



QRO

THE PALOS VERDES AMATEUR RADIO CLUB NEWSLETTER

SEPTEMBER 2023

Inside this month's QRO...

- PVARC upcoming meetings.....2
- Thought for when there's no UHF repeater line of sight in sight,
by Diana Feinberg, AI6DF.....3-4
- PVARC hams Conquered the Bridge.....5
- Moving to Zoom, more topics6
- Upcoming events; ordering club badges, jacket, patch.....7
- About us.....8
- September 2023 calendar9
- Elecraft gear for sale by PVARC member.....10:
- Upcoming PVARC ham license classes11
- PVARC new membership & renewal form.....12

All QRO monthly issues since 2007 are on the PVARC website at www.k6pv.org under the "Newsletter" tab.

Additional club news appears in the PVARC Weekly Bulletin sent by email to members.

Understanding the Yaesu C4FM VHF/UHF Digital Mode ("System Fusion") and WIRES-X,

**Presenter: John Kruk, N9UPC,
Yaesu National Sales Manager**

7:30 pm, Thursday, September 7, 2023

In-person at Fred Hesse Community Park,
29301 Hawthorne Blvd., Rancho Palos
Verdes...and online via Zoom

*Hesse Park meeting room opens at 6:30 pm
Zoom meeting room opens by 7:15 pm*

Also meeting this month:

PVARC HF Enthusiasts Group meeting
Saturday, September 9, 10:00 am-Noon at
Palos Verdes Library Purcell Room

**PVARC EmComm Interest Group virtual
meeting** Saturday, September 16, 11:00 am
- Noon via Zoom

PVARC upcoming monthly meetings

The PVARC's **September 7th** hybrid monthly meeting at Hesse Park and via Zoom covers two new topics for us: Yaesu's System Fusion (C4FM) FM voice/data digital system and WIRES-X internet linking. Presenting remotely will be John Kruk, N9UPC and Yaesu's National Sales Manager. John has been passionate about amateur radio EmComm since being first licensed in 1993 and working in the two-way radio industry. If you've wanted to learn what System Fusion and WIRES-X are all about this is a great opportunity.

Our club has promoted digital FM modes since 2018 to augment analog FM. Most recently we learned about ICOM's D-Star digital protocol at our May 4, 2023, monthly meeting from Canadian ham Austin Hallett, VE7QH. During 2018-2019 several PVARC monthly meetings were devoted to DMR (Digital Mobile Radio) and we've published quite a few **QRO** articles about digital FM modes.

According to the repeaterbook.com website as of September 4, 2023 there are 93 System Fusion ham repeaters within California, many of them also WIRES-X sites. Additionally, 51 D-Star and 153 DMR amateur repeaters are in the Golden State—so it's useful having capability in more than one digital FM mode.

At our **October 5th** hybrid monthly meeting Carl Luetzelschwab, K9LA (who is also the ARRL Central Division Director covering Indiana, Illinois, and Wisconsin) will present an update on Solar Cycle 25 propagation. He'll be speaking from his QTH in Ft. Wayne, IN, to follow-up on his Cycle 25 forecast presentation at our June 2018 monthly meeting.

The PVARC's **November 2nd** meeting features Joe Moell K0OV discussing transmitter hunting (both pedestrian and mobile.) Joe is a noted T-hunt expert living in Orange County who last spoke at the PVARC in 2014. He also frequently speaks at hamfests and ham conventions.

On **December 14th** the PVARC will hold another virtual-only "Holiday After-Dinner" event with our usual "door prizes" and a speaker rumored to be your club president. A sit-down holiday dinner would have been nicer but recent escalations in meal prices and service charges would have made our kind of event too expensive for many members.

Meanwhile, PVARC's HF Enthusiasts Group meets in-person at the Palos Verdes Library main branch on the 2nd Saturday this month, September 9, from 10:00 am-Noon. In October and November HFE meetings will be on 1st Saturdays due to Library scheduling conflicts.

Our EmComm Interest Group continues meeting virtually via Zoom on 3rd Saturdays. ■



Above: Yaesu's new FTM-500DR dual-receiver, dual-mode mobile transceiver, with a 2-meter VFO shown in System Fusion digital mode and the control head detached. PHOTO CREDIT: YAESU

Reaching PVARC's K6PV repeater when the line of sight is nowhere in sight

By Diana Feinberg, AI6DF

QRO Editor

Not having a reasonable line of sight into a critical UHF ham repeater sure creates a “how to get it done” challenge. Thankfully I've mostly solved challenges getting into K6PV and other repeaters without lines of sight by using mobile transceivers with 10-40 watts, some high school geometry, and an easily-found \$1.48 PVC plumbing pipe 90° elbow added to my portable beam antenna.

My biggest UHF challenge since 2020 became participating in PVARC's Tuesday night analog nets from a low-elevation location near Torrance Beach. The Palos Verdes Hills and neighboring homes rise sharply blocking my paths into K6PV and its 2-meter cross-link. Hams in other areas surrounding the Palos Verdes Peninsula's base have similar predicaments where handheld radios, mobile antennas, and even some vertical base station antennas are useless getting into repeaters at the top. What saves the day for low-height most situations is a \$1.48 PVC elbow to elevate the beam antenna's angle. Following the adage “A picture is worth 1,000 words” several photos (next page) show my portable Elk log-periodic antenna setup that reaches K6PV. ►



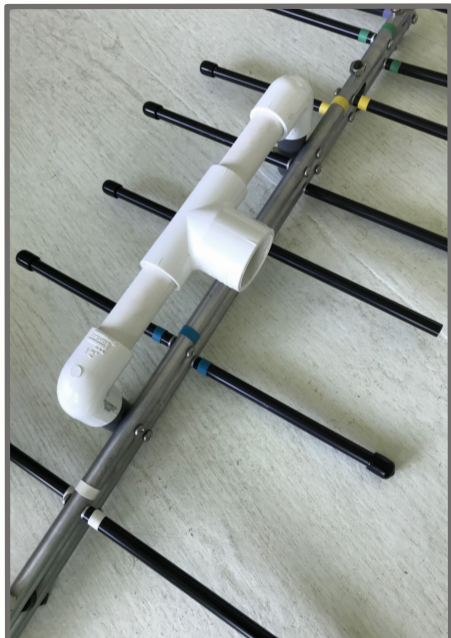
Above: AI6DF near Torrance Beach is 17,200 feet away horizontally and 1,110 feet lower vertically from K6PV = a 4-degree beam antenna elevation needed from Torrance's Lower Hollywood Riviera if slope path had no or modest obstruction.

However, terraced homes nearby and the sharply-rising Palos Verdes Peninsula's north slope necessitate a 20-degree beam antenna elevation to best reach K6PV. Your angle may vary...finding the correct angle requires rudimentary geometry calculation and some testing.

AERIAL IMAGE CREDIT: Google Maps

Reaching PVARC's K6PV repeater when the line of sight is nowhere in sight

► *Continued*



Far Left: The Elk log-periodic 440 antenna's rotating PVC mast attachment rotates for using horizontal or vertical polarization (latter is shown here).

Near Left: Rotating the antenna's mast mount to horizontal polarization and attaching the \$1.48 PVC 1" elbow allows raising antenna angle to needed degree in vertical polarization.



Above: Success! Reaching K6PV from this location required a 20-degree vertical polarization angle on this portable mast to clear nearby homes and Palos Verdes hills. The Elk log-periodic antenna needs a non-metallic vertical mast in the antenna elements region and the front-feeding RF coaxial cable must be draped away from the antenna. PHOTOS: DIANA FEINBERG, AI6DF

PVARC members and other hams Conquer the Bridge with radio communication

On Labor Day, September 4, 2023 the 14th annual Conquer the Bridge 5.3-mile race traversed the Vincent Thomas Bridge above the Port of Los Angeles—and ham radio again provided public service communication for runner safety. Walt Ordway, K1DFO, has organized and overseen our radio coverage since the race resumed in 2009.

Around 3,000 runners and walkers registered for this year's event. The race started at 7 am on Harbor Blvd. at 5th Street, near the Maritime Museum in San Pedro. The course went north on Harbor Blvd to the Vincent Thomas bridge, headed east across the bridge, turned around at Navy Way on Terminal Island, returned back over the bridge and down Harbor Blvd to the finish line at 5th Street.

This year's ham radio communication used the 146.880 MHz repeater aboard the Battleship Iowa which provided excellent coverage. Ham operators were positioned at various locations along the course including on the bridge. This year's radio operators were: Mike KK6KCH; Matthew N6MDC; Scotty K6ZNL; Ralph A16GP; Steve KI6TEQ; Glenn KJ6ATN; Bob AC6RM; Mike KN6YSK; Dave KN6OFU; Steve KN6YDX; Cynthia AG6NW; and Walt K1DFO. ■



PHOTO CREDITS: Conquer the Bridge website,
<https://conquerthebridge.com/about-us/>



PVARC virtual meetings move to new platform



Effective with our August 19, 2023, EmComm Interest Group meeting the PVARC has switched its virtual meeting platform to Zoom.

Cisco Webex worked well for us since April 2020 to host over 120 PVARC meetings of all types. However, recent Webex security enhancements complicated meetings such as PVARC's where attendees do not have individually-addressed invitations that enable validating attendee log-ins. For corporate or government virtual meetings the ability to authenticate attendees is usually a must.

As we did with Webex, we'll send members both a Zoom "one-click" meeting hyperlink for use in the app and a Zoom meeting number + meeting password to use in any browser window.

Many PVARC members are familiar with Zoom from other organizations but we've learned Zoom still isn't for everyone. One PVARC member has already advised that Zoom free and Zoom paid commercial service (we have the latter) are not permitted on his computers, only Zoom for Government. Information technology trade-offs between ease of access and security will likely be with us forever. ■

Additional subjects coming to PVARC monthly meetings soon...

Starting in October 2023 the PVARC will also strive for a short 2nd topic at our monthly general meetings. These presentations will cover subjects such as: a unique aspect in our club, something one of our members did/designed/learned, demonstrating an interesting concept, a new ham trend...and/or more.

Have a short subject you feel fellow members would be interested in hearing about? Contact our Vice President, Ray Day N6HE, at rayday@cox.net .



Above: Our member Gary Lopes WA6MEM signal tests a donated ICOM HF transceiver prepared for sale to benefit the ARRL's ARES-LAX program. PHOTO: DIANA FEINBERG, AI6DF

PVARC 2023 upcoming events

- **PVARC hybrid monthly meetings online via Zoom and in-person as announced**

1st Thursday each month, 7:30-9:15 pm, except in August and December

- **PVARC HF Enthusiasts Group meetings in-person at Palos Verdes Library main branch**

1st Saturday in August, October, and November, 10:00 am-Noon

2nd Saturday in September, 10:00 am-Noon

- **PVARC EmComm Interest Group online meetings via Zoom**

3rd Saturday each month, 10:00-11:00 am or 11:00-Noon (time depends on other radio events that day)

- **Walt Ordway K1DFO Technician and General amateur radio license classes at Hesse Park**

November 4 and 11, 2023 in Fireside Room

- **Volunteer Examiner license test session at Hesse Park, November 18, 2023 (Fireside Room) 10:00 am**

- **PVARC 2023 virtual After-Dinner, December 14**

Non-PVARC Events of Note:

- **W6TRW Swap Meet**, last Saturday each month. 7:00-11:30 am. Northrop Grumman parking lots, Aviation Blvd./Marine Ave., North Redondo Beach. VE license testing in Building S-2 at 10:00 am.
- **Pacificon / ARRL Pacific Division Convention**, October 20-22, San Ramon Marriott, San Ramon (East Bay), CA. Website: <https://www.pacificon.org/>

Become an ARRL member: support amateur radio while increasing your learning

Consider joining the American Radio Relay League (ARRL) if not already a member. The ARRL is the only national organization representing amateur radio and has another significance for the PVARC: We receive benefits from being an ARRL-affiliated club, which requires that at least 51% of club members be ARRL members.

Annual ARRL membership costs \$49 and includes your choice of the printed monthly **QST** magazine or the ARRL's new **On The Air** magazine for newer hams. Both are available electronically to all ARRL members plus free online access to ARRL's two other publications, **QEX** and **National Contest Journal**.

Additionally all ARRL members can access numerous web-based materials, ARRL staff, and assistance with ham radio issues. Visit: www.arrl.org/. ■

Need a PVARC badge?

If you wish to order a new or replacement engraved PVARC badge please contact Gary Lopes at wa6mem@cox.net and he will make arrangements for your payment and sending your new badge. Badges cost \$13. ■

Embroidered PVARC patches still available

PVARC club patches are still available by special arrangement for \$4 each. They may be sewn onto any cap, jacket, shirt, or bag.

During our period of virtual meetings if you would like a patch contact Diana, AI6DF, ai6df@arrl.net and we'll find a way to get your patch to you. ■



About Us...

Welcome to the Palos Verdes Amateur Radio Club, K6PV.

Founded in 1975, today our 150+ members hail from every city in Los Angeles County's South Bay region...and beyond.

Our club fosters diverse ham radio interests including public service, DXing, contesting, digital modes, and electronic experimentation.

We also teach license classes several times annually and gladly assist newer hams in understanding amateur radio technology or procedures.

Many PVARC members serve in the government-affiliated disaster amateur radio groups for the South Bay's cities and Los Angeles County. We also provide public service communication at no charge to sponsors of community and running events.

No matter where you are along your ham radio journey you are welcome as a PVARC member. ■

Palos Verdes Amateur Radio Club

An American Radio Relay League Affiliated Club

Board of Directors:

President	Diana Feinberg, AI6DF
Vice President	Ray Day, N6HE
Treasurer	Don Putnick, NA6Z
Secretary	Ron Wagner, AC6RW
Directors	Clay Davis, AB9A Gary Lopes, WA6MEM
Past Vice President	Bob Sylvest, AB6SY

Appointed Offices:

QRO Editor	Diana Feinberg, AI6DF
K6PV QSL Manager	Jeff Wolf, K6JW
K6PV Trustee	Mel Hughes, K6SY
LAACARC Delegate	Jeff Wolf, K6JW
VE Coordinator	Dave Scholler, KG6BPH
VE ARRL Liaison	Jerry Shaw, KI6RRD
Net Control Operators:	Laura Remington, KA6LJR; Ron Wagner, AC6RW; Dale Hanks, N6NNW; Bob Sylvest, AB6SY; Malin Dollinger, KO6MD; Dave Turner, KM6LGX; Jerry Shaw, KI6RRD; Gary Lopes, WA6MEM; Clay Davis, AB9A; Rick Heaston, KG6RH; Jeff Remington, KA6JMR; Marlee Remington, KA6MJR; Derek Okada, K6DMO

Contact us:

QRO Editor: 310-544-2917, ai6df@arrl.net

Email: k6pv@arrl.net

Website: www.k6pv.org

Postal Address:

Palos Verdes Amateur Radio Club

PO Box 2316

Palos Verdes Peninsula, CA 90274-8316

Repeaters (Open, though often listed as "Closed"):

PVARC: K6PV, 447.120 MHz

Analog FM: (-), PL 100.0, CTCSS

Digital DMR: 447.120 MHz (RX); 442.120 MHz (TX)

Talkgroup 31060, Color Code 1, Time Slot 2

"PV-West": W6MTA, 449.980 MHz (-), PL 173.8, CTCSS

Club badges: Gary Lopes, WA6MEM, wa6mem@cox.net

Club jackets or patches: Dave Scholler, KG6BPH,
310-373-8166

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Front page photo — Pt. Vicente Lighthouse shortly after sunrise on February 28, 2020 with low fog in the Catalina Channel. PHOTO: DIANA FEINBERG, AI6DF

PVARC CALENDAR OF EVENTS

SEPTEMBER 2023

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	Major ham radio contests shown in red				1	2
3	Labor Day; PVARC public service at Conquer The Bridge run in San Pedro	K6PV analog net, 7:30 pm	K6PV DMR net, 7:30 pm	PVARC monthly meeting at Hesse Park & via Zoom: 7:30 pm, on Yaesu C4FM / WIRES	8	PVARC HF Enthusiasts Group, 10:00 am. PV Library ARRL Sept. VHF Contest
10 ARRL Sept. VHF Contest	11	12 K6PV analog net, 7:30 pm	13 K6PV DMR net, 7:30 pm	14	15	16 PVARC EmComm Interest Group meeting, 11am via Zoom ARRL 10 GHZ+ Contest
17 ARRL 10 GHZ+ Contest	18	19 K6PV analog net, 7:30 pm	20 K6PV DMR net, 7:30 pm	21	22	23 First Day of Fall CQ Worldwide RTTY Contest
24 CQ Worldwide RTTY Contest	25	26 K6PV analog net, 7:30 pm	27 K6PV DMR net, 7:30 pm	28	29	30 W6TRW Swap Meet, Northrop Grumman, N. Redondo Bch. 7:00-11:30 am

FOR SALE BY PVARC MEMBER: ELECRAFT K3/100, P3 PANADAPTER, & K-POD

The Radio:

The radio is an Elecraft K3/100 (100 watt transceiver), SN 3398. It is extensively optioned, including dual receivers, a full complement of filters, microphone, and more. It has the latest firmware installed.

ASKING \$1275 FOR THE RADIO

The Panadapter

The P3 Panadapter is the matching Elecraft panadapter display for the K3 and includes the SVGA interface that enables it to operate with an external monitor as well as with its built-in display. Additionally, the optional transmit monitor is also included.

ASKING \$525 FOR THE P3

*** ASKING \$1750 FOR THE RADIO AND PANADAPTER TOGETHER ***

The K-Pod

The K-Pod is a small accessory controller that can be placed anywhere on the operating table with a cable connection to the K3. It has a tuning knob and multiple functional and programmable capabilities for controlling the radio, making controlling common functions very convenient.

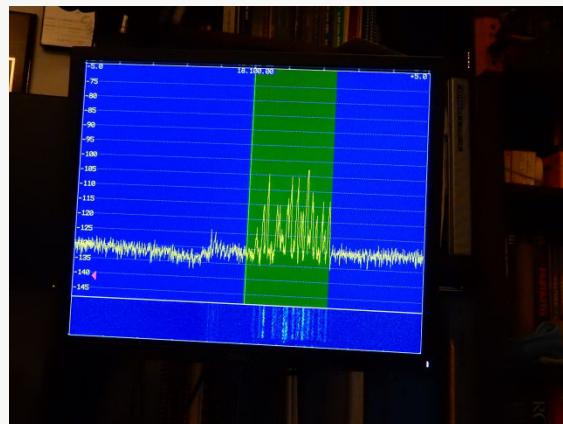
List price of K-Pod from Elecraft: \$360
ASKING PRICE FOR THE K-POD: \$200

*** ASKING PRICE FOR ALL THREE "K-LINE" ITEMS: \$1925 ***

For questions, complete details, and to view the equipment,
contact Jeff, K6JW at k6jw@arrl.net
Serious inquiries only, please



K3, P3, and K-Pod



P3 Output to External Monitor

Two Free Amateur Radio Courses

FCC "**Technician**" course (entry level)

FCC "**General**" course (2nd level)

Each course is 2 sessions

The sessions will be on 4 and 11 November 2023

Technician 9:30 AM to 1:15 PM both Saturdays (bring your lunch)

General 1:30 PM to 5:00 PM both Saturdays

The FCC tests will be 10:00 AM to noon on 18 November 2023

At the start of the 4 November Technician course, a member of the Palos Verdes Amateur Radio Club will give a 30-minute presentation on how to get further involved in amateur radio.

The class location is at Fred Hesse Community Park,
29301 Hawthorne Blvd., Rancho Palos Verdes, CA 90275

Confirm your attendance to Walt, K1DFO at waltfordway@juno.com

I charge no fee for either course. Taking the FCC test is \$15. After passing the Technician test the FCC will send you an e-mail for paying its \$35 license fee and then they will post your call sign.

Optional Material (sold at cost)

Gordon West books with all the FCC test questions,

\$30 for the Technician and \$25 for the General

Paper copy of Walt's Power Point charts,

\$29 for the Technician and \$25 for the General

For courses sponsored by the Palos Verdes Amateur Radio Club, students thru grade 12 who pass their examination at a PVARC VE test session will, upon application to the Club, be eligible for reimbursement up to a maximum of \$50 to cover the cost of materials and the examination fee.

Everyone who obtains their first ham radio license through a PVARC VE test session, regardless of age, will receive a free membership in the Palos Verdes Amateur Radio Club for the remainder of the current calendar year.



Palos Verdes Amateur Radio Club

P.O. Box 2316

Palos Verdes Peninsula, CA 90274

<http://www.k6pv.org>

Fillable PDF form is downloadable from PVARC website at: http://www.n6rpv.net/n6rpvpage/pvarc/membership_form.pdf

MEMBERSHIP FORM

New

Renew

Date _____

Last Name _____ First _____ Spouse _____

Street Address _____

City _____ State _____ Zip _____

Home Phone _____ Work _____ Cell _____

Email address _____

(Unless otherwise noted, emails will be sent to the applying member only)

License Call _____ Class _____ v ARRL Member?

Other amateur radio groups you belong to _____

Additional Household and/or Family Members (if Applicable):

Last _____ First _____ Call _____ Class _____ v ARRL?

Last _____ First _____ Call _____ Class _____ v ARRL?

Last _____ First _____ Call _____ Class _____ v ARRL?

Membership (\$20 Individual, \$25 Family) \$ _____

(Optional) donation to support PVARC activities \$ _____

TOTAL \$ _____

Paypal to recipient
PVARC90274@gmail.com
Go to www.paypal.com

Cash

Check made payable to
Palos Verdes Amateur Radio Club

Check # _____

Please email completed form to PVARC90274@gmail.com or print and mail to the address at top. Dues based on January 1st to December 31st year. By submitting this application/renewal you agree to the Club's constitution and by-laws, available on-line at: <http://www.n6rpv.net/n6rpvpage/pvarc/constitution.pdf>.