

QRO

Monthly Newsletter of the Palos Verdes Amateur Radio Club



DECEMBER 2018

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PVARC's Holiday Dinner

(Reservations required)

Thursday, Dec. 6, 2018

6:30 pm: Meet & Greet7:00 pm: Dinner, followed by program and door prize drawings

Los Verdes Golf Course 7000 W. Los Verdes Drive Rancho Palos Verdes, CA (at south end of complex)



Palos Verdes Amateur Radio Club 2018 Holiday Dinner

Los Verdes Golf Course 7000 W. Los Verdes Drive, Rancho Palos Verdes, CA Thursday, December 6, 2018 Meet and Greet beginning at 6:30 pm, Dinner at 7:00 pm, followed by Program and Prizes

(Please don't arrive before 6:10 pm or you might be activated as one of our Elves assisting with room setup starting at 5:00 pm.)



Directions:

Take Hawthorne Blvd. to Los Verdes Drive.

If heading southbound on Hawthorne towards the ocean, Los Verdes Drive is the first street on the right after passing the Ralph's supermarket at Crest and Hawthorne. Turn right onto Los Verdes Drive and go downhill to the end.

If traveling northbound uphill on Hawthorne look for the Los Verdes Drive sign and turn left where you see various apartment buildings. Follow Los Verdes Drive to the bottom.

Our dining room is the very last section of Los Verdes' clubhouse building. Passengers may be dropped off at the circle outside the patio gate. Walk across the patio to our room entrance and check in there.

Handicapped parking spaces are across from the Los Verdes Clubhouse.

Questions or problems? Contact Diana at 310-544-2917 (cell)

PVARC's upcoming meeting topics...

Our January 3, 2019, meeting at Hesse Park will feature five PVARC members with "Show Us Your Shack (or Project)" presentations. Our September 2018 meeting didn't have time for presentations by Ray Day, N6HE, and Peter Landon, KE6JPM, so on January 3 their "Show Us Your Shack" will be combined with presentations from Neal Pollack, N6YFM; Bob Millard, AC6RM; and George Nestojko, WA6YBR.

Our other speakers for 2019 are being arranged; we will have noted DXpedition operator and team physician Arnie Shatz, N6NC, at our February meeting and our ARRL Southwestern Division Director Dick Norton, N6AA, at another of our meetings.

As mentioned after we switched PVARC monthly meetings to first Thursdays in order to use Hesse Park's large McTaggart Hall, some years our January meeting might fall on New Years Day or the July meeting on Independence Day. In 2019 July 4th is the first Thursday and Hesse Park's building will be closed. We intend to meet on the 1st Thursday in (normally-dark) August as a special case if Hesse Park's room is available.

PVARC annual dues increase by \$5 for new Hesse Park staff fee

We were recently advised that effective January 2, 2019, our club (and other groups) will need to pay an \$18 per hour staff fee for using Hesse Park's building outside of normal business hours. As a result, our Board of Directors decided to raise our annual membership dues by \$5 for payments after Dec. 1, 2018. The new proceeds cover the new park fee without cutting any existing PVARC programs. As shown in the table at right, our new dues of \$20 for Individual Membership and \$25 for Family Membership are either at or below most other L.A. area radio clubs. PVARC Individual dues had been \$15 annually since the early-1990's and we were planning to keep that level in 2019.

Despite the new staff fee Hesse Park still represents an excellent meeting place. We are not charged room rental fees (normally \$42 per hour) yet benefit from nice accommodations, plenty of free parking, a very helpful staff, and other amenities.

Hesse Park's building is fully-staffed at City expense during normal hours of 9:00 am to 5:00 pm Monday-Friday and 10:00 am-5:00 pm Saturday-Sunday. But when an organization such as the PVARC uses Hesse Park before or after normal hours the City has to pay additional staff to work the extra hours. Going forward, all groups renting Hesse Park rooms before or after normal hours will be assessed the \$18/hour staff fee.

We'll be paying the hourly staff fee for each of our 1st Thursday monthly meetings from 6:30-9:30 pm, from 8:30-10:00 am on Saturdays when our ham license classes are taught; and for 9:30 -10:00 am on Saturdays when we start up Volunteer Examiner test sessions. ■

| Club | Annual Dues (Dec. 1, 2018) |
|---|---|
| Palos Verdes Amateur Radio Club | \$20 individual; \$25 entire family |
| South Bay Ama- | \$20 individual; |
| teur Radio Club | \$30 entire family |
| United Radio | \$20 individual; |
| Amateur Club | \$25 entire family |
| Southern California | \$24 individual; |
| DX Club | +\$6 each family member |
| Associated Radio Amateurs of Long Beach | \$25 individual; +\$5 each family member |
| Downey Amateur | \$20 individual; |
| Radio Club | \$35 entire family |
| Rio Hondo Ama- | \$20 individual; |
| teur Radio Club | +\$10 each family member |
| Pasadena Radio | \$25 individual; |
| Club | +\$25 each family member |
| Crescenta Valley | \$35 individual; |
| Radio Club | +\$35 each family member |
| Independent Radio Club (La Cãnada) | \$45 individual |
| Westside Amateur Radio Club | \$20 individual; +\$7.50 each family member |
| Hughes Amateur | \$20 individual; |
| Radio Club | \$25 entire family |

Planning continues for the PVARC's 2019 "Islands On The Air" DXpedition to Catalina Island

Work continues on assembling our 2019 "Islands On The Air" DXpedition to Two Harbors on Catalina Island from Wednesday, February 20, until mid-day Sunday, February 24.

Priority will be given to previous DXpedition participants and thereafter it's first-come, first-served up to the limit of our available accommodations. Each participant is responsible for paying their Catalina Express transportation to/from Two Harbors, cabin room, pro-rata share of breakfast and lunch costs for food the team brings, dinners at the only restaurant in Two Harbors, and any personal supplies/snacks. Rates for our cabins will be available around January 1....last year total room cost for four nights was \$224.40 per person. And pack lightly—every participant will use part of their 100-pound baggage allowance to help carry DXpedition gear.

We expect again having three stations, including participating in the CQ Worldwide 160-Meter SSB Contest and the North American RTTY QSO Party. If interested in being a team member please advise Ray, N6HE, at: rayday@cox.net. The PVARC has activated Catalina Island—North America 066—for "Islands On The Air" annually since 2007, except in 2013 when nine-foot waves prevented Catalina Express ships from operating on our travel day. But otherwise, Two Harbors is our island paradise. ■

Below: Aerial view of Two Harbors at Catalina Island's isthmus, looking northeast. The pier jutting into the water is where Catalina Express ships dock. The Yellow triangle (center) shows PVARC's K6PV/6 IOTA station and cabins. The Palos Verdes Peninsula is at the upper right edge across the Catalina Channel. PHOTO: GOOGLE EARTH



Disaster preparedness and amateur radio implications for Palos Verdes Peninsula and South Bay from recent California fires

By Diana Feinberg, Al6DF QRO Editor

If you are reading this article you are likely an amateur radio operator and know the importance of disaster readiness, especially emergency communication "when all else fails."

In recent months at several disaster preparedness expos I noticed an inverse relationship: the more affluent one is, the less likely they are to handle personal matters on their own. Extremely affluent individuals—busy with high-powered careers or travels—seem to have a mindset that other people can always be hired to take care of both everyday and infrequent matters, including homes or personal needs.

Such was the case after I operated a complete ARRL amateur radio exhibit on September 29 at the City of Malibu's Disaster Preparedness Expo in my capacity as ARRL Los Angeles Section Manager. At the City Hall site we had eight working ham radios (including a Kenwood TS-590S on HF) and their associated antennas as well as literature and radio accessories. But during the Expo's five-hour span only about 15 people came to our ARRL exhibit...and it appeared no more than 150 residents in total attended the Expo. None appeared to be movie stars or corporate executives, just ordinary folks mostly over age 50. Most exhibitors, including our four-person ARRL team, County Fire and Sheriff personnel, and vendors spent much of their time talking among themselves with so few residents attending.

Just 40 days later the Woolsey Fire swept through the Santa Monica Mountains with massive destruction (and possibly more coming with rains.) But the 15 people who came to the ARRL booth at Malibu City Hall said they were concerned with how to communicate if cell phones, landline phones, internet, and cable TV went out in a disaster—as eventually happened in the Woolsey Fire.

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Below: As photographed from the AI6DF QTH in Rancho Palos Verdes on windy November 9, 2018, 27 miles across Santa Monica Bay a "firenado" during the Woolsey Fire swirls unchecked above the City of Malibu. PHOTO: DIANA FEINBERG, AI6DF



Disaster preparedness and amateur radio implications for Palos Verdes Peninsula and South Bay from recent California fires

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Notwithstanding the difficulties getting more people fully-prepared for disasters, some useful lessons for amateur radio came from the Woolsey Fire:

- Don't rely exclusively on your group's normal repeaters—be capable of operating simplex with relays or have back-up repeater arrangements with other groups. A key ham repeater on Castro Peak above Malibu lost its commercial AC power early in the Woolsey Fire, then the repeater's back-up power exhausted the next day and the machine remained off the air for most of the fire. Another key amateur repeater above Paradise Cove completely burned on the fire's third day.
- Who are you going to call? Many hams in the Woolsey Fire zone were subject to mandatory
 evacuations leaving few in the fire zone to communicate with. Without repeaters some who
 remained had communication difficulties from canyons or were shielded by hillsides alongside their properties.
- It only took a few critical burned utility poles to knock-out phone, cellular, cable TV, and internet services over a wide area. This could happen in an urban area too.
- Being a ham radio operator does not guarantee access behind a police line in a disaster, unless you are part of an official disaster amateur radio group. The amateur operators in L.A.
 County Disaster Communications Service at Lost Hills Sheriff Station and those in City of Los Angeles Fire Department Auxiliary Communication Service who drove inside Woolsey Fire police lines did so in their agencies' vehicles, not personal ones.
- Always make sure your amateur radio batteries are charged. In the Lomita Sheriff Station's
 DCS unit a reminder to fully re-charge all ham batteries is customarily sent at the start of each
 month. You might not be able to fully re-charge your batteries after an incident begins because electric utilities are likely to cut power in fire-prone areas during windy conditions as a
 preventive measure.
- The Woolsey Fire and Camp Fire in northern California again showed there is often very little time to evacuate during wind-driven fires. Know in advance what you would take if you only had one minute to evacuate your home, what to take if you had five minutes notice, 10 minutes, 15 minutes or more. Your list will change with the time you have available.
- Usually discussed for CERT volunteers, it's now time for amateur radio operators to also keep an N-95 respirator or two and eye-protective goggles in their radio bag.
- Finally, when sending ham radio traffic make sure you have the correct street and address.
 Some streets have multiple suffixes (Place, Court, Drive, etc.) or directional designations (North, East, South, West.)

By Jerry Kendrick, NG6R

If you're an HF enthusiast, you've probably already added a linear amplifier to your ham station for increased likelihood of securing those DX contacts. (Eventually, most of us take that step after doing the best we can to optimize our antennas' performance.) A very important requirement in connecting an amplifier to the driving transceiver is to ensure maximum transfer of power into the amplifier. The transceiver is designed to work best when the impedance it drives is 50 ohms (with zero reactance [1][2]). That's why we use 50-ohm coax cables (like RG-213 or RG-8) and why the linear amplifiers' input impedance is designed to be 50 ohms. But, have you checked yours? Is it really 50 ohms and does it also have very little reactive component?

Recently, in reconditioning a PVARC-owned Heathkit SB-200 linear amplifier prior to its sale to a club member, we wanted to demonstrate that its input impedance was nearly 50 ohms (with little reactance) on each band (i.e., input SWR at or near 1:1). It wasn't! On the 10m band, SWR was more than 2:1. The driving transceiver was not happy with this. As we know, many modern solid-state transceivers require an output SWR of less than 2:1, lest they begin to "fold back" (i.e., reduce) their output power. In order to understand our degrees of freedom in correcting this condition, let's first examine the input circuitry in the amplifier. This amplifier is based on two 572B triode vacuum tubes operating in parallel with a separately switched input impedance network for each of its five bands (80m, 40m, 20m, 15m and 10m). A full schematic of this amplifier is shown for reference in Figure 1, which depicts the five band input networks in the lower right portion of the diagram.

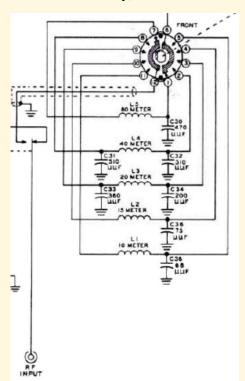
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Figure 1. Full schematic of the Heathkit SB-200 linear amplifier; amplifier was introduced in 1964 and manufactured into the early 1980s. It uses two 572B triode vacuum tubes operating in parallel and generally produces about 600W carrier output power.

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For additional clarity, the switch-selectable input network for the five bands is depicted in Figure 2.



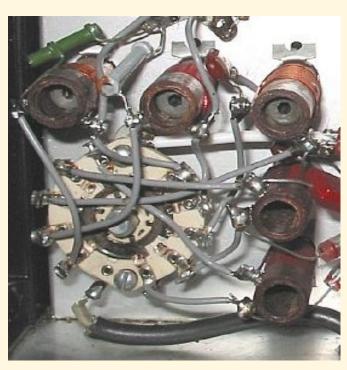


Figure 2. Partial schematic and photo of the Heathkit SB-200 linear amplifier showing the five switch-selectable band input circuits. Note that as originally designed and built, the 80m, 15m and 10m bands use an "L-shaped" configuration, whereas the other two bands of 40m and 20m use a "pi-shaped" configuration—a series inductor and two shunt capacitors. As discussed later in the article, the L-shaped network for 10m (and 15m as well) will be replaced with a pi-shaped network for improved SWR performance.

The purpose of the L- or pi-shaped input network in each band is to transform the 50-ohm output impedance of the generator (i.e., transceiver) to the input impedance of the vacuum tubes. We rely on the original circuit designer of this Heathkit to have selected the right two or three components that will make this transformation correctly for each band AND that the passage of time and effect of aging still allow us to have an amplifier input SWR of approximately 1:1. But, what if that's not the case—what then? Yes, there is an adjustable ferrite slug in the variable inductor (labeled L1 in the 10m network, for example), but its effect on SWR over its range of adjustment is very limited.

Let's focus on the troublesome 10m case. Basically, we need to rebuild an input matching circuit that will create the impedance transformation we need—from 50 ohms resistive to an unknown complex impedance looking into the vacuum tube input. But, there are some real challenges to doing that. A "pi" network generally provides a greater range of impedance transformation, so we'll plan on replacing the "L" network with a "pi" network. But, what series L and what pair of shunt Cs do we implement? We could experiment with various L and C values, but this empirical technique is too unstructured and time consuming, so a more systematic approach is needed.

To solve this problem we need to determine the complex impedance Z right at the input to the vacuum tube filament circuit (where Z = R + jX; R is the real or resistive component and X is the imaginary or reactive component).

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Knowing that information, we could determine the three "pi" network components—one inductor and two capacitors—that would transform from 50 ohms (where the output impedance of the generator and interconnect coax are both 50 ohms) to this impedance.

We recall that the pi-shaped configuration we need is common to many (or most) roller-inductor type matchboxes—more commonly referred to as antenna tuners (ATs)—such as depicted generically in Figure 3. So, for testing purposes we will temporarily substitute a roller-inductor antenna tuner in place of the existing input network for 10m. Referring back to Figure 2, basically we will short across and eliminate L1 and remove C36, the two components in the 10m input network. Thereafter, in 10m transmit mode during this testing, the power input (via the AT) into the amplifier will go through only the band-select switch directly to the vacuum tube filament circuit.

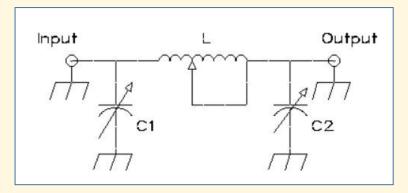




Figure 3. Pi-shaped network that represents many roller-inductor antenna tuners. All three components—series inductor and two shunt capacitors—are variable over a fairly large range to accommodate SWR mismatches up to 10:1 or sometimes higher.

Test configuration. Now, we connect this "test-mode antenna tuner" between the output of the transceiver and the input of the amplifier using two short coax cables. Then with the amplifier band-select switch set on 10m, the amplifier terminated into a 50-ohm dummy load, the transceiver frequency dialed to 28.51MHz (and in FM mode) and about 20W output power, we depress the PTT switch on the microphone; we trim both the TUNE and LOAD controls on the amplifier for maximum output power (should be about 100-120W). In this condition, we then adjust the roller inductor and the two antenna tuner capacitors until we achieve a very low SWR (close to 1:1) at the transceiver output. (Many transceivers have an output SWR metering capability; otherwise, use the SWR meter in the "test-mode antenna tuner" or place an SWR meter in the coax line between the transceiver and the antenna tuner.) An iteration or two might be required (between peaking the amp output power with the TUNE and LOAD controls and adjusting the three controls on the AT for lowest transceiver SWR) since there is some interdependence between the amplifier input impedance and the amplifier's output TUNE/LOAD controls.

Now, without changing the control knobs on the antenna tuner, we have captured the values of inductance and capacitances needed to create the pi input network for 10m. But, how do we extract that information from within the AT? We'll employ a technique known as complex conjugate impedance matching. [3][4][5] [6] For this amplifier on 10m, we executed this technique as described below.

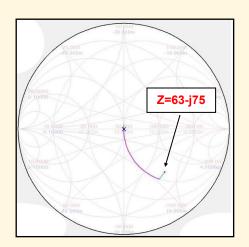
We first removed the coax line between the transceiver output and the AT input and instead placed a 50-ohm dummy load on the AT input connector. We removed the coax line attached to the AT output connector and placed a RigExpert AA-30 antenna analyzer onto this SO-239 connector. (An equivalent analyzer that displays both R and X components of impedance

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could be used.) So, essentially in this setup, we're looking "backwards," toward what would normally be the transceiver connection, inside the AT. We measured the impedance at 10m on the antenna analyzer—the R (real, resistive) component and the X (imaginary, reactive) component. We plotted those two values on a Smith chart. The impedance components were displayed as R = 63 ohms and X = -75 ohms. That singular data point (Z in the accompanying schematic) is plotted on the Smith chart as shown in Figure 4 left side.

Using the program SimSmith [7][8], we postulated a pi network of a series inductor (L1) and two shunt capacitors (C1 and C2), as shown in Figure 4 right side.

Using the computer program, we successively adjusted the values of these three components, while monitoring the resulting SWR at the block labeled G (for generator, representing the transceiver), until the trajectory terminated at the center of the Smith chart (representing 50 ohms with no reactance). Observing the colors of the trajectory segments, we can see the effect of each component: the short blue arc corresponds to C1; the long pink arc L1; and the very short green arc C2.



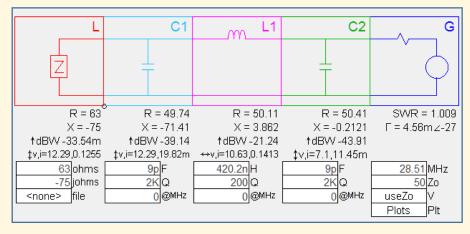


Figure 4. (Left) Smith chart from SimSmith program showing initial data point Z=63-j75, the complex conjugate of the impedance needed for our 10m input network. (Right) Successive pi section components C1-L1-C2, which are separately adjusted to create a trajectory from the given impedance (Z=63-j75, in our case) to the center of the chart at Z=50+j0.

Successful outcome. At last, we've determined (at least in theory) the pi network that is needed for the 10m input circuit—a pi network composed of a series inductor of 420nH and two shunt capacitors of 9pF each, as shown in Figure 4. The original 10m inductor had 2¾ turns. A new inductor was created by rewinding the form with 5¾ turns of #18 enameled wire, as shown in Figure 5. It measured 420nH using a handheld inductance measurement meter. Also shown in Figure 5 are the two temporary variable capacitors that were used to fine-tune the input SWR. After finally adjusting and measuring the capacitors (including any stray capacitance) needed to minimize SWR, fixed capacitors of 20pF and 15pF for C1 and C2, respectively, were soldered into place. A final reading of 10m input SWR is 1.2:1, a very satisfactory result.

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Figure 5. (Left) 10m input network inductor coil form rewound with 5¾ turns of #18 enameled wire to create a 420nH inductance. (Right) two temporary variable capacitors used for final adjustment of the two pi capacitors C1 and C2. Once input SWR was minimized by adjusting these caps, their values (and any associated stray capacitance) were measured with a capacitance measurement meter and fixed-value high-voltage ceramic disc capacitors were substituted and soldered into place.

How were we able to achieve this result? I.E., what is the "magic" associated with "looking backwards" inside the AT? Fundamentally, in the computer program, we used the measured impedance (Z=63-j75 ohms), which is the input impedance of the vacuum tubes. Then, based on the principle of complex conjugates (Z*=63+j75), we synthesized a pi network to transform from the tubes input impedance back to 50 ohms. Component values were selected to achieve an input SWR of nearly 1:1 at 50 ohms non-reactive at the transceiver output. Use of the automated Smith chart computer program to make this transition from Z=63-j75 to Z=50+j0 was convenient and also very familiar, as we have published previous articles describing this tool and technique. [8][9][10]

This method of impedance measurement and circuit design is not limited to HF amplifiers. Using this same process, input and output matching networks can be designed for any amplifier—tube or solid-state—from HF through microwave frequencies. [11] ■

References

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- 8. Page 9, http://n6rpv.net/pvarc/2018QRO/QROAug2018.pdf
- 9. Page 5, http://n6rpv.net/pvarc/2016QRO/QROApr2016.pdf
- 10. Page 8, http://n6rpv.net/pvarc/2017QRO/QROJul2017B.pdf
- 11. Conversations with Gary Lopes, WA6MEM, ARRL LAX Section Technical Coordinator

PVARC Volunteer Examiner session licenses eight new hams

Simultaneously with this year's Palos Verdes Half Marathon the PVARC's November 17th Volunteer Examiner test session was operating in Hesse Park's Fireside Room.

Seven Technician licenses and one General license were earned at this test session following the November 3rd and 10th ham classes taught by Walt Ordway, K1DFO. Everyone who passed took a copy of our complimentary membership application and we hope they become part of our club. We had expected a larger turnout based on the nearly four-dozen flyers our club handed out for Walt's classes at the Prepared Peninsula disaster expo on October 28 at the Norris Pavillion in Rolling Hills Estates.

The Volunteer Examiners who made our November 17 test session possible were: Raymond WA6OWM; Matthew N6MDC; Thomas KB9ENS; Donald NA6Z; and Jerry KI6RRD (Lead VE). Dave KG6BPH again assisted as the coordinator.

Walt Ordway's next ham license classes at Hesse Park are on Saturdays, February 2 and 9, with the VE test session on February 16. ■

Stuart Salot, W7UW (SK)

We were saddened to learn former PVARC member Stuart Salot, W7UW, passed away on November 5 in Seattle, WA, at age 81 after a lengthy illness.

Stu had been a continuous PVARC member from the early-1990's through 2017, along with his wife Martha, N7ZCZ, while residing mostly in Rancho Palos Verdes. Late in 2017 they moved permanently to their longtime second home in Friday Harbor, WA, on one of the San Juan Islands between Washington State and Canada's British Columbia.



Stu and Martha were very generous donors to the PVARC, annually supporting our general activities for which we were always very appreciative. Just prior to their Washington State move Stu donated most of his RPV ham radio gear to our club to benefit students and newer hams. Your **QRO** Editor also remembers Stu for his great public service work during our coverage of the 62-mile RAT Beach Bike Tour and the Palos Verdes Marathon.

Stu was raised in Beverly Hills, earned his B.S. degree at University of California, Berkeley, and then a Ph.D. in chemistry from the University of Southern California. For over 35 years he was the owner and CEO of environmental engineering firm CTL Environmental Services in Los Angeles. When he was asked in 2011 whether his W7UW call sign indicated also being a University of Washington alumnus he said "No," the call was simply available but he did spend considerable time each year at his San Juan Islands home.

We will deeply miss Stu and will remember him for his intellect, kindness, and commitment to amateur radio.■

PVARC Club News

15 PVARC badges now ready for pickup during December-January

Gary Lopes, WA6MEM, has the following new PVARC badges ready for distribution at either our December 6th Holiday Dinner; our January 3, 2019, monthly meeting at Hesse Park; or by special arrangement.

- K6BRN Brian
- K6DAH Denise
- K6GHL Greg
- K6HF Mike
- KC6ROX Candy
- KI6YMD Bob
- KM6IOP Marc
- KM6QVX Debra
- KM60XC Daniel
- **N6CGS Chris**
- N6XJM Ellen
- N6YFM Neal
- W6BMD Teri
- W6GEZ Tony
- WJ1P / DU1X Joel

To make special arrangements with Gary you may contact him at: gary@wa6mem.com. ■

Embroidered PVARC patches available at meetings

PVARC club patches are available at our monthly meetings for \$4 each. You may sew these onto any cap, jacket, shirt, or bag.

The four illustrations in the patch center are emblems



of the Palos Verdes Peninsula's four cities (clockwise from top left: Palos Verdes Estates, Rolling Hills Estates, Rancho Palos Verdes and Rolling Hills.) ■

Palos Verdes Amateur Radio Club

An American Radio Relay League Affiliated Club

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Vice President Ray Day, N6HE

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Dale Hanks, N6NNW; Bob Sylvest, AB6SY; Ron Wagner, AC6RW; Dan Yang, K6DPY

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Monthly Meetings:

1st Thursday (except August and December) at 7:30 pm at Fred Hesse Park, 29301 Hawthorne Blvd., Rancho Palos Verdes, CA. Visitors always welcome.

Repeaters (Open, though often listed as "Closed"): Club: K6PV, 447.120 MHz (-), PL 100.0, CTCSS "PV-West": K6IUM, 449.980 MHz (-), PL 173.8, CTCSS

To order a Club badge:

Gary Lopes, WA6MEM, gary@wa6mem.com To order a Club jacket or patch:

Dave Scholler, KG6BPH, 310-373-8166

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Front page photo — Pt. Vicente Lighthouse seen from Pelican Cove during a spectacular sunset on November 2, 2018.

PHOTO: DIANA FEINBERG, Ai6DF

PVARC Club News

PVARC upcoming dates in 2018-19

 PVARC monthly meeting at Hesse Park, McTaggart Hall

1st Thursday each month, 7:30-9:30 pm, except in August and December. 6:30-7:25 pm, "What's Next?" group for newer hams.

In 2019 only: No monthly meeting on July 4 due to Independence Day; special meeting August 1.

- HF Enthusiasts Group meetings at Palos Verdes Library, Peninsula Center main branch 2nd Saturday every month, 10 am to Noon in the Purcell Room.
- Walt Ordway, K1DFO, Technician and General amateur radio license classes at Hesse Park Saturdays, February 2 and 9, 2019; license exam session, February 16; Saturdays, May 4 and 11, 2019; license exam session, May 18. Also, two Saturdays in November, TBA
- Public service events in 2019: Expected operations are: Ridgecrest 5K at Peninsula Center, late-April; Hills Are Alive 10K/5K in Rolling Hills Estates, August 10; Conquer the Bridge run/walk at Los Angeles Harbor across Vincent Thomas Bridge, Labor Day September 2; and Palos Verdes Half Marathon-10K-5K, November 16.
- PVARC 2018 Holiday Dinner: Los Verdes Golf Course, Rancho Palos Verdes
 Thursday, December 6. Guest speaker: Manhattan Beach schools K-5 science teacher Joanne Mitchell, KM6BWB, on high-altitude balloon projects with Kindergarten through 5th grade students.
- ARRL 2019 Southwestern Division Convention and Yuma Hamfest, Feb. 15-16, Yuma, AZ
- PVARC 2019 Islands On The Air DXpedition to Two Harbors, Catalina Island, February 20-24.
- ARRL 2019 Field Day, Soleado Elementary School, Rancho Palos Verdes, June 29-30.
- ◆ 2019 International Lighthouse & Lightship Weekend, Pt. Vicente Lighthouse, August 16-18.
- ◆ PVARC 2019 Holiday Dinner: TBA.

WELCOME NEW MEMBERS OF THE PALOS VERDES AMATEUR RADIO CLUB IN 2017-2018

Jeff Wolfe, KM6GYB

George Nestojko, WA6YBR

Irene Turner, KM6LGU

Dave Turner, KM6LGX

Don Wilt, WG6E

Don Putnick, NA6Z

George Rizkalla, KM6OXX

Alfred Visco, KM6OPB

Noel Park, KM6OPA

Michael Leyba, KK6KCH

John Tsohas, KM6OPE

Gregg Perkins, KM6OPD

Thomas Wynne, KM6QVW

Frank Attenello, KM6QVU

Debra Shrader, KM6QVX

Daniel Shrader, KM6QXC

Baldomero Fernandez, KM6QVV

Brian Keen, KM6QWC

Emanuele Rodrigues-Berardini, KM6QVZ

Neal Pollack, N6YFM

Daniella Ward, KM6TRC

Talbot Knighton, KM6TDF

Dylan Brown, KM6TDI

Robert Cullinan, KM5DI

Ellen Tessitore, N6XJM

Michael Vulpillat, KJ6RVU

Brian Clebowicz, K6BRN

PVARC Club News

PVARC provides communication for Palos Verdes Half Marathon

Saturday, November 17, was a clear but cool morning for the Palos Verdes Half Marathon-10K-5K races, fortunately with smoky air from fires elsewhere having cleared.

PVARC member Steve Collins, KI6TEQ, coordinated our club's communication support at this year's Half Marathon and focused on two key improvements. First, to ensure all operators along the route could hear everyone else's transmissions this year our K6PV club repeater was combined with Mel Hughes' 2m crossband (same configuration as our Tuesday evening net). Secondly, the race organizers provided a commercial radio to our Ralph Yoon, AI6GP (the combined Start/Finish line/shadow operator) for immediate access to the race director. There was one reported injury, but after some assistance from law enforcement, the runner made it back to the start/finish area.

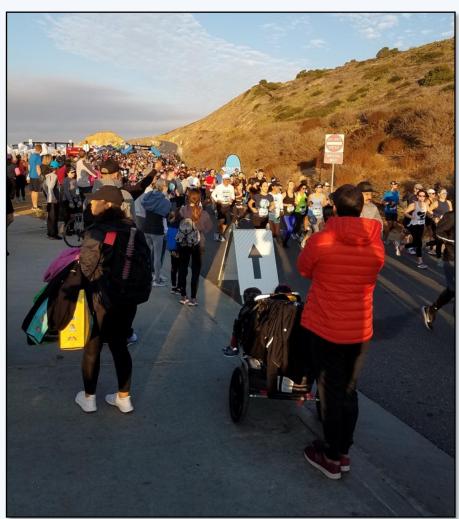
Net control was conducted from the Rancho Palos Verdes Emergency Communication Center where Dale Hanks, N6NNW, and Bob Closson, W6HIP, did a great job operating during the race. Ray Day, N6HE, and Bob Millard, AC6RM, utilized their higher-power equipment and gain antennas to ensure communications from geographically blocked locations. Operators did a great job tracking lead runners for the Half Marathon and conducting parking lot operations. Overall, few problems were reported.

The PV 5K, 10K, and Half Marathon concurrent races are conducted annually as a fund raiser for Rolling Hills Estates Kiwanis Club scholarships to deserving high school students. Herb Stark, KO6RC, is the Kiwanis Club coordinator for the race, and Mountain Sports International (now Dragonfli Media) actually manages the race in concert with volunteers from various organizations.

Thanks to all the operators for a job well done!

Dale Hanks N6NNW
Bob Closson W6HIP
Patrick Hutchings W6PBH
Ralph Yoon AI6GP
Herb Stark KO6RC
Marty Dodell KF6VSY
Walter Ordway K1DFO
Bob Sylvest AB6SY
David Holcomb K9DBA
Steven Collins KI6TEQ
David Held WA6PHS
Robert Millard AC6RM
Mike Semos N6DBS (now K6HF)
Ray Day N6HE
Mike Leyba KK6KCH

Right: View of the Start/Finish area at this year's Palos Verdes Half Marathon-10K-5K. PHOTO: RALPH YOON, Al6GP



PVARC Calendar

December 2018

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|---|---|-----|--|-----|--|
| | | | | | | 1 |
| 2 | 3 | 4 PVARC Weekly Net, 7:30 pm K6PV repeater and cross-band | 5 | 6 PVARC Holiday Dinner,Los Verdes Golf Course, 7 pm | 7 | 8 PVARC HF Enthusiasts Group meeting, 10:00am-Noon, main PV Library's Purcell Room |
| 9 | 10 | PVARC Weekly Net, 7:30 pm K6PV repeater and cross-band | 12 | 13 | 14 | 15 |
| 16 | 17 Last 2018 net for many disaster amateur radio groups | PVARC Weekly Net, 7:30 pm K6PV repeater and cross-band | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 Christmas Day No net | 26 | 27 | 28 | 29 W6TRW Swap Meet, 7:00- 11:30 am, at Northrop Grum- man, N. Redondo |
| 30 | 31 New Year's Eve | | | | | |

Tell your friends and family about our upcoming ham license classes at Hesse Park

Two Free Amateur Radio Courses

FCC <u>"Technician"</u> course (entry level) FCC <u>"General"</u> course (2nd level) Each course is 2 sessions

The sessions will be on 2 February and 9 February 2019

Technician 9:30 AM to 1:30 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 16 February 2019

At the start of the 2 February Technician course, the Palos Verdes Amateur Radio Club will give a 30-minute presentation on how to get further involved with amateur radio.

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

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

There is <u>no fee</u> for either course. Taking the FCC test is \$15.

Optional Material (sold at cost)

Gordon West books with all the FCC test questions, \$26 for the Technician and \$26 for the General Paper copy of Walt's Power Point charts, \$22 for the Technician and \$22 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 www.n6rpv.net/pvarc or k6pv.org

NEW MEMBER & MEMBERSHIP RENEWAL FORM

| NEw· | or Renewal: | MEMBERSHID | DATE: |
|---------------------|--|------------------------|--|
| | Of RENEWAL: First Name: | | |
| | - 100110 | | |
| | | | |
| | | | Cell |
| | | | |
| | (Unless otherwise noted en | mails will be sent to | the applying member only) |
| License Call: | License Class: | ARRL Member? | Birth Mo./Day: |
| Other amateur radio | o groups you belong to: | | |
| Additional Househo | old and/or Family Members (| f Applicable): | |
| Name | Call Cla | assARRL | Birth Mo./Day: |
| Name | Call Cla | assARRL | Birth Mo./Day: |
| Name | Call Cla | assARRL | Birth Mo./Day: |
| | | Individual | membership (\$20.00) \$ |
| | House | hold and/or Family i | membership (\$25.00) \$ |
| | Addition | al donation to supp | ort PVARC activities \$ |
| Са | sh: or Check#: | Date | TOTAL \$ |
| | | | sed on January 1 st to December 31 st year |
| | New and Renewal Membe | | |
| accepting membershi | ew or renewal membership in to p I agree to abide by the Club's pvarc/constitution.htm or upon | s constitution and by- | teur Radio Club and understand that blaws (available on-line at: |
| Signature: | | | |
| Family Member Sign | ature: | | Date: |

Family Member Signature: _____ Date: _____