attenuator.

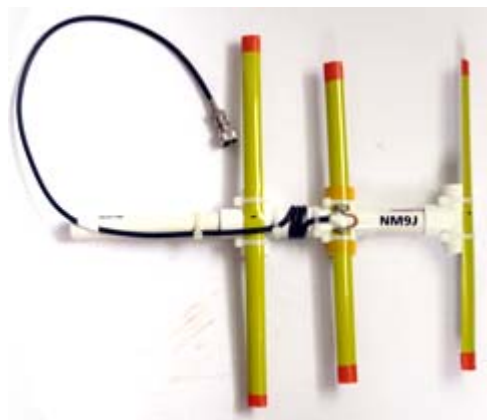
RF leakage through the radio's plastic body into its front-end circuitry could bypass the attenuator's effect. One indication of excess leakage is when removal of the antenna provides no reduction in the full-scale S-meter reading.

There are several ways to fix this problem.

1. Try tuning the radio one or more channel steps above or below the fox transmitter's frequency, for example to 146.550 or 146.580 MHz. There should be sufficient adjacent channel rejection provided by the IF-filter to bring S-meter readings back on-scale. Hint: program another memory channel with the adjacent frequency.
2. Monitor the fox harmonic on 439.695 MHz — it should be at least 40dB down on the 146.565 MHz fundamental. Once the 70 cm harmonic becomes audible, the fox is probably close enough to be visible. Hint — program a different memory channel with the UHF harmonic frequency.
3. Invest in an active attenuator. The active or "offset" attenuator has a mixer circuit that produces a replica of the fox transmission, but on a new frequency — for example 4 MHz higher or lower. The signal's strength can be adjusted to bring it to a useful level. This allows reception of a weakened signal which *cannot* have bypassed the attenuator and leaked straight into the receiver's RF circuitry. See: <https://www.byonics.com/attenuators>. One disadvantage for the active attenuator is that it needs a power source — and be careful not to destroy the mixer device by transmitting into it!

Run the tape

Antennas are always interesting to radio amateurs — and this is certainly true of fox hunting. Today's favorite is the "Tape-Measure Yagi" devised by Joe Leggio, WB2HOL (SK). The design is optimized for a clean pattern with good front-to-back ratio and stands up well to crashing through the undergrowth on the way to the fox. Most of the parts for construction are available from Lowes or Home Depot. See: <https://xwarn.net/2022/01/04/joe-leggio-wb2hol-tape-measure-antenna/>.



440 MHz version of Tape-Measure Yagi.

For reception of the fox harmonic on 439.695 MHz, there is a 440 MHz version available: <https://w5hrc.org/archive/2013/antenna-building-for-foxhunt-event/>

and <https://w5hrc.org/media/2020/11/Tape-Measure-Yagi-440.pdf> (pdf file).

If you prefer a directional antenna that covers *both* 2 meters and 440 MHz, take a look at the Elk Antennas 2M/440L5

Dual-Band Antenna. This a log-periodic design that is also suitable for satellite work. <https://elkantennas.com/product/dual-band-2m440l5-log-periodic-antenna/>.



Elk Antennas dual band log periodic antenna in use by David KD2EVI.

Another dual bander is available from Arrow Antenna, <https://www.arrowantennas.com/arrowii/146-437.html>. Arrow also supplies loop antennas and active attenuators. ARRL has a small, dual-band 2 meter /70 cm handheld Yagi antenna suitable for foxhunts and satellite work, <https://home.arrl.org/action/Store/Product-Details/productId/2066877520>.

One word of caution — large antenna designs can weigh several pounds. When the boom is supported from *behind* the elements, this can be a heavy burden on the wrist during longer direction-finding events.

Know your park.

When the foxhunt location is known in advance — for example FDR Park — study the site geography ahead of time.

A large-scale contour map is useful for identifying high ground that can cause reflections. You may need to negotiate overgrown areas, streams and boggy ground. Park features could feature in hints transmitted during the hunt. (See: <https://parks.ny.gov/sites/default/files/FranklinDRooseveltTrailMap.pdf>.)



Walk in their shoes

Put yourself in the situation of the fox operators. They may pick a parking spot with a view of the fox transmitter. Some operators will select a *different* vehicle from their own to avoid being identified too easily. If the operators walk from vehicle to transmitter site, they will probably pick a location near a parking lot with a park bench or picnic table for comfort.

Search strategy

In the past, PCARA has organized mobile fox hunts where the transmitter was hidden within a 5-mile radius of the Beach Shopping Center. Transmissions were timed at ten-minute intervals. Hunters would start out from the Beach, taking further bearings along the way.

There were different philosophies for efficient hunting — one way was to drive off in the direction of the first bearing, then take another bearing at each subsequent transmission, getting closer and closer to the fox. Another approach was to drive off *at right angles* to the first bearing, take a second bearing on the next transmission then plot both bearings as lines on a map. The crossing point should be close to the fox location. Both strategies have proved successful, depending on distance to the fox and presence of reflections.

For foxhunts on-foot in a park, it can be difficult to head off at right angles to the first bearing because of lakes, dense forest, availability of paths and trails etc. As suggested by Lou KD2ITZ, it may be more efficient to walk (or run) in the direction of the first bearing, taking additional readings along the way.

How do you get to Fox-worthy Hall?

Practice, practice, practice

If you are new to foxhunting, there is a lot to learn in terms of equipment and technique. The best approach is to **practice** beforehand. Get your handi-talkie out, program the fox frequency and third harmonic, connect your directional antenna plus attenuator then head outside and try to determine the direction to an on-the-air signal.

Perhaps you can find a repeater with an extended net in progress, though it can be annoying if transmissions finish early. If your HT can tune to NOAA Weather frequencies, you might use an NWS transmitter as a continuous signal source — though your 146 MHz antenna may behave oddly on 162.550 MHz.

A weak signal source can be improvised from a nanoVNA or an old VHF scanner. For the scanner, look up the frequency of the first intermediate frequency (IF) stage, then set the scanner's receive frequency to the fox transmitter frequency plus or minus the scanner's first IF. For example, on my Radio Shack portable scanner, set receive frequency $f = 146.565 + 10.850 = 157.415$ MHz. The scanner's local oscillator will then act as a weak signal source, suitable for close-in fox hunting. Maybe you can persuade someone else to hide the signal source before you begin practice.

Equipment check

When you practice direction-finding ahead of the event, you will achieve another objective — a practical test that all your equipment is working. Is your HT battery charged? Do you have a spare? Are all the antenna connectors, cables and adapters in good condition? Is

the active attenuator attenuating? Check it *now* before the foxhunt starts.

Are you lucky?

No matter how much you practice, luck also plays a part in any Foxhunt. How lucky are **you**? Have you ever won a door prize at a hamfest? Do you check your horoscope in the newspaper? Is your 807 half-full or half-empty? Best of luck in the next hunt.

- NM9J

Peekskill / Cortlandt Amateur Radio Association

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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 Jun 6: PCARA Monthly Meeting, 10:15 a.m., Putnam Valley Library, 30 Oscawana Lake Rd., Putnam Valley, NY.

Sat Jun 6: PCARA V.E. Test Session, 11:30 a.m., Putnam Valley Library, see below.

Sat Jun 20: PCARA Breakfast, 9:00 a.m., Uncle Giuseppe's, 327 Downing Dr, Yorktown Heights.

Weekend Jun 27-28: ARRL Field Day. Location to be announced.

Hamfests

Check with organizers before leaving.

Sat Jun 6: Fair Lawn ARC Hamfest, Fair Lawn Memorial Pool, Bellair Ave., Fair Lawn, NJ.

Sun Jun 7: LIMARC Hamfest, 999 Stewart Avenue, Bethpage, NY. 8:45 a.m.

Sat Jun 20: Raritan Valley RC Hamfest, Piscataway High School, 100 Behmer Road, Piscataway, NJ. 8:00 a.m.

VE Test Sessions

Check with the contact before leaving.

Jun 6: PCARA, 11:30 a.m., Putnam Valley Library, 30 Oscawana Lake Rd., Putnam Valley NY. Must contact VE radiocassetta'at'gmail.com.

Jun 11: WECA, Westch Cnty Fire Trg Center, 4 Dana Rd Valhalla NY. 7:00 p.m. Contact VE, rcasino48'at'gmail.com.

Jun 12: Orange County ARC, Munger Cottage, 40 Munger Dr., Cornwall NY. 6:00 p.m. Contact VE: w2bcc'at'arrl.net.



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