THE PALOS VERDES AMATEUR RADIO CLUB NEWSLETTER

Inside this month's QRO...

AL ALL ALLA

2
3
3
4
5
6-10
11
12
13
14
15

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.

An Introduction to D-STAR

Austin Hallett, VE7QH

Thursday, May 4, 2023

PVARC monthly meeting in-person at Hesse Park and virtually via Webex

7:00 pm: Hesse Park room opens 7:15 pm: Webex online room opens 7:30-9:15 pm: Meeting

Guests welcome. Email ai6df@arrl.net for the Webex meeting link.

Also this month:

PVARC HF Enthusiasts Group meeting Saturday, May 13, 10:00 am-Noon at Palos Verdes Library Purcell Room (no Webex)

PVARC EmComm Interest Group meeting Saturday, May 20, 10:00-11:00 am via Webex



MAY 2023

PVARC upcoming monthly meeting

PVARC's **May 4, 2023**, hybrid in-person/Webex meeting features Austin Hallett, VE7QH, presenting "**An Introduction to D-STAR.**" He'll be discussing how you can get involved with this digital communication mode. If you are familiar with DMR you can easily understand D-STAR as well.

Austin will be speaking from his home in Kamloops, British Columbia, where he works for the B.C. Ministry of Forestry as a radio technician maintaining mountain-top repeaters used for fire detection/ warning systems. He holds an Advanced (Canadian) amateur license, equivalent to our Amateur Extra.

Also at our May 4 meeting we'll kick-off our Field Day planning by showing the PVARC segment in Al6DF's 2019 video "Field Day in the ARRL Los Angeles Section." Newer hams are encouraged to participate in Field Day too...there's something for everyone.

If you plan to attend in-person at Hesse Park on May 4 be advised our access to McTaggart Hall begins at 7:00 pm due to another organization meeting ahead of us. Our Webex connection will start by 7:15 pm and the hybrid meeting begins at 7:30 pm.

At PVARC's **June 1** meeting our speaker will be Clint Bradford, K6LCS, on "Working the satellites with your HT radio." Clint last spoke about working ham satellites at PVARC's May 2011 monthly meeting.■

Using D-STAR via a Hot Spot

Our Vice President Ray Day, N6HE, has also been contacting distant D-STAR stations from his home QTH using an internet-connected Multi-Mode Digital Voice Modem (MMDVM). These Hot Spots can also connect DMR, Yaesu System Fusion, P-25, and Kenwood NXDN digital stations. Here are two views from Ray's setup, the ZUMspot Raspberry Pi MMDVM in use *(left photo)* and Ray's ICOM ID-5100A mobile transceiver display *(right.)* ■.



QRO

Field Day is June 24-25 and PVARC is planning for it

We look forward to this year's ARRL Field Day on June 24-25 at Soleado Elementary School in Rancho Palos Verdes. It's a fabulous location at 1,000 feet above sea level overlooking the Los Angeles Basin with an outstanding take-off to almost all United States and Canadian points.



We operated Field Days in 2017, 2018, and 2019 from Soleado's soccer field after holding FD at Ridgecrest Intermediate School during 2012-2016 and Peninsula High School for many years through 2011.

As this year marks PVARC's first traditional Field Day since June 2019 we now need to assess how many members might participate at Soleado. Many PVARC members operated from home stations in 2020-2022 after ARRL modified some Field Day rules during the pandemic.

In 2023 Class 1-D home stations on commercial AC mains power may still contact all FD stations for credit. Maximum home station transmit power remains limited to 100 watts. One major change to FD rules in 2023 is allowing up to 500 watts PEP transmit power at portable non-battery stations (i.e., Class A for three or more operators, Class B for one or two operators, and Class C mobile stations). This exception was created because some clubs/groups across the U.S. must operate Field Day from a valley or other "non-optimal" location.

A Field Day planning meeting will be held very soon at the home of our Field Day Chair, Rocco, N6KN. Stand by for details.■

In remembrance...

- **Dave Held, WA6PHS (SK)** of Hermosa Beach last month became a Silent Key at age 77. He had been a PVARC member since 2013. His daughter advised us of his passing.
- **Robert Pilmer, KI6BUK (SK)** of Rancho Palos Verdes, a PVARC member during 2005-2013, passed away on March 9, 2023 at age 91. With Bachelor's and Master's degrees in chemistry he became an authority in rigid polyurethane chemistry.
- Maureen Landon (KE6JPM-XYL) passed away in January 2023. Her Funeral Mass will be at the church she loved, St. John Fisher Catholic Church (5448 Crest Road, Rancho Palos Verdes), on Saturday, May 27, 2023 at 11:00 am. She and Peter (past PVARC Treasurer) relocated to Fairview, OR, in 2021 after many years in Rancho Palos Verdes.■

ARRL members: Please participate in ARRL dues survey

QRO Editor's note: All ARRL-affiliated clubs have been asked to make their ARRL members aware of an upcoming League survey as discussed below in an open letter from ARRL CEO David Minster on 4/20/2023:

For only the second time in 22 years, we are considering a dues increase. Promoting and protecting amateur radio requires a strong and vibrant ARRL. Paying our dues (and some of you go above and beyond) is one way each of us does our part.

In my column in the April issue of QST I introduced the following question:

How does ARRL handle an increase in dues?

On May 1, we will launch an online survey, inviting all ARRL members to participate. The survey will include some short questions about raising dues and modifying the way some membership benefits are bundled. The survey will also include an opportunity to share your feedback. The participation of every member is important.

Do this before May 1: Review your ARRL website account

Before you can take the survey in May, you'll need to make sure you have a working ARRL website account that is associated with your membership.

Follow these steps:

1 Go to <u>www.arrl.org/take-dues-survey</u>. This is a member-only page.

2 If you are already logged in to your account, you'll see CONGRATULATIONS! on the members-only page that will host the survey in May.

3 If you are NOT already logged in to your account, follow the instructions on the page to log in. Or, select the Login button at the top of the web page, and you will be prompted to enter your ARRL website username (usually your call sign) and password. If you have not logged in since April 2022, please use these Login Instructions at: <u>https://www.arrl.org/login-instructions</u>

4 The survey will open on May 1. Return to this web page to take the survey on, or after, May 1: <u>www.arrl.org/take-dues-survey</u>.

If you need additional help with your login, call us Monday - Thursday from 8 AM to 7 PM ET, and Friday from 8 AM to 5 PM ET at 860-594-0200 or email us at <u>membership@arrl.org</u>.

We'll send an update on May 1 once the survey is live.

Thank you for being a member and collaborating on this big decision.

73 David A. Minster, NA2AA Chief Executive Officer

Annual Armed Forces Day Crossband Test is May 13

From the ARRL News, 04/24/2023

The US Department of Defense (DoD) will host this year's Armed Forces Day (AFD) Crossband Test on May 13, 2023. This annual event is open to all licensed amateur radio operators and will not impact any public or private communications. For more than 50 years, military and amateur stations have taken part in this event.

The AFD Crossband Test is a unique opportunity to test two-way communications between military communicators and radio stations in the Amateur Radio Service (ARS), as authorized in 47 CFR 97.111. These tests provide opportunities and challenges for radio operators to demonstrate individual technical skills in a tightly controlled exercise scenario.

Military stations will transmit on selected frequencies and will announce the specific ARS frequencies monitored. All of the times are Zulu (Z), and all frequencies are Upper Side Band (USB) unless otherwise noted at the web link below. The frequencies used for the test will not stray outside the confines of the exercise.

A complete list of frequencies, time periods, QSL cards, and other information can be found at DoD MARS - Armed Forces Day, <u>https://www.dodmars.org/mars-comex-information-website/</u> <u>armed-forces-day</u>

Military callsigns / sites participating on May 13

AAZ / Ft. Huachuca, AZ AAC / Barrow Army Reserve Center, KY AAN / U.S. Northern Command, CO ADB / Camp Foster, Okinawa AGA4RO / Robins AFB, GA AFM4NPD / Naval Support Activity Mid-South, TN AAM3D / Cyberspace Operations Directorate, MD WAR / The Pentagon, DC AGA2SY / Hancock Field, NY AGA5SC / Scott AFB, IL AGA9TR / Travis AFB, CA NWKJ / USS Yorktown, SC NEPM / USS Iowa, CA NIIW / USS Midway, CA NWVC / LST-325, IN NSS / U.S. Naval Academy, MD NAF / Newport Naval Radio Station Museum, RI NMCI / U.S. Coast Guard Base, Alameda, CA SCHOOLHOUSE / Savannah Cyber Training Center, GA AGA0WJ / Naval Air Station Whidbey Island, WA



By Jerry Kendrick, NG6R

Recently a challenge was presented that required creating multiple hardware copies of a particular signal adapter. Thirty-three 15-pin to 8-pin adapters are required for a large ham radio organization. In last month's **QRO**, Part 1 of this article described the basis of the requirements for these adapters. In Part 2, we'll describe the interesting and frustrating twists and turns that occurred while meeting this challenge.

Recapping Part 1 of this article in last month's **QRO**, each of these 33 adapters provides the connectivity between a given station's Bridgecom BCM-220 FM transceiver and its SignaLink USB Sound Card device. This connectivity of certain signals from the BCM-220's rear accessory 15-pin connector to the 8-pin RJ45 jack on the SignaLink USB Sound Card enables digital communication between the station's computer and its 220 MHz transceiver. This digital interface is the means of enabling on-air NBEMS digital message traffic among LA County Sheriff DCS stations and also athome DCS support stations. Without enabling this interface with HD15-to-RJ45 adapters, passing essential on-air digital messages among stations would not be possible. Part 1 showed a potential solution for constructing these adapters using a particular component. However, although this part was once available, it no longer is. Some 10 or 11 suitable adapters were procured many years ago, but not enough to meet the need for thirty-three units. So, some other innovations are needed, as discussed here in Part 2.

I have been singularly unsuccessful in replicating my purchase from eBay several years ago of HD15to-RJ45 user-configurable adapters, and only had about 10 of these devices in my parts cabinet from a much earlier purchase. With these ten, we could meet a portion of the requirement, but not the 33 that were needed. So, I decided to purchase a significant number of DB9-to-RJ45 configurable adapters, as illustrated in Figure 1.



Figure 1. DB9-to-RJ45 user-configurable adapter, readily available from numerous part supply vendors on eBay and Amazon

The plan was to also purchase a comparable number of simple metal pin-push-thru HD15 male connectors, similar in appearance to the one shown in Figure 1, but with 15 pin holes (three rows of 5 pins) instead of 9.

The clever plan (or so it seemed at the time) was to simply trade out and discard the metal DB9 connector in favor of an HD15 connector, and then I'd be able to construct the 33 adapters we needed for DCS (one for each county sheriff station plus a few spares). After all, DB9 adapter units are ►►

▶ ▶ plentiful and reasonably priced in quantity buys on eBay, unlike the HD15 adapters, which are now impossible to find on the Web (and certainly not found on eBay or Amazon).

It wasn't until actually starting to construct the "hybrid" adapter that I discovered that there is a slight difference in pin diameters between the two different RJ45 adapter housing units. At a casual glance, the two RJ45 PVC housings (DB9 and HD15), with their eight pigtail male pins, look virtually identical (even agreeing on pin wire color sequence), but up close and with a micrometer the difference is evident. The DB9 pins will <u>not</u> penetrate the HD15 pin holes nor, of course, will they seat in the connector to prevent withdrawal. A photo enlargement in Figure 2 shows the two male crimped pin types side by side, with the larger diameter DB9 male pin on the left, thus illustrating the incompatibility. The diameter of the DB9 pin is 39 mils and the HD15 pin is 30 mils. So, on to a different plan!



Figure 2. Side by side comparison of push-through pins for two user-configurable male connectors: DB9 on the left, HD15 on the right

Now the ten HD15 adapters I had in stock (from a purchase years earlier) need just four of the 8 RJ45 pigtail leads, those wires connected to RJ45 pins 1, 2, 3 and 5 (consistent with the DCS Standard SignaLink jumper module configuration discussed in Part 1 of this article in last month's **QRO**). So, that leaves four other

exiting pigtail wires (from unused pins 4, 6, 7 and 8) that can be carefully snipped out, harvested and reused by soldering onto the appropriate leads of a DB9 adapter, thus repurposing at least 10 "DB9 adapters" that would otherwise have been discarded.

Looking at Figure 3, you can see how the unused and harvested HD15 adapter pins and wires (colors yellow, red, white and brown) have been soldered onto standard RJ45 pin wires 1, 2, 3, 5 colors of blue, orange, black and green, respectively. Careful insulation stripping and handling of very small gauge wires prior to soldering, and placement of tiny heat shrink tubing enables safe and reliable use of these modified DB9 housings. What was intended NOT to be a labor-intensive approach (contrasted with the solder-on cable connector method discussed below) turned out to be just that! But that wire harvesting step doubles the total number of usable compact adapters—from 10 to 20 units. But we still need 13 more to meet our challenge of delivering 33 units! ►►



Figure 3. DB9-to-RJ45 adapter reconfigured by snipping off and discarding all DB9 pins and then soldering onto pin wires 1, 2, 3 and 5 (blue, orange, black, green, respectively) the harvested unused (and smaller diameter) pins (4, 6, 7 and 8) from earlier configured HD15 adapters

▶ I sent out several queries to vendors on eBay and Amazon (including a couple of vendors I've purchased similar components from in the past) to see if any of them have the HD15 adapters in stock (with their smaller diameter pins), even if they haven't advertised them online. Since there were no positive responses, the plan forward is to make up the remaining units (to reach 33 total) by soldering plain 15-pin VGA-type male solder-cup connectors onto a portion of an RJ45-to-RJ45 male/male (m/m) cable like the working and on-air-proven prototype shown in Figure 4.



Figure 4. SignaLink-to-Bridgecom BCM-220 cable adapter created by soldering an HD15 (or VGA) male connector onto one end of a section of RJ45 cable; this is an alternative labor-intensive approach when user-configurable adapters are not available

With solder-cup HD15 male connectors on hand, as well as enough RJ45-to-RJ45 m/m cables to complete the additional cable adapters, the task to build up all the remaining adapters needed (of the soldered-connector cable variety) was a straightforward but labor-intensive exercise, as described below.

The steps needed to construct the soldered-connector adapter, using a cable section with an RJ45 male connector on one end, are illustrated in Figure 5. ►►



Figure 5. (a) Starting with a suitable length of RJ45-to-RJ45 m/m cable and removing the connector on one end, (b) a short section of cable insulation is removed and four of the eight wires are snipped away, leaving just the four wires connected to RJ45 pins 1, 2, 3 and 5; (c) insulation from these four individual small-gauge wires is then carefully removed and they are soldered onto HD15 pins 5, 15, 8 and 9, respectively; several unused solder cups on the 15-pin connector are snipped off as they are not needed; (d) a non-conductive quickly-hardening rubbery thermoplastic adhesive (hot glue) is applied to secure these wires, to stiffen and ruggedize the cable and connector, as well as to cover several of the unused pins of the HD15; (e) finally, the short section of heat-shrink tubing, that had been placed over the cable prior to soldering, is pulled into place, heat is applied from the heat gun to shrink the tubing and conform to the cable and connector; a final application of hot glue is added to create a sealed and ruggedized connector suitable for field application.

► The obvious question before delivering and placing adapters in radio boxes for distribution to scattered stations across the county is: How can you be sure that all the adapters work? It would be very inconvenient to test all these adapters using an actual BCM-220 radio on-the-air with a SignaLink unit configured according to the DCS Standard Configuration, although it could be done. So instead, a test jig was built that enables each adapter (or adapter cable) to be quickly tested. Here in Figure 6 is a photo of the test jig:

Note in Figure 6 that a female HD15 15-pin connector is soldered onto an RJ45 male connector, carefully mating the pins according to the specific pinto-pin connectivity details presented in Part 1 of this article in last month's **QRO**, only using a female HD15 connector. [RJ45 \rightarrow HD15 pins as follows: $1\rightarrow$ 5; $2\rightarrow$ 15; $3\rightarrow$ 8; $5\rightarrow$ 9; 4,6,7,8 unused]

Then, this convenient test jig is made part of a test circuit that includes the adapter or adapter cable under test, as illustrated here in Figure 7:





Figure 6. (left) Test jig used to confirm construction accuracy and verify no wiring errors in both compact adapters and soldered cable connector adapters.

Figure 7. (right) End-to-end test bed to verify that there are no wiring errors in the 33 adapters to be delivered

The CABLE TESTER completes a test cycle through the RJ45 8-wire connections and indicates which pathways are complete. The unit under test in this photo is a compact adapter shown plugged in between the test jig and an ordinary blue RJ45-to-RJ45 cable. The photo above happened to catch the cycle on wire #5. Note that both green lamps on wire #5 are lit. A test cycle (which takes only seconds to complete) will show that wires 1, 2, 3 and 5 for a properly wired adapter or adapter cable are sequentially green, meaning that the circuits are complete. Wires 4, 6, 7 and 8 will not light during the test cycle, provided that the adapter is wired correctly. Thus, a rapid and easy-to-verify test can and will be completed on each of the 33 adapters prior to their being delivered.

As assurance that the constructed adapters and the test jig itself don't contain the same offsetting wiring error (thus erroneously passing the test but failing the mission!), there was one compact adapter plus one cable connector adapter (working prototypes) that were both successfully tested on-the-air in an FLDIGI/NBEMS digital message QSO between Deane N5DQ and Jerry NG6R using Bridgecom radios and DCS Standard SignaLink jumper module configuration (for NG6R). Both of those adapters have also been successfully tested using this test jig and the CABLE TESTER test configuration. So, there is no possibility that the test jig contains a wiring error.

► The final set of constructed cables, successfully tested and ready for delivery, is shown in Figure 8. Challenge met! Perseverance, flexibility and attention to detail are the requisites that were rewarded in meeting this challenge of adapter construction on a large scale. Building adapters in our various ham radio pursuits is an important and sometimes essential aspect of our hobby. And, there can be myriad approaches that arrive at the same end goal, which is to send the correct signal reliably and consistently to the right destination.



Figure 8. Completed set of adapters required to interface Los Angeles County Disaster Communications Service's Bridgecom BCM-220 FM transceiver to SignaLink USB Sound Card; set includes 20 compact user-configured RJ45-to-HD15 adapters, 11 RJ45 soldered connector adapters, plus two working prototypes, i.e., one copy of each type (upper left) for a total of 33 adapters.

PHOTOS: JERRY KENDRICK, NG6R

More random accomplishments of PVARC members...in 35 words or less

Jim, K6MU, became the 2,548th recipient of ARRL's Triple Play Award for Logbook of the World-confirmed contacts working all 50 U.S. States on each of three operating modes: CW, Phone, Digital. Laura, KA6LJR, had a blast participating in this year's ARRL Rookie Roundup SSB contest-still lots of fun despite band conditions. Her longesttenured contact was with a ham first licensed in 1959.



PVARC members provided public service communication covering 600 runners at the Ridgecrest Intermediate School 5K on 4/29. Radio operators were: Dave, KE6GFR; Bob, AC6RM; Matthew, N6MDC; Mike, KN6YSK; Sergio, WA6WV; Steve, KI6TEQ; Cynthia, AG6NW; Steve KN6YDX; Herb, KO6RC; and Walt, K1DFO.

QRO has room for more random accomplishments of PVARC members. Let us know.

PVARC upcoming events

• PVARC hybrid monthly meetings online via Webex and in-person as announced

1st Thursday each month, 7:30-9:15 pm, except in December (*no Hesse Park in-person option in August or December 2023*)

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

2nd Saturday each month, 10:00 am-Noon

 PVARC EmComm Interest Group online meetings via Webex

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 Holiday Dinner or virtual After-Dinner, December 14
- ARRL Field Day at Soleado Elementary School, Rancho Palos Verdes, June 24-25

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.
- Dayton Hamvention, May 19-21, 2023, Greene County Fairgrounds, Xenia, OH (largest ham convention in Western Hemisphere.) Website: <u>https://hamvention.org/</u>

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, Al6DF, ai6df@arrl.net and we'll find a way to get your patch to you. ■

MAY 2023



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

Past Vice President

Appointed Offices:

QRO Editor K6PV QSL Manager K6PV Trustee LAACARC Delegate VE Coordinator VE ARRL Liaison Net Control Operators:

Diana Feinberg, Al6DF Jeff Wolf, K6JW Mel Hughes, K6SY Jeff Wolf, K6JW Dave Scholler, KG6BPH Jerry Shaw, Kl6RRD 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: <u>www.k6pv.org</u> 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, <u>wa6mem@cox.net</u> Club jackets or patches: Dave Scholler, KG6BPH, 310-373-8166

QRO is published monthly by the Palos Verdes Amateur Radio Club, ©2023 all rights reserved. For permission to reprint please contact PVARC at: k6pv@arrl.net

Front page photo — Pt. Vicente Lighthouse after sunset on May 9, 2019. PHOTO: DIANA FEINBERG, AI6DF

PVARC CALENDAR OF EVENTS MAY 2023							
SUNDAY	Monday	Tuesday	Wednesday	THURSDAY	Friday	Saturday	
	1	2 K6PV analog net, 7:30 pm	3 K6PV DMR net, 7:30 pm	4 PVARC hybrid monthly club meeting at Hesse Park and Webex: 7:30 pm	5	6	
7	8	9 K6PV analog net, 7:30 pm	10 K6PV DMR net, 7:30 pm	11	12	13 PVARC HF Enthusiasts Group, 10:00 am. PV Library Armed Forces Cross-Band test	
14 Mother's Day	15	16 K6PV analog net, 7:30 pm	17 K6PV DMR net, 7:30 pm	18	19 Dayton Hamvention	20 PVARC EmComm Interest Group meeting, 10 am via Webex; Armed Forces Day & Dayton	
21 Dayton Hamvention	22	23 K6PV analog net, 7:30 pm	24 K6PV DMR net, 7:30 pm	25	26	W6TRW Swap Meet, Northrop Grumman, N. Redondo Bch. 7:00-11:30 am CO WW CW contest	
28 CQ WW CW contest	29 Memorial Day	30 K6PV analog net, 7:30 pm	31 K6PV DMR net, 7:30 pm	Major ham radio contests shown in red			

- 15 -	
--------	--

Pailos Verdes Peninsula, CA 90274 http://www.k6pv.org New Renew Filable POINT is downloadable from PVARC websile at: http://www.n6pv.net/n6pv.page/ pvarc/membership_form.pdf Date Last Name	PALOS V	Pa	Palos Verdes Amateur Radio Club P.O. Box 2316			MEMBERSHIP FORM				
Fillable PDF form is downloadable from PVARC website at: http://www.nfirpv.net/nfirpvpage/ Date Last Name First Spouse Street Address	BURNEUR RAL	and curs	Palos Verdes Peninsula, CA 90274 <u>http://www.k6pv.org</u>			New Renew				
Last Name First Spouse Street Address Zip City State Zip Home Phone Work Cell Email address (Unless otherwise noted, emails will be sent to the applying member only) License Call Class NRRL Member? Other amateur radio groups you belong to ARRL Member? Additional Household and/or Family Members (if Applicable): ARRL? Last First Call Class ARRL? Last First Call Class ARRL? Membership (\$20 Individual, \$25 Family) \$ (Optional) donation to support PVARC activities \$ TOTAL \$ Paypal to recipient Check made payable to TOTAL \$		Fill we pva	Fillable PDF form is downloadable from PVARC website at: http://www.n6rpv.net/n6rpvpage/ pvarc/membership_form.pdf				Da	ate		
Street Address CityStateZip Home PhoneWorkCell Email address [Unless otherwise noted, emails will be sent to the applying member only) License CallClass ARRL Member? Other amateur radio groups you belong to Additional Household and/or Family Members (if Applicable): LastFirstCallClass ARRL? LastFirstCallClass ARRL? LastFirstCallClass ARRL? LastFirstCallClass ARRL? Class ARRL? LastFirstCallClass ARRL? LastFirstCallClass ARRL? LastFirstCallClass ARRL?	Last Name			First			Spouse			
City	Street Add	Iress								
Home Phone Work Email address (Unless otherwise noted, emails will be sent to the applying member only) License Call Class Other amateur radio groups you belong to Additional Household and/or Family Members (if Applicable): Last First Call Class First Call Class ARRL? Last First Call Class Call Class Call Class Call Class Call Class Call Call Class Criptional) donation to support PVARC activities \$ TOTAL \$	City						State	Zip		
Email address (Unless otherwise noted, emails will be sent to the applying member only) License Call Class ~ ARRL Member? Other amateur radio groups you belong to Additional Household and/or Family Members (if Applicable): Last First Call Class ~ ARRL? Lost Class ~ TARL? Lost Class ~ TARL? Lost Class Class ~ TOTAL \$ Paypal to recipient Class Check made payable to	Home Pho	ne		Work		c	Cell			
(Unless otherwise noted, emails will be sent to the applying member only) License Call Other amateur radio groups you belong to Additional Household and/or Family Members (if Applicable): Last First Call Class First Call Class First Call Class First Call Class 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 \$	Email addr	ress							_	
License Call Class Other amateur radio groups you belong to Additional Household and/or Family Members (if Applicable): Last First Call Call Class First Call Class First Call Class Class First Call Class Class Call Class Class Class ARRL? Last First Call Class Class Class Class ARRL? Membership (\$20 Individual, \$25 Family) \$ (Optional) donation to support PVARC activities \$ TOTAL \$		(U	nless otherwise	noted, emails wil	l be sent to the app	lying member	only)			
Other amateur radio groups you belong to	License Cal	II		Class _	v	ARF	RL Member?			
Additional Household and/or Family Members (if Applicable): Last First Call Class	Other amat	teur radio grou	os vou belong t	o						
Additional Household and/or Family Members (if Applicable): Last First Call Class ✓ ARRL? Membership (\$20 Individual, \$25 Family) \$		5	,						_	
Last First Call Class Image: Class ARRL? Last First Call Call Class Image: Class ARRL? Membership (\$20 Individual, \$25 Family) \$ Image: Class	Additional I	Household and,	or Family Men	nbers (if Applica	ble):					
Last First Call Class Image: Class in the second se	st	Fi	irst		Call	Class _		~	ARRL?	
Last First Call Class v ARRL? Membership (\$20 Individual, \$25 Family) \$ (Optional) donation to support PVARC activities \$ TOTAL \$	st	Fi	irst		Call	Class _		~	ARRL?	
Membership (\$20 Individual, \$25 Family) \$ (Optional) donation to support PVARC activities \$ TOTAL \$ Paypal to recipient	st	Fi	irst		Call	Class _		~	ARRL?	
Membership (\$20 Individual, \$25 Family) \$ (Optional) donation to support PVARC activities \$ TOTAL \$ Paypal to recipient										
Membership (\$20 Individual, \$25 Family) \$ (Optional) donation to support PVARC activities \$ TOTAL \$ Paypal to recipient										
(Optional) donation to support PVARC activities \$ TOTAL \$ Paypal to recipient					Memb	ership (\$20 I	ndividual, \$25 I	Family)	\$	
Paypal to recipient Cash Check made payable to	(Optional) donation to support PVARC activities \$									
Paypal to recipient Cash Check made payable to								TOTAL	\$	
Paypal to recipient Cash Check made payable to										
	Раура	al to recipient			Check m	ade payable	to			
PVARC90274@gmail.com Cash Palos Verdes Amateur Radio Go to www.paypal.com Club Check #	VARC90274 Go to <u>www</u>	l@gmail.com v.paypal.com		Cash	Palos Ve Club	erdes Amateu	ır Radio	Check	#	
	_									
Please email completed form to PVARC90274@gmail.com or print and mail to the		Pleas	e email comple	eted form to PV	ARC90274@gmai	il.com or prin	t and mail to th	ne		
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.		by-laws	, available on-li	ine at: http://w	ww.n6rpv.net/n6	rpvpage/pva	rc/constitution	.pdf.		