



# QRO

THE PALOS VERDES AMATEUR RADIO CLUB NEWSLETTER

JUNE 2024

## INSIDE THIS MONTH'S QRO...

Speakers at upcoming PVARC meetings.....	2
A record weekend of Northern Lights .....	3
Where U.S.A. amateur operators are (or not).....	4-5
PVARC VHF/UHF Enthusiasts Group replaces EmComm Interest Group.....	6
Planning for Field Day 2024.....	7
Renewing a ham license: simple approach.....	7
PVARC logo patch appears on many shirts.....	8
2024 membership renewals (are you there?).....	9
2024 major events; info on club jackets/badges/ patches.....	10
About us.....	11
June 2024 calendar.....	12
PVARC new membership & renewal form.....	13

## “Geochron Digital 4K Clocks”

**Patrick Bolan, KJ7ZSU**

**Thursday, June 6, 2024, 7:30 pm,  
hybrid meeting in-person at Hesse  
Park and via Zoom**

- **PVARC Hesse Park room  
opens at 6:45 pm**
- **Zoom online meeting room  
opens by 7:10 pm**

**Also in June:**

**Saturday, June 8, 10:00 am-Noon,  
PVARC HF Enthusiasts Group meeting at  
Palos Verdes Library main branch in the  
Conference Room**

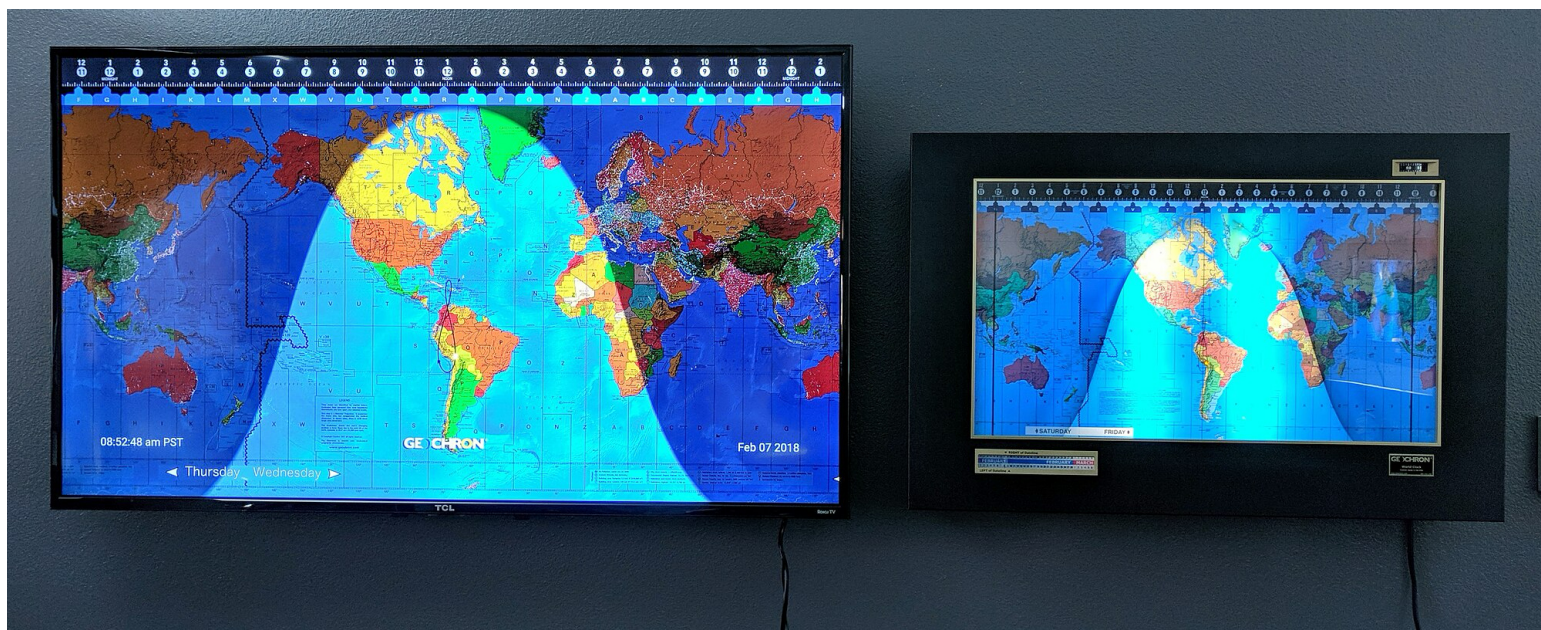
All **QRO** monthly issues since 2007 are  
on the PVARC website at [www.k6pv.org](http://www.k6pv.org)  
under the “Newsletter” tab.



## Upcoming PVARC meeting speakers...

PVARC's hybrid **June 6 monthly meeting** at Hesse Park and via Zoom features monthly features Patrick Bolan, KJ7ZSU, from Oregon City, OR, speaking about Geochron world clocks which depict the solar "gray line" as it moves throughout each day.

Patrick developed the digital version of Geochron (shown below at left on 4K television) and now owns the Geochron company which still makes mechanical Geochrons (smaller framed world clock on the right). Patrick's talk with us will focus on the digital version which offers far more information capabilities, much larger screen sizes, and higher resolution for about \$480 vs. \$2,500+ for wall-mounted mechanical models.



**Above:** Geochron 4K on a 44" television (left side) vs. the traditional framed mechanical Geochron (right side.) PHOTO CREDIT: Clonodin, CC BY-SA 4.0 [<https://creativecommons.org/licenses/by-sa/4.0>](https://creativecommons.org/licenses/by-sa/4.0/), via Wikimedia Commons

Our July meeting at Hesse Park and via Zoom is on **Wednesday, July 3**, because the 1<sup>st</sup> Thursday is Independence Day. We'll be talking then about our Field Day experiences and hold free drawings for ham equipment formerly owned by Herb Clarkson, KM6DD (SK) and donated to our club in his will. We'll be asking members to only enter the drawing for each equipment piece if they truly can use it.

Herb's equipment consists of:

- Kenwood TS-450 HF transceiver and Astron AS-35M power supply
- Yaesu FT-8800 dual-receive VHF/UHF transceiver
- Yaesu FT-8100 dual band mobile radio with various VHF/UHF mobile antennas
- Radio Shack HTX-212 VHF transceiver and Astron SS-25 power supply. ■



## A weekend of Northern Lights for the records

Photos by PVARC member Kirk Beasley, KN6UMV

**QRO** Editor's Note: Our fellow member Kirk, KN6UMV, was visiting his cabin near Winthrop, WA, in the Cascade foothills about 30 miles south of the Canadian border when the May 2024 G5 extreme geomagnetic solar storm created spectacular auroras. Shown below are a few of the nearly 100 photos Kirk took on May 11. It was a solar storm for the records at about the maximum point in the current solar cycle. ■



## Where the ham radio licenses are (or aren't)...

Folks in Texas often say “Don’t mess with Texas” but in amateur radio we need to say “Don’t mess with California.” From FCC license statistics as of June 3, 2024, California has 95,333 amateur licenses vs. 53,386 in Texas. Of course, not all current licenses are active or “alive” but over time non-operating licenses will leave and new ones arrive. Yes, California still leads the nation.

State/Territory	Novice	Tech	General	Advanced	Extra	Total
California	621	56,998	19,081	3,195	15,438	95,333
Texas	268	26,488	13,283	2,119	11,228	53,386
Florida	406	18,043	11,682	2,388	9,959	42,478
Washington	176	18,480	8,024	1,065	5,726	33,471
Ohio	304	12,162	7,330	1,202	6,117	27,115
New York	372	11,578	6,627	1,273	5,934	25,784
Pennsylvania	255	10,458	6,206	1,230	5,605	23,754
North Carolina	139	10,294	5,875	949	5,176	22,433
Arizona	106	10,967	5,068	935	4,565	21,641
Michigan	161	9,651	5,318	926	4,672	20,728
Virginia	163	9,251	5,293	870	4,861	20,438
Oregon	93	11,029	4,889	654	3,593	20,258
Tennessee	106	9,334	5,207	769	4,434	19,850
Colorado	83	10,569	4,541	665	3,804	19,662
Illinois	244	8,438	5,201	950	4,391	19,224
Georgia	100	8,684	4,944	781	4,139	18,648
Utah	34	12,524	3,300	294	2,165	18,317
Indiana	154	7,122	4,132	668	3,188	15,264
Missouri	93	7,444	3,858	586	3,091	15,072
Massachusetts	145	5,728	3,435	26	3,278	13,212
New Jersey	189	5,844	3,170	64	3,060	12,927
Alabama	62	5,417	3,164	498	2,887	12,028
Minnesota	101	5,166	2,960	561	2,519	11,307
Wisconsin	86	4,761	3,181	31	2,594	11,153
Idaho	27	6,382	2,540	242	1,657	10,848
Maryland	95	4,719	2,769	515	2,672	10,770
South Carolina	53	4,678	2,712	441	2,388	10,272
Oklahoma	41	4,978	2,510	346	1,974	9,849
Kentucky	71	4,534	2,559	370	2,026	9,560
Nevada	38	4,372	1,869	306	1,540	8,125
Arkansas	35	4,117	1,975	288	1,622	8,037
Kansas	63	3,338	1,915	278	1,521	7,115
Connecticut	114	3,028	1,856	367	1,674	7,039
Iowa	49	2,946	1,661	378	1,486	6,520
New Mexico	25	3,132	1,439	253	1,336	6,185
Louisiana	57	2,590	1,691	314	1,350	6,002
West Virginia	39	2,994	1,425	193	1,258	5,909
New Hampshire	51	2,399	1,506	250	1,504	5,710
Puerto Rico	98	2,963	1,220	164	729	5,174
Mississippi	20	2,128	1,338	210	1,258	4,954
Montana	26	2,227	1,176	163	837	4,429
Maine	37	1,825	1,259	198	1,089	4,408



## Where the ham radio licenses are (or aren't)...

► *Continued from previous page*

In terms of representation within the ARRL, California has two ARRL Directors and nine Section Managers while 2<sup>nd</sup> and 3<sup>rd</sup> ranking Texas and Florida each have one ARRL Director and three Section Managers. We're eager to have more hams in California so please encourage your Golden State friends, colleagues, and relatives to get licensed. ■

State/Territory	Novice	Tech	General	Advanced	Extra	Total
► Nebraska	24	1,696	1,021	210	756	3,707
Hawaii	25	1,959	753	139	674	3,550
Alaska	15	1,539	873	131	680	3,238
Wyoming	9	1,017	662	106	493	2,287
South Dakota	16	908	585	110	500	2,119
Vermont	13	959	509	98	500	2,079
Rhode Island	20	814	478	88	456	1,856
Delaware	19	757	496	82	418	1,772
North Dakota	9	730	412	61	303	1,515
Other*	1	278	96	4	193	572
District of Columbia	4	264	114	19	120	521
Virgin Islands		120	70	11	51	252
Guam	1	93	46	8	101	249
<b>TOTAL</b>	<b>5,556</b>	<b>370,914</b>	<b>185,304</b>	<b>30,742</b>	<b>155,590</b>	<b>748,106</b>

Source: <http://arrl.org/fcc-license-counts>

**Right:** California and Texas combined have nearly 20% of all U.S. amateur radio licenses.

Meanwhile, 49% of all U.S. ham licenses are concentrated in just 10 states.

State	% of total U.S. ham licenses
California	12.7%
Texas	7.1%
Florida	5.7%
Washington	4.5%
Ohio	3.6%
New York	3.4%
Pennsylvania	3.2%
North Carolina	3.0%
Arizona	2.9%
Michigan	2.8%
All 40 other states, DC, and 3 territories	51.1%
Total U.S. licenses	100.0%

## Introducing PVARC's VHF/UHF Enthusiasts Group—a new direction for PVARC's EmComm Interest Group

The PVARC's HF Enthusiasts Group continues to hold meetings generating so much excitement that attendees sometimes go overtime in our Library meeting room...or go to lunch afterward at the Red Onion Restaurant across the street.

Not to be outdone, we are now renaming our EmComm Interest Group as PVARC's VHF/UHF Enthusiasts Group to capture interest and knowledge using these bands whether for EmComm or other purposes. The VHF/UHF bands obviously offer much repeater, digital, and line of sight communication not found on the HF bands. Although EmComm isn't in the new name EmComm is still a key component.

We'll be starting the VHF/UHF Enthusiasts Group via Zoom initially on a weeknight near the end of each month when few other club meetings typically happen. If there's sufficient interest we will arrange for some in-person gatherings too.

73 and standby for fellow VHF/UHF enthusiasts. ■



**Above:** The PVARC's May 11, 2024, HF Enthusiasts Group meeting at the Palos Verdes Library was a lively one. Shown from left to right: K9BGC, WD6Y, WD6E, K6MU, N6YFM, K6BRN, KO6CIA, NA6Q, and (behind the camera) N6HE.

PHOTO: RAY DAY, N6HE



## PVARC begins planning for ARRL Field Day, June 22-23

For this year's ARRL Field Day the PVARC plans to again operate from Soleado Elementary School in Rancho Palos Verdes, subject to final School District permit approval.

We've enjoyed Soleado's quiet site since 2018 which, although somewhat "off the beaten path", offers an outstanding transmit location above the Los Angeles Basin. Previous PVARC Field Day sites have been at Palos Verdes Peninsula High School (mid-1990's through 2011) and Ridgecrest Intermediate School (2012-2017). Coincidentally, we had to move from Pen High and later Ridgecrest because major construction work prevented access for Field Day.

The PVARC expects to again operate as a 2A station on emergency power. We always encourage newer hams to visit our Field Day site and try operating on the HF bands, including under a higher-licensed ham.

Don't wish to operate radios? We still up our stations in limited time. after 8:00 am Saturday—and we am. Many other clubs will start gear on the day before, which is When Field Day ends at 11:00 disassembling everything and site by 1:00 pm

This year's ARRL Field Day logo with a Civil Defense-inspired visitor traffic at Soleado which has



need help from PVARC members to set PVARC typically has site access just need to be "on the air" by 11:00 setting up their antennas and allowed by the Field Day rules. am Sunday we then need help completely vacating the school

uses the pun "Be Radio Active" design. We don't expect that to hurt very little to begin with.

Stay tuned for more Field Day details...this year should be another great one for the PVARC.■

## We say again: Need to renew your license and pay the \$35 fee? ARRL's easy to follow article has the steps to do it.

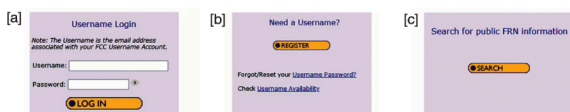
### How to Renew Your License Online

The ARRL VEC provides instructions on how to file an amateur radio license renewal application and make a payment via the FCC's new COMmission Registration System (CORES).

Before you renew your license, you will need to create a new FCC CORES username account, and then link your FCC Registration Number (FRN) to your new account. As of April 2022, the FCC charges a \$35 fee to renew amateur radio licenses. You must create the new account to pay the fee. Follow the steps below to create a new CORES account, and then after you complete the license renewal application, the License Manager system will automatically direct you to the CORES system. Log in and pay the fee.

#### Setting Up Your New FCC CORES Username Account

1 If you haven't already created a CORES account, you must register a username (your email address) and a password (see [a] and [b]). Visit the FCC CORES web page at <https://apps.fcc.gov/core/userLogin.do> to set up your account. If you don't know your FRN, you may search for it on that web page (see [c]). You will need your FRN for the next step.



2 Log in to your new account and click the first option, ASSOCIATE USERNAME TO FRN.

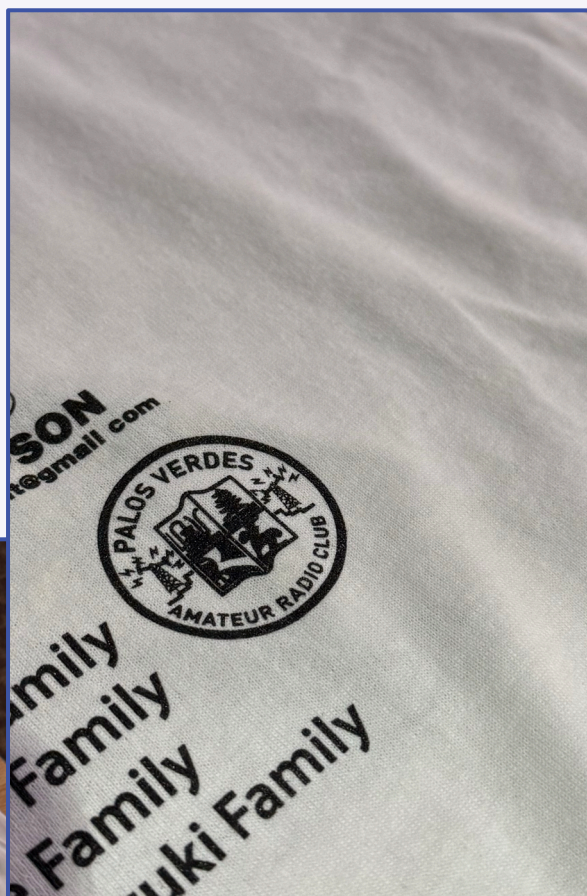
Select one of the following:

Visit:

<https://www.arrl.org/files/file/QST/This%20Month%20in%20QST/2023/10%20october%202023/10%202023%20Somma%20renew%20license%20online.pdf>

## PVARC logo appeared on Ridgecrest 5K T-shirts and slated for Hills Are Alive shirts, too

We were delighted to see PVARC's patch logo on all T-shirts for runners and volunteers at the Ridgecrest Intermediate School 5K on April 28. PVARC's logo is also slated to appear on T-shirts at the August 3, 2024, Rolling Hills Estates "Hills Are Alive" 10K/5K alongside other supporters and sponsors. Our logo will also be submitted for Labor Day "Conquer the Bridge" run T-shirts. Thanks go to our members who serve at these events and to Walt Ordway, K1DFO, for organizing our public service coverage and building awareness of our club. ■





## PVARC 2024 membership (as of 6/3/2024)

Thanks to all who renewed their PVARC membership for 2024 or holds a complimentary membership for this year. To ensure we better acknowledge all membership renewals—whether received by postal mail, PayPal, or in-person—we'll be listing renewals in **QRO** for the next several months. Let us know if you renewed (or recently joined) but do not see your call sign here.

Haven't renewed yet? Renew at either a PVARC in-person monthly meeting; by using the fillable form on our website with your PayPal payment; or print and mail the form with your check to our PO Box address. ■

AB6SY  
AB9A  
AC6RM  
AC6RM-XYL  
AC6RW  
AF6VT  
AI6DF  
AJ6HZ  
AK6CZ  
K0MZ  
K1DFO  
K5LAX  
K6BRN  
K6CTT  
K6DMO  
K6EXY  
K6GHL  
K6JW  
K6JW-XYL  
K6LH  
K6MU  
K6NT  
K6UU  
K9BGC  
KA6JMR  
KA6JWR  
KA6LJR

KA6MJR  
KA6ZTO  
KC6NNV  
KC6ROX  
KE6PMN  
KE6SGP  
KF6MYQ  
KF6QFG  
KF6QFH  
KF6VTN  
KG6BNN  
KG6BPH  
KG6RH  
KI6EAI  
KI6GUY  
KI6HQX  
KI6LJM  
KI6RRD  
KI6SPA  
KI6SUA  
KI6TEQ  
KI6YMD  
KJ6CAU  
KJ6CBA  
KJ6WZE  
KK6EWB  
KK6KCH

KK6TXN  
KM6ATI  
KM6LGU  
KM6LGX  
KN6BBO  
KN6FYW  
KN6QHJ  
KN6UMV  
KN6WJR  
KN6YDX  
KN6YSJ  
KO6BVD  
KO6CIA  
KO6CIK  
KO6MD  
KO6S  
N6AA  
N6GVP/DJ0IX  
N6HE  
N6IDN/DK3FF  
N6KK  
N6KN  
N6MDC  
N6NNW  
N6YFM  
NA6Q  
NA6Z

NG6R  
NT6E  
NZ6L  
W6BMD  
W6DLD  
W6GEZ  
W6HIP  
W6HIP-XYL  
W6KCV  
W6KCV-XYL  
W6MO  
W6OQ  
W6PBH  
W6YBW  
W6YBW-XYL  
WA6LKV  
WA6MEM  
WA6NSR  
WA6OWM  
WA6OWM-XYL  
WA6WV  
WD6Y  
WG6E  
WJ1P  
WW6WW

## PVARC 2024 upcoming events

- **PVARC hybrid monthly meetings online via Zoom and in-person as announced**  
1<sup>st</sup> Thursday each month, 7:30-9:15 pm, except in August and December; July 2024 meeting held on 1<sup>st</sup> Wednesday, July 3
- **PVARC HF Enthusiasts Group meetings in-person at Palos Verdes Library main branch**  
2<sup>nd</sup> Saturdays, 10:00am-Noon
- **PVARC VHF/UHF Interest Group online meetings via Zoom (to start in July)**
- **Walt Ordway K1DFO Technician and General amateur radio license classes at Hesse Park**  
Two Saturdays in November 2024; 9:30 am to 5:00 pm; dates TBA
- **PVARC 2024 Holiday Dinner or virtual "After-Dinner", December 12**

### 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.
- **Hamcon, Zion: ARRL Rocky Mountain Div. Convention, July 12-13.** St. George, Utah. Website: <http://hamconzion.com/>
- **Bored Net Group MicroExpo / ARRL Santa Barbara Section Convention, August 31.** Cal State University Channel Islands, Camarillo. Free. <http://www.theborednet.net/index.php/ham-radio-expo-to-be-held-on-august-31-2024/>
- **PACIFICON, ARRL Pacific Division Convention: October 18-20, 2024.** San Ramon Marriott, San Ramon, CA; website: [www.pacificon.org](http://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 \$59 and includes digital access to all four ARRL periodicals (**QST** magazine, **On The Air** magazine, **National Contest Journal**, and **QEX** magazine focusing on advanced technical topics.) Subscriptions to printed copies of ARRL publications are available at additional charge.

All ARRL members can access numerous web-based materials, ARRL staff, and assistance with ham radio issues. Visit: [www.arrl.org/](http://www.arrl.org/). ■

## Need a PVARC badge?

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

## Embroidered PVARC patches available

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

If you would like a patch contact Diana, AI6DF, [ai6df@arrl.net](mailto: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:

<b>QRO</b> 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:

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 Website: [www.k6pv.org](http://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](mailto:wa6mem@cox.net)

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

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Front page photo — Floodlit Pt. Vicente Lighthouse after sunset viewed from Pelican Cove on July 28, 2018. PHOTO: DIANA FEINBERG, AI6DF

## PVARC CALENDAR OF EVENTS

JUNE 2024

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						<b>June 1</b>
<b>2</b>	<b>3</b>	<b>4</b> K6PV analog net, 7:30 pm	<b>5</b> K6PV DMR net, 7:30 pm	<b>6</b> PVARC hybrid monthly meeting at Hesse Park and via Zoom, 7:30 pm	<b>7</b>	<b>8</b> HFE Enthusiasts Group meeting, PV Library, 10 am
<b>9</b>	<b>10</b>	<b>11</b> K6PV analog net, 7:30 pm	<b>12</b> K6PV DMR net, 7:30 pm	<b>13</b>	<b>14</b> Flag Day	<b>15</b>
<b>16</b> Father's Day	<b>17</b>	<b>18</b> K6PV analog net, 7:30 pm	<b>19</b> K6PV DMR net, 7:30 pm	<b>20</b>	<b>21</b>	<b>22</b>
<b>23</b>	<b>24</b>	<b>25</b> K6PV analog net, 7:30 pm	<b>26</b> K6PV DMR net, 7:30 pm	<b>27</b>	<b>28</b>	<b>29</b> W6TRW Swap Meet, Northrop Grumman, N. Redondo Bch. 7:00-11:30 am
<b>30</b>	<b>July 1</b>	<b>2</b> K6PV analog net, 7:30 pm	<b>3</b> PVARC hybrid monthly meeting at Hesse Park and via Zoom, 7:30 pm:	<b>4</b> Independence Day	<b>5</b>	<b>6</b>





# 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](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

ARRL Member? ☐

Other amateur radio groups you belong to

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

Last  First  Call  Class  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  
PVARC90274@gmail.com  
Go to [www.paypal.com](http://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>.

**For Sale by PVARC Member:****ICOM IC-7300 (SN 02005611)**

The ICOM IC-7300 is an all mode transceiver that incorporates coverage for all HF bands as well as 6 meters.

The radio is in mint cosmetic condition and has only been used in the shack. The firmware was updated on 7/17/2021 to v.1.41. Any available additional update(s) may be done by the owner. Full instructions for doing this are in the owner's manual. I have reset the radio to its factory defaults.

Included with the radio are a power cable, microphone, the original operator's manual, a factory CD with the manual, and the original carton.

On 5/1/2021 I replaced the internal, soldered-in clock battery with a replacement battery that fits into a holder I installed so that any future replacements will no longer require soldering. The only function of the battery is to run a clock on the display.

Asking price: \$800, cash only, firm, no trades. (The asking price is \$200 less than the current retail advertised price, including the current manufacturer's rebate.)

Contact Jeff, K6JW at [k6jw@arrl.net](mailto:k6jw@arrl.net) to view the radio or for further information.

