QRO

Monthly Newsletter of the Palos Verdes Amateur Radio Club

August 2017

International Lighthouse & Lightship Weekend, Aug. 18-20

In lieu of an August club meeting we will hold our annual Lighthouse Picnic on Sunday, August 20, at Pt. Vicente for PVARC members and their families.

If you plan to attend the picnic **please RSVP by 3pm Thursday, August 17**, to Diana Feinberg, AI6DF, at: dfeinberg@att.net so we can order sufficient food. Joey's Smokin' Hot BBQ in Torrance is supplying our meats and main side dishes. As with other BBQ restaurants there's a multi-day preparation process.

We would appreciate if you could bring a small dessert or side dish to augment the meats, main side dishes, and beverages which the PVARC provides at no cost to members. And let us know if you want to operate HF (as mentioned on page 2.)

See you at the Lighthouse. ■

PVARC Lighthouse Picnic

(for PVARC members and their families—please RSVP)

Pt. Vicente Lighthouse
31550 Palos Verdes Dr. West
Rancho Palos Verdes

Sunday, August 20, 2017
12:30-3:00 pm

Please park in Coast Guard lot outside fence, walk through the pedestrian gate. Those with handicapped plates or placards may park inside lighthouse grounds in a designated zone near the picnic area..

A SUV shuttle will also be available to transport anyone either way between the front gate and picnic area.

Information about our 2017 International Lighthouse & Lightship Weekend at Point Vicente Lighthouse

- Our HF station inside the Pt. Vicente Lighthouse Museum goes on-air as K6PV by 6:00 pm Friday, August 18, through Sunday afternoon, August 20. We will operate overnight Friday and Saturday if there is sufficient interest or as band conditions allow. PVARC members wishing to operate K6PV should bring an HT radio and from the lighthouse front gate use the K6PV repeater as a talk-in frequency. (We'll be listening on both K6PV-Repeater and K6PV-Reverse from inside the Museum). We also suggest you advise Diana Feinberg, at dfeinberg@att.net if you wish to operate so we can coordinate HF operators.

- Our Sunday picnic starts food serving at 12:30 pm. As always, our club provides all the grilled meats, main side dishes, utensils, water, beverages, and some other items. If coming to the picnic we would appreciate that you bring a pot-luck side dish, dessert, or other item. Canopies will provide shaded eating areas.

- **Now hear this:** The U.S. Coast Guard requests all PVARC members and guests observe the following rules while on the Lighthouse grounds:
  - **No alcoholic beverages**
  - **No smoking**
  - **No pets**
  - **Please respect privacy of the Coast Guard families living in homes at Pt. Vicente, no car horns**
  - **Do not venture beyond the Lighthouse, Museum, and picnic areas; please keep away from the helipad**
  - **No access into the lighthouse this year due to "environmental" reasons.**

Thanks again to PVARC member Bob Closson, W6HIP, for coordinating arrangements with the U.S. Coast Guard and Coast Guard Auxiliary that enable our continued use of the Pt. Vicente Lighthouse grounds. ■

The Pt. Vicente Lighthouse grounds.
BASE PHOTO: GOOGLE® EARTH

Directions: Take Palos Verdes Drive South exit labeled, "Pt. Vicente Interpretive Center." Park in the dirt lot outside light-house gate.

Only a few vehicles may park on the grass to west of the light-house.

Please do not go outside the picnic area or near the Coast Guard residences.

400 lighthouses and lightships from 43 DX entities entered in ILLW 2017 as of August 15th

Country	2017 ILLW Lights
Argentina	5
Australia	57
Austria	2
Belgium	2
Brazil	3
Canada	16
Chile	2
Costa Rica	1
Cuba	7
Cyprus	1
Denmark	9
England	30
Finland	7
France	3
Germany	60
Gibraltar	1
Iceland	1
Ireland	8
Italy	4
Latvia	3
Malaysia	7
Malta	1
Mexico	2

Country	2017 ILLW Lights
Netherlands	20
New Zealand	7
Northern Ireland	5
Norway	2
Panama	1
Poland	3
Portugal	10
Puerto Rico	5
Scotland	17
Serbia	1
South Africa	13
Spain	2
Sri Lanka	1
Sweden	13
Switzerland	1
Taiwan	1
Turkey	1
Uruguay	2
United States	56
Wales	5

While three days remain for entering Lighthouses and Lightships in this year's ILLW, total entries are slightly behind previous years. Security issues and a declining solar cycle affecting HF bands are the likely causes.

The latest count for ILLW 2017 is exactly 400 lighthouse and lightships, representing 43 DX entities. At the solar cycle maximum in 2014 there were 543 lights and 59 DX entities in that year's ILLW,

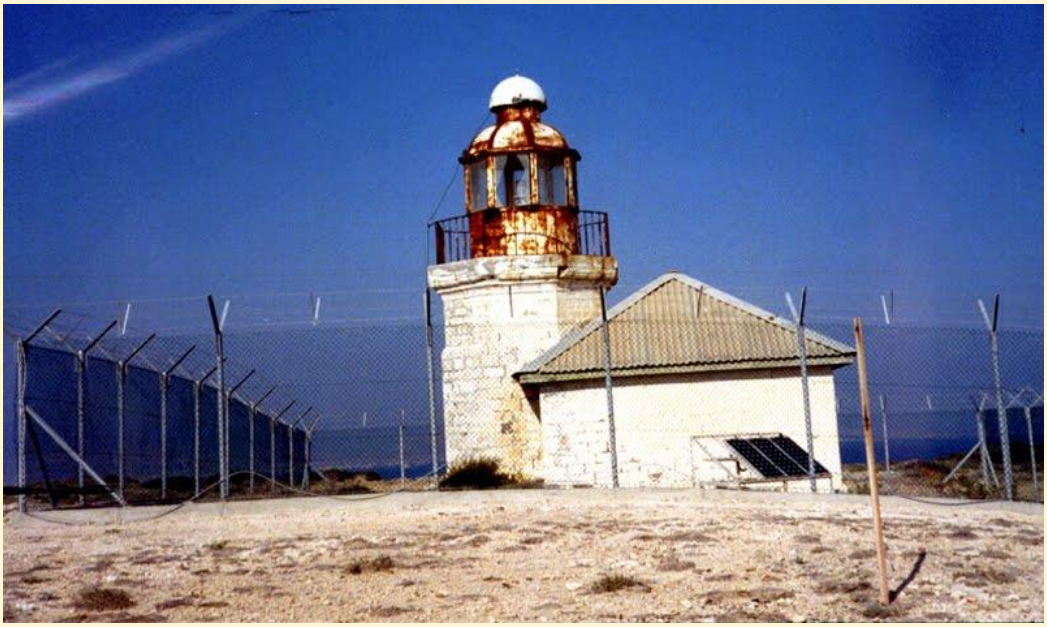
For ILLW 2017 at Pt. Vicente Lighthouse the U.S. Coast Guard Auxiliary will not be operating an amateur radio station. The PVARC's station will set up inside the museum building (which also has a restroom). The Pt. Vicente Lighthouse itself is currently closed for outsider access.

New this year among ILLW lighthouse entries is Costa Rica's first-ever appearance. We hope to work the Puntarenas Light there (see photo, next page). The Mediterranean island of Cyprus is also entered in this year's ILLW—only the 2nd time since ILLW started in 1998. ■

Two “rare” lighthouses will be on the air for 2017 International Lighthouse Weekend

Maybe we can work Costa Rica from Pt. Vicente…but probably not Cyprus given the solar cycle descent and recent propagation conditions.

Puntarenas Lighthouse, Costa Rica: the country’s first-ever lighthouse in ILLW.
PHOTO CREDIT: By Rodtico21 (Own work) [CC BY-SA 4.0 (http://creativecommons.org/licenses/by-sa/4.0)], via Wikimedia Commons



In Cyprus, the abandoned Cape Gata Lighthouse—built in 1864--will be an ILLW operating site.this year, only the 2nd time Cyprus has been represented during ILLW’s 20-year history.. Cape Gata is the southern-most tip of Cyprus, 151 miles across the Mediterranean Sea from Lebanon. PHOTO CREDIT: Creative Commons photo

PVARC members again needed to staff Information Desk at HAMCON 2017 – it's our convention responsibility

We need you!

The PVARC is responsible for staffing the HAMCON 2017 Information Desk at a prime location across from ARRL exhibits and next to HAMCON's Registration Desk.

Please consider times when you can fill one of our two-hour time slots.

PVARC members will work in pairs to handle attendee questions about the convention or surrounding areas. Although smart-phones have eliminated asking many questions our advise is always reassuring. At HAMCON 2015 the most frequent question was where to deposit the raffle tickets.

We'll have detailed information books at the desk for your reference, including nearby health-care locations. ■

Friday, Sept. 15	PVARC Member	PVARC Member
12:00- 2:00 pm		
2:00-4:00 pm		
4:00-6:00 pm		
6:00-7:30 pm		

Saturday, Sept. 16	PVARC Member	PVARC Member
7:00-9:00 am		
9:00-11:00 am		
11:00 am-1:00 pm		
1:00-3:00 pm		
3:00-5:00 pm		

Sunday, Sept. 17	PVARC Member	PVARC Member
7:00-9:00 am		
9:00-11:00 am		
11:00 am- 1:00 pm		

From the Department of Big Deals in Electronics: Not even my two-cents worth here…

Logitech Wireless Solar Desktop Keyboard K750
by Logitech

Was $56.88

Price: $56.87 Prime

Learn more

As listed on Amazon.com, 7/25/2017

…but here's where our two-cents really count: support the Amateur Radio Parity Act, now in the U.S. Senate

It takes less than a minute to express your support for the Amateur Radio Parity Act to California's two U.S. Senators. The Amateur Radio Parity Act would require community associations with CC&Rs (Covenants, Conditions, and Restrictions) to give reasonable accommodation to amateur radio operators wishing to have an outside antenna. The ARPA was unanimously passed in the House of Representatives earlier this year.

Whether you are an ARRL member or not please click on the ARRL's simple-to-use link at http://arrl.rallycongress.net/ctas/urge-us-senate-to-support-amateur-radio-parity-act to easily send pre-written emails to Senators Feinstein and Harris. If you don't live in a CC&R community today you might in the future.

In recent weeks several hams who are lawyers circulated a lengthy list of objections to the ARPA (HR-555). However these lawyer-hams do not seem to live in CC&R communities and their objections, while selfishly correct, show a complete lack of understanding about the characteristics of community associations and how they operate. Like any good lawyer would do, these attorneys dissected the ARPA as if a contract—noting every possible objection or omission. But the 346,000 community associations in the U.S. (with 69 million residents) are so diverse in their architectural designs, roof structures, size of available exclusive-use land, view restrictions, etc., that the lawyer-hams' objections and demands are unrealistic. I have lived in a CC&R community since 1984, served on its Board, and understand these communities. I believe the ARPA, as currently written in a compromise with the Community Associations Institute, provides the flexibility allowing as many community associations as possible to find a way for their ham residents to have some type of antenna. Please support the ARPA today. ■

—Diana Feinberg, AI6DF

Understanding Resistance, Capacitance, Inductance, Reactance and Impedance

By Jerry Kendrick, NG6R

We use the terms in the title of this article when we discuss electronic components, circuits, antennas, cables and many other facets of our ham radio hobby. It's important that we share a common understanding of these terms, how they relate to each other and how they sometimes are misused when we confuse physical components with their mathematical representations.[1]

Resistance is a materials property that opposes the motion of electrons when an electromotive force (voltage) is applied to the material. It is measured in ohms (Ω) and symbolized mathematically by "R". Metals are good conductors with low resistance, whereas insulators are poor conductors with high resistance. This opposition to electron flow occurs equally whether the applied voltage is steady and unchanging (direct current or DC) or is changing with regularity (alternating current or AC). The physical device that we normally associate with resistance is called a resistor. [We'll discuss this later, but note that physical resistors not only have resistance, but they also have a small amount of capacitance and inductance.].

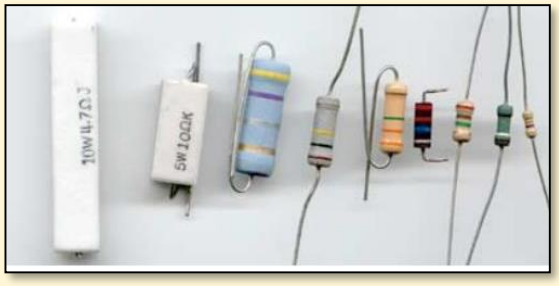


Figure 1: Examples of resistors

Figure 2: Examples of capacitors

Capacitance is the ability of a body to store (and later release) energy in the form of electric charge. It is measured in farads (F) and symbolized mathematically by "C". Capacitance is a function of the geometric design of the body configured to store charge. The physical device that we normally associate with capacitance is called a capacitor. The simplest capacitor uses conductive plates separated by a dielectric material. The numerical value of capacitance is a function of the area of the plates, the distance between them and the nature of the dielectric material (called the permittivity) between the plates.[2] The bigger the area and the closer the plates are together, the greater the capacitance. [Note that physical capacitors not only have capacitance, but they also have a little resistance and inductance.].

Inductance is the property of an electric conductor by which a change in current through it induces a voltage across it (and can also even induce a voltage across a nearby conductor). A steady current flowing through a conductor will produce a steady magnetic field around it; and, with no change in that field, no voltage will be induced. However, a time-varying current will create a time-varying magnetic field which will induce an electromotive force (voltage) across the conductor. The greater the rate of change of the field, the greater will be the induced voltage.[3] As a result of this property, we can say that inductance is the ability of a body to store (and later release) energy from its magnetic field.

Figure 3: Examples of inductors

Continued on next page ▶

Understanding Resistance, Capacitance, Inductance, Reactance and Impedance

▶ *Continued from previous page*

The physical device that we normally associate with inductance is called an inductor. It is measured in henrys (H) [not henries] and symbolized mathematically by "L". Inductors are generally made from coils of wire and may have a core of just air or of some permeable material like iron. [Note that physical inductors not only have inductance, but they also have a little resistance and capacitance.]

Reactance, measured in ohms like resistance, is also opposition to the flow of electrons. However, it differs from resistance in a major way. Reactance characterizes how capacitors and inductors oppose alternating current (AC) passing through them. Reactance is given the mathematical symbol "X". The opposition that a capacitor offers to alternating current passing through it (generally referred to as capacitive reactance) is given by:

$$X_C = 1/2\pi fC$$

This means that as frequency (f) of the AC goes up, or as the capacitance (C) goes up, the opposition to alternating current becomes less and less. In the lower frequency limit (for direct current, where the frequency is zero), the reactance is infinite, i.e., an ideal capacitor cannot pass DC at all. We say "ideal" because, in each physical device we've discussed (R, C and L), there is an element of resistance, capacitance and inductance in each.

The opposition that an inductor offers to alternating current passing through it (generally called inductive reactance) is given by:

$$X_L = 2\pi fL$$

This means that as frequency (f) of the AC goes up, or as the inductance (L) goes up, the opposition to current becomes greater. In the lower frequency limit (for direct current, where the frequency is zero), the reactance is zero, i.e., an ideal inductor does not oppose the passage of DC at all.

Another very important characteristic of capacitive reactance and inductive reactance is that for both of these parameters, voltage across the device and current through the device are 90 degrees apart. That is not true for resistance. For an ideal resistor, voltage and current are always in phase regardless of the frequency of the AC passing through it.

So, summarizing, both resistance and reactance are measures of the opposition to electron motion in a material or conductive path. Resistance applies for both DC and AC. Reactance applies only for AC through capacitors and inductors and has no real meaning for DC. Voltage and current are in phase for ideal resistors and are exactly 90 degrees out of phase for ideal capacitors and inductors. But, what if we want to characterize the opposition to current flowing in a conductive path in which there is some combination of resistance, capacitance and inductance? Thus the need to define and characterize "impedance."

AC impedances behave analogously to DC resistances. Ohm's law for AC circuits mirrors that for DC, i.e.,

$$E = IZ, \quad I = E/Z, \quad Z = E/I.$$

But, here E (voltage), I (current) and Z (impedance) are all complex numbers expressed in polar coordinates.

Continued on next page ▶

Understanding Resistance, Capacitance, Inductance, Reactance and Impedance

► *Continued from previous page*

A previous **QRO** article [4] explains polar coordinates and how to convert from the rectangular form of complex impedance to polar form and vice versa. The rectangular form of impedance is given by:

$$Z = R + jX$$

where Z is complex impedance, R is resistance, X is reactance and j is √-1. The polar form of impedance is given by:

$$Z = |Z|\angle\theta$$

where |Z| is the magnitude of the complex impedance and θ is the angle from the rectangular real axis. These concepts are explained in a previous **QRO** article. [4]

In discussions of electronic systems, antennas, antenna tuners and the like, we sometimes forget that ideal capacitors and inductors do not dissipate energy—they merely store it temporarily and subsequently release it back into the circuit. This is the central principle of antenna tuners that use only L's and C's to insert an appropriate impedance between the transceiver (or amplifier) and the antenna system and reduce SWR to a value close to 1:1.

Of course, in any real device, there exists elements of all three parameters we've discussed—resistance, capacitance and inductance. An example is a wire coil inductor. Although intended to function as an inductor, but since it's made of wire, it has some resistance. Also, its wire coil conductors, being closely spaced but still separated, have some amount of capacitance between those conductors. So, this device is mostly an inductor but it also has some capacitance and some resistance.

Another example is a resistor. It has conducting wires leading to the resistive element, around which a magnetic field is established. As that magnetic field changes with the alternating current, a small voltage is induced in those wires. So, that means it's acting a bit like an inductor. Of course, if it's a wire-wound resistor, it acts even more like an inductor, particularly as frequency increases. There is a small amount of capacitance that is created between the two conducting ends of the resistor, as well.[5]

These five terms that are the article's subject are so fundamental and so ubiquitous for us as ham operators, we generally take for granted that they're understood by all. It's useful to review them periodically and to remind ourselves how relevant they are for many of the articles we read in QST, in our quest to upgrade our ham licenses and in our technical discussions with each other and on the air. ■

References:

1. https://www.allaboutcircuits.com/textbook/alternating-current/chpt-5/review-of-r-x-and-z/
2. https://en.wikipedia.org/wiki/Capacitance
3. https://en.wikipedia.org/wiki/Inductance
4. http://www.n6rpv.net/pvarc/2017QRO/QROMay2017.pdf page 7
5. https://www.quora.com/How-do-resistors-behave-at-extremelyhigh-frequencies

HAMCON 2017 / ARRL SW Division Convention comes to Torrance in Sept.

The PVARC is one of 12 Los Angeles and Orange County clubs sponsoring HAMCON 2017, September 15-17, at the Torrance Marriott Redondo Beach Hotel (Del Amo Center).

HAMCON 2017 is also the 2017 ARRL Southwestern Division Convention, with a full array of technical talks on all aspects of amateur radio. Equally interesting is the 63-booth Vendor Hall with many major ham radio manufacturers. If you want to see or touch Elecraft, FlexRadio, BridgeCom products, for example, HAMCON 2017 is your place.

Bonus: ARRL Assistant Lab Manager Bob Allison, WB1GCM, will do free testing of any HT radio using the ARRL calibrated spectrum analyzer.

The PVARC is again staffing HAMCON's Information Desk during Convention operating hours. (See page 5 for list of times when we need PVARC members.)

Save the dates of September 15-17 for a great convention—an ARRL Divisional Convention doesn't get closer to home than this one. (www.hamconinc.org).■

For us, it's conveniently held at the Torrance Marriott Redondo Beach Hotel next to Del Amo Fashion Center.

◈ PVARC's financial report is available upon request to any 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	Peter Landon, KE6JPM
Secretary	Ron Wagner, AC6RW
Directors	Clay Davis, AB9A, Gary Lopes, WA6MEM

Appointed Offices:

QRO Editor	Diana Feinberg, AI6DF
Webmaster	Kel Vanderlip, W6KCV
Club Librarian	Bryant Winchell, W2RGG
K6PV QSL Manager	Jeff Wolf, K6JW
K6PV Repeater Trustee	Mel Hughes, K6SY
LAACARC Delegate	Jeff Wolf, K6JW
VE Coordinator	Dave Scholler, KG6BPH
VE ARRL Liaison	Jerry Shaw, KI6RRD
Net Control Operators	Malin Dollinger, KO6MD, Dale Hanks, N6NNW, Bob Sylvest, AB6SY, Ron Wagner, AC6RW, Dan Yang, K6DPY

Contacts:
QRO Editor: 310-529-6450, ai6df@arrl.net
Webmaster: 310-377-4444, kelvin@vanderlip.org

Email us: k6pv@arrl.net
Website: www.k6pv.org

Mailing Address:
Palos Verdes Amateur Radio Club
PO Box 2316
Palos Verdes Peninsula, CA 90274-8316

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

QRO is published monthly by the Palos Verdes Amateur Radio Club, ©2017 all rights reserved. For permission to reprint please contact PVARC at: k6pv@arrl.net

Front page photo —*Pt. Vicente Lighthouse is viewed through museum building doorway during the 2015 International Lighthouse & Lightship Weekend..*
PHOTO: DIANA FEINBERG, AI6DF

PVARC Short News Items

The PVARC's upcoming meeting topics…

At the PVARC's September 7th meeting our fellow member Alan LaFever, AK6G, will give a very informative presentation on "3-D Printing" and how you can get into it. Alan has fabricated numerous parts using 3-D printing in his home garage---and prices of many 3-D printers have dropped lately.

The October 5th monthly PVARC meeting features a new presentation by your **QRO** Editor Diana AI6DF about the various member-supported VHF/UHF repeater networks in California. These include well-known networks such as the PAPA System, CACTUS System, DARN System, WIN System, and RABBIT System…plus some lesser-known and private ones. This presentation will compare the respective systems' repeater coverage, bands used, transmit modes employed, brief history, "system personality." and annual membership cost.

Elsewhere….your **QRO** Editor Diana. AI6DF, is speaking at the Antelope Valley Amateur Radio Club in Quartz Hill (Palmdale-adjacent) on August 26th about The New Dayton Hamvention. She also spoke at the AVARC's July 26th meeting about 220 MHz amateur radio. Additionally our club Vice President Ray Day, N6HE, and Director Gary Lopes, WA6MEM, will be speaking at the Western Amateur Radio Association in Fullerton on October 2 about the PVARC's 2017 Catalina Island DXpedition. Ray and Gary spoke on August 3rd at the Downey Amateur Radio Club also about our 2017 Catalina DXpedition. ■

…plus later this year

Our 2017 Holiday Dinner is at Ports O'Call Restaurant on San Pedro's waterfront Thursday, December 14, 2017, in the upstairs "Breakwater Room." Returning then for an encore guest speaking engagement is Dr. Jay Jones, WB9FPM and Professor of Biology at University of La Verne. Jay spoke at our December 2011 Holiday Dinner and his presentation then was very well received. More information to follow. ■

Need a PVARC patch?

If you want a PVARC logo patch for a hat, shirt, jacket, soft-side bag or whatever we have a new batch with higher-resolution stitching.

New patches are available for $4 each at all our meetings or by contacting Dave Scholler, KG6BPH, at 310-373-8166 (or email him at: jdavidscholler@hotmail.com .) If you order a PVARC club jacket one patch is sewn onto the jacket's left front and included in the cost. These jackets may also be ordered through Dave Scholler. ■

Short News Items

PVARC members and a few other hams operate at the "Hills Are Alive 10K/5K"

Many amateur operators provided radio communications for the Rolling Hills Estates 10K & 5K event on Saturday, August 12. All went well for the almost 350 registered runners in the two events—no runners were injured in either.

The radio operators who supported this year's event were:

Bob W6HIP,
Jared KM6DQV,
Jeff KD6BWX,
Ralph AI6GP,
Bob KE6JI,
Dave WA6PHS,
Denzel KG6QWJ,
Mike N6DBS,
Herb KM6DD,
Fran KF6QFQ,
Sid KF6QFH,
Matthew N6MDC,
John WW6WW,
Jay KI6VFY,
Melody KI6SPA,
Richard KJ6CBA,
Herb KO6RC,
Steve KI6TEQ,
Cynthia AG6NW,
Walt K1DFO (net control).

If it sounds like fun, join the group next year on Saturday August, 11, 2018. ■

Conquer the Bridge race on Labor Day needs two more radio operators

Walt Ordway, K1DFO, is seeking two additional ham operators for the 5.3 mile "Conquer the Bridge" race across the Vincent Thomas Bridge over Los Angeles Harbor. If you can help contact Walt at: walt.Ordway@juno.com

Helpful guidelines when submitting QRO articles

Our **QRO** newsletter welcomes articles about technical subjects and PVARC member activities.

To facilitate layout and editing please send your article as two separate files: 1) all the text as a straight Microsoft Word file and 2) any photos, illustrations, or diagrams in a second file or as separate JPEG files. If possible please keep the text portion to not exceed 800 words. Thanks! ■

WELCOME NEW MEMBERS OF THE PALOS VERDES AMATEUR RADIO CLUB IN 2016-2017

BRUCE GILBERT, KM6DQX

CARL HINDMAN, KM6DRB

HUGO DOMINGUEZ, JR., KM6DQU,

JARED BOCKOFF, KM6DQV

STEVE WRAY, KM6DQW

THEODORE LEY, KM6DRC

JOE BARGER, N6KK

DENISE ANN HUGHES-MURPHY, K6DAH

STEFAN FERRIER, KM6GXW

CINDY SNYDER, KM6GYG

MICHAEL LYNCH, KM6GYA

STUART MASTROIANNA, WX6ST

THOMAS ESSENPREIS, KB9ENS

MARK GREENBERG, KM6GYC

LORI TANIMURA, KM6GXY

CHERI TANIMURA, KM6GXX

HEIDI STROMBURG, KG0GGY

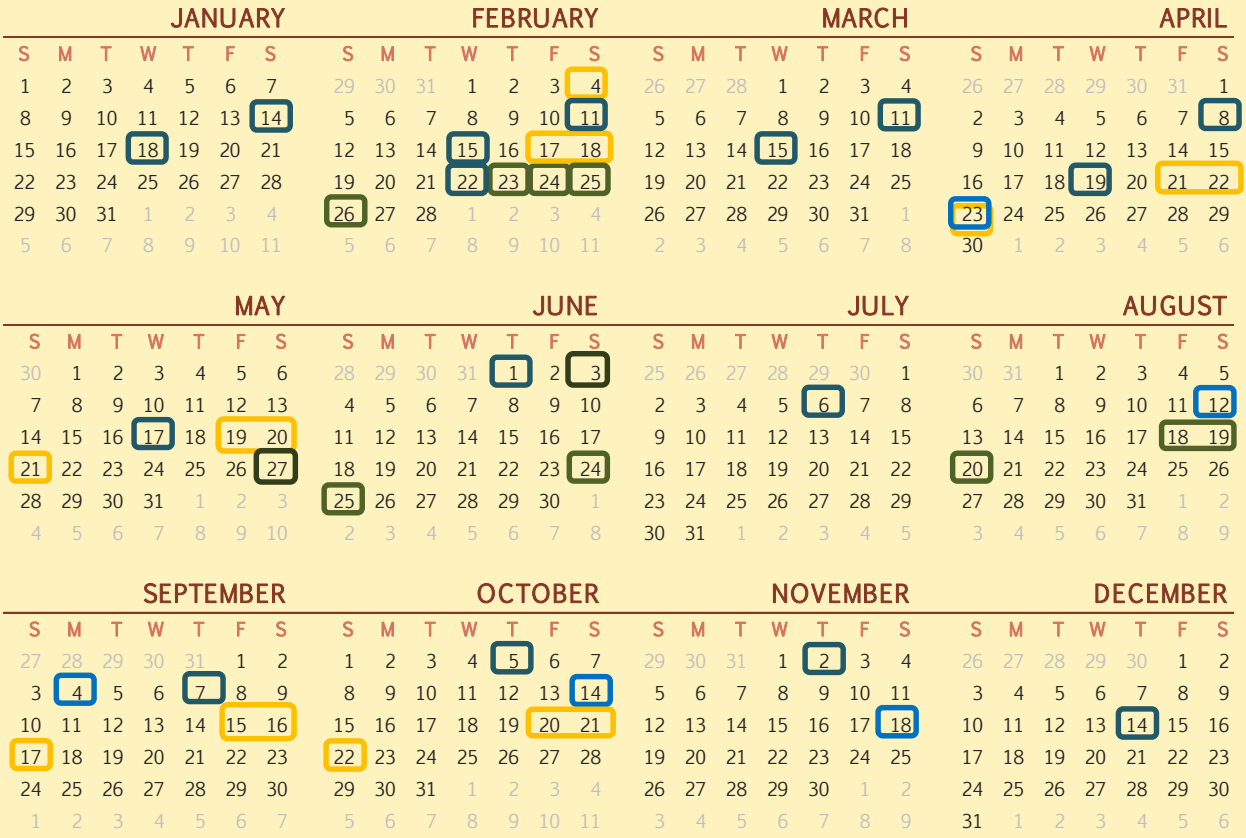
MIKE SEMOS, N6DBS (RETURNING MEMBER)

RICK HEASTON, KM6GXZ

LARRY FADDEN, KK6TXN

STEVE SHERIDAN, KM6IQO

Palos Verdes Amateur Radio Club Calendar 2017



2017 Major Contest Dates

Jan. 21:	North American SSB QSO Party
Jan. 27-29:	CQ Worldwide 160-Meter (CW)
Feb. 10-12:	CQ Worldwide RTTY WPX
Feb. 17-19:	ARRL DX (CW)
Feb. 25:	North American RTTY QSO Party
Feb. 24-26:	CQ Worldwide 160-Meter (SSB)
Mar. 3-5:	ARRL DX (SSB)
Mar. 24-26:	CQ Worldwide SSB WPX
May 26-28:	CQ Worldwide CW WPX
Jun. 10-11:	ARRL June VHF Contest
Jun. 24-25:	ARRL Field Day
July 8-9:	IARU World Championships
July 15-16:	CQ Worldwide VHF
July 15:	North American RTTY QSO Party
Aug. 19:	North American SSB QSO Party
Sept. 9-10:	ARRL September VHF Contest
Sept. 22-24:	CQ Worldwide RTTY DX
Oct. 7-8:	California QSO Party
Oct. 27-29:	CQ Worldwide SSB DX
Nov. 4-5:	ARRL Sweepstakes (CW)
Nov. 18-19:	ARRL Sweepstakes (SSB)
Nov. 24-26:	CQ Worldwide CW DX
Dec. 8-10:	ARRL 10-Meter Contest

PVARC Nets

Tuesdays at 7:30 pm on K6PV, 447.120 MHz (-), PL 100.0, and 144.910 MHz, Tone Squelch, PL 156.7

PVARC Meetings & Meals

Meetings 7:30 pm **1st Thursdays (eff. 6/1)** except August and December at Fred Hesse Park, 29301 Hawthorne Blvd., Rancho Palos Verdes. Guests welcome.

No-host dinner at 5:30 pm before club meetings at Red Onion Restaurant, 736 Silver Spur Road, Rolling Hills Estates.

2nd Saturday each month: PVARC "HF Enthusiasts Group", 10:00 am

3rd Sunday in August: Annual family picnic at Pt. Vicente Lighthouse.

December 14: Holiday Dinner, Ports O'Call Restaurant, San Pedro.

PVARC Public Service Events

Apr. 23:	Ridgecrest Int. School 5K
Aug. 12:	Rolling Hills Estates "Hills Are Alive" 5K/10K
Sept. 4:	"Conquer the Bridge" Race
Oct. 14:	RAT Beach Bike Tour

Major Ham Radio Conventions

Feb. 4:	Palm Springs Hamfest
Feb. 17-18:	Yuma Hamfest, Yuma, AZ
Apr. 21-23:	International DX Convention, Visalia, CA
May 19-21:	HamVention, Xenia OH
Sep. 15-17	**HAMCON 2017, Torrance**
Oct. 20-22:	Pacificon, Santa Clara, CA

PVARC HF Operating Events

Feb. 22-26:	Islands On The Air DXpedition, Catalina Island;
June 24-25:	ARRL Field Day;
Aug. 18-20:	Intl. Lighthouse Weekend, Pt. Vicente Lighthouse

PVARC Ham License Classes

Fred Hesse Park (Fireside Room), 29301 Hawthorne Blvd., Rancho P.V.

Feb. 4 & 11; May 27 & June 3; August 5 & 19; Nov. 4 & 11.

Palos Verdes Amateur Radio Club
P.O. Box 2316
Palos Verdes Peninsula, CA 90274
www.n6rpv.net/pvarc or www.k6pv.org

NEW MEMBER & MEMBERSHIP RENEWAL FORM

NEW: _____ **or RENEWAL:** _____ **MEMBERSHIP** **DATE:** _____

Last Name: _____ **First Name:** _____**Spouse:** _____

Street Address: _____

City: _____ **Zip:** _____

Phone: Home _____ **Work** _____**Cell**_____

Email address: _____
(Unless otherwise noted emails will be sent to the applying member only)

License Call: _____ **License Class:** _____**ARRL Member?**____**Birth Mo./Day:** _____

Other amateur radio groups you belong to:_____

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

Name_____ **Call** _____ **Class**_____ **ARRL**____ **Birth Mo./Day:** _____

Name_____ **Call** _____ **Class**_____ **ARRL**____ **Birth Mo./Day:** _____

Name_____ **Call** _____ **Class**_____ **ARRL**____ **Birth Mo./Day:** _____

Individual membership ($15.00) $_____

Household and/or Family membership ($20.00) $_____

Additional donation to support PVARC activities $_____

Cash: _____ **or Check #:** _____ **Date**_____ **TOTAL $**_____

Please make checks payable to: Palos Verdes Amateur Radio Club; Dues based on January 1st to December 31st year.

All New and Renewal Member applications must be signed below.

I am applying for a new or renewal membership in the Palos Verdes Amateur Radio Club and understand that by accepting membership I agree to abide by the Club's constitution and by-laws (available on-line at: http://www.n6rpv.net/pvarc/constitution.htm or upon request.)

Signature:_____ Date: _____

Family Member Signature: _____ Date: _____

Family Member Signature: _____ Date: _____

HAMCON 2017

ARRL Southwestern Division Convention

September 15-17, 2017

Torrance Marriott Redondo Beach Hotel
3635 Fashion Way
Torrance, CA 90503

Hamcon, Inc. is a 501(c)3 Non Profit Organization
Donations to Hamcon, Inc. are tax deductable

"Ham Radio for Everyone" is our theme with much to see and do at HAMCON 2017

- Full range of talks by experts on radio equipment, operating techniques, public service, DXing, technical subjects, and much more
- 10,300 sq. ft. Vendor/Exhibit Hall with 63 booth spaces
- Distinguished speakers at Saturday lunch and dinner, and Sunday breakfast
- Extensive prize drawings
- W1AW/6 Special Event station
- ARRL Forums, Ham License test sessions
- Young ham forum
- Sunday swap meet
- Discount hotel room rates (available through the Marriott link on our website)
- With more to come . . .

AND FOR THE FIRST TIME EVER

Special Friday Afternoon tour of the **Battleship Iowa**

- Includes Catered Buffet Dinner in the Officer's Wardroom
- Tour the Radio Room (not open to the general public) and operate the ship's NI6BB amateur station
- Bus transportation to and from the Marriott Hotel included
- Limited to 80 guests, so register early

For complete convention details, registration and hotel bookings log onto:

WWW.HAMCONINC.ORG

Register for HAMCON 2017, the 2017 ARRL Southwestern Division Convention, by mail or online at www.hamconinc.org

HAMCON 2017
2017 ARRL Southwestern Division Convention

September 15-17, 2017
Torrance Marriott Redondo Beach Hotel
3635 Fashion Way, Torrance, CA 90503

Convention Registration Form

Visit us at: www.hamconinc.org/

All attendees over 18 years old must have a separate paid registration; no charge for registered minors 18 or younger when accompanied by paid Adult registrant.

Call Sign: _____

Last name: **First name:**

Street or mailing address:

City: **State & ZIP Code:**

E-mail address: **Phone:**

Additional Attendee #1 **Call Sign:** **Adult:** ☐ **Minor:** ☐
Last name: **First name:**

Additional Attendee #2 **Call Sign:** **Adult:** ☐ **Minor:** ☐
Last name: **First name:**

Additional Attendee #3 **Call Sign:** **Adult:** ☐ **Minor:** ☐
Last name: **First name:**

	Per Person	x Number	= $ Total
Early Registration, postmarked by Aug. 15, 2017:	$20		
Regular Registration, Aug. 16 to Sept. 17, 2017:	$25		
BEST VALUE: Registration and all three meals	$135		
Saturday Lunch**: ___# Chicken ___# Vegetarian	$36		
Saturday Dinner**: ___# Chicken ___# Vegetarian	$55		
Sunday Breakfast**	$29		
Battleship Iowa Special Event (bus departs Torrance Marriott at 2:15 pm, Friday, Sept. 15)	$50		

I want to operate NI6BB station aboard the Iowa ☐

** Each meal has a special prize drawing exclusively for attendees

Each Adult paid Early Registrant receives one ticket for the Early Registration Prize drawing. All Adult paid registrants receive two free Prize Drawing tickets.

Total Amount Paid: _____

Cash ☐ Check ☐

Please send Registration Form and Check to:

HAMCON Inc.
c/o Margie Hoffman, KG6TBR
21612 Grovepark Dr.
Santa Clarita, CA 91350

For HAMCON staff use:
Registration received by:_____
Date received & registration #:_____
Amount received: $_____

Tell your friends and relatives about the PVARC's next Technician and General license classes at Hesse Park on November 4th and 11th

Two Free Amateur Radio Courses

FCC "Technician" course (entry level)
FCC "General" course (2nd level)
Each course is 2 sessions
The sessions will be on 4 and 11 November 2017
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 18 November 2017

At the start of the 4 November 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 no fee for either course.
Taking the FCC test is $15.

Optional Material (sold at cost)
Gordon West books with all the FCC test questions,
$22 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.