



QRO

MONTHLY NEWSLETTER OF THE PALOS VERDES AMATEUR RADIO CLUB

DECEMBER 2016

*The Palos Verdes Amateur Radio Club
Wishes Season's Greetings and
a Happy New Year To All*

Scenes from the PVARC's 2016 Holiday Dinner at Los Verdes Golf Course on December 10th



Over 60 PVARC members and guests attended this year's Holiday Dinner at Los Verdes Golf Course. The next several pages show additional views from our 2016 dinner. (The Holiday Dinner replaces a December club meeting at Hesse Park.)

Left: seen from the patio, getting ready for dinner attendees.

Below: meet and greet before the dinner.



More scenes from the PVARC's 2016 Holiday Dinner at Los Verdes Golf Course



Other scenes at PVARC's 2016 Holiday Dinner at Los Verdes Golf Course



PHOTOS: DIANA FEINBERG, AI6DF





Since its 2008 inception the Palos Verdes Amateur Radio Club's W6AM Rhombic Award has been presented to:

2016 – Mel Hughes, K6SY
 2015 – Joe Pace, NZ6L
 2014 – Walt Ordway, K1DFO
 2013 – Bob Closson, W6HIP
 2012 – Dale Hanks, N6NNW
 2011 – Bill Harper, WA6ESC
 2010 – Ginger Clark, KG6TAU;
 John Freeman, WW6WW;
 Karen Freeman, KG6BNN
 2009 – Homer Meek, K6HKT
 2008 – Dan Colburn, W6DC

Mel Hughes, K6SY, receives the PVARC's 2016 W6AM Rhombic Award for distinguished service

The PVARC had its genesis in 1975 at his home's kitchen table but at our 2016 Holiday Dinner Mel Hughes, K6SY, received the PVARC's W6AM Rhombic Award for exemplary service. Mel has served and supported the PVARC since that first meeting in 1975 to organize Rancho Palos Verdes ham operators. After our club's founding Mel became a City of Rancho Palos Verdes Planning Commissioner, was elected to the City Council, served as Mayor, and in later years became one of the initial members of the City's Emergency Preparedness Committee. During Mel's term on the Emergency Preparedness Committee the City's PVAN amateur radio organization was established and city funding obtained for building the RPV Emergency Communications Center. Mel is a Past President of the PVARC and also served many years on our Board of Directors. Mel continues serving as our K6PV repeater trustee and in early 2015 established an automatic 2-meter cross-band link into K6PV for use during our weekly club nets. Thank you, Mel....and congratulations. ■

Above and right:

Mel Hughes, K6SY, receives the 2016 W6AM Rhombic Award from PVARC President Diana Feinberg, AI6DF, at our 2016 Holiday Dinner.

This award is named after legendary DXer Don Wallace, W6AM (SK) whose Rancho Palos Verdes amateur radio station was known worldwide. A snippet of antenna wire from Don's massive rhombic antenna system adorns our W6AM award plaques.

PHOTOS:
 LAURA BEHENNA,
 KK6BFI



Amateur Radio Parity Act dies in U.S. Senate after opposition by one Senator from Florida

From the ARRL website:

ARRL Vows Continued Pursuit of the Amateur Radio Parity Act in the 115th Congress

12/09/2016

The Amateur Radio Parity Act, H.R. 1301, died an unbecoming death as the 114th Congress of the United States drew to a close today. After having passed the House of Representatives on a unanimous vote, the bill stalled in the Senate due to the intervention of only one member, Sen. Bill Nelson (D-FL).

Over the course of the past year, Sen. Nelson has received thousands of e-mails, letters, and phone calls from concerned constituents asking for his support of H.R. 1301. Numerous meetings were held with his senior staff in an effort to move the legislation forward. Negotiations, which led to an agreement with the national association of homeowner's associations and publicly supported by CAI and ARRL, were brushed aside by Sen. Nelson as irrelevant.

In a final meeting with the Senator's staff earlier this week, it became clear that no matter what was said or done, the Senator opposed the bill and refused to allow it to move forward. Unfortunately, as the bill did not receive floor time, the only manner in which it could get passed in the Senate would be through a process that required unanimous consent, which means no one opposes the bill.

The legislation will be reintroduced in both houses of Congress after the 115th Session begins in January. We have already been in contact with the sponsors of the bill to allow for an early introduction, which will give us more time to obtain success. We believe that we can get his bill adopted given the fact that we were inches away from crossing the goal line. We will continue to need the support of the membership, particularly in Florida, as we go forward through the next year. ■

QRO Editor's Note

The ARRL frequently mentioned passing the Amateur Radio Parity Act in the U.S. Senate would be more difficult than in the House of Representatives. That's because of the Senate's floor rules that give one or a few Senators room to significantly modify or delay any legislation.

Unlike the House of Representatives floor rules the Senate has no debate time limits and Senate amendments can be unrelated to the original bill. Additionally, the Senate allows filibuster (or threats of filibuster) to delay legislation and requires unanimous consent to bring stalled legislation to the Senate floor.

When the Amateur Radio Parity Act is re-introduced after the new Congress takes office in January 2017 the PVARC will again be asking our members to voice their support to California congressional members. -- *Diana Feinberg, AI6DF* ■

PVARC HF Enthusiasts Group explores new triplexer for Catalina use...and other topics...at December meet

The PVARC HF Enthusiasts Group held its monthly meeting on December 10 where attendees discussing projects or matters they were working on. Among the things mentioned,

- Jerry, NG6R, showed his HF triplexer using surplus low-pass filters (see right photo and article, next page).
- Malin, KO6MD, mentioned a WWII naval Morse key he is renovating.
- Kel, W6KCV, discussed using a Ubiquity WiFi router from Portuguese Bend to Two Harbors, Catalina, for internet access during our upcoming DXpedition.
- Jeff, K6JW, brought for sale some of his unneeded ham shack items.
- Bob, KE6JI, has a two-element HF tribander for sale (26' span)
- Clay, AB9A, has a programmable gate array project for an SDR counter like that of an Icom IC-7300.
- Ron, AC6RW, showed his homebrew HF rig.

The next HF Enthusiasts Group meeting is Saturday, January 14, 2017. ■



Above: Ron, AC6RW, examines HF triplexer developed by Jerry Kendrick, NG6R, for simultaneous 20-15-10-meter operations using three low-pass filters to enable hauling just one hexbeam antenna on our upcoming Catalina Island DXpedition.



Attending the December 10 HF Enthusiasts Group meeting were (clockwise from front, left photo): Ralph, AI6GP; Malin, KO6MD; Bob, KE6JI; Kelvin, W6KCV; Jeff, K6JW; Carlos, WD6Y. In right photo, (L-R), Jerry, NG6R; Clay, AB9A; and Rod, KK6CYU. Not shown, Ron, AC6RW, behind camera and Diana, AI6DF, who took pictures.

HF Triplexer for the PVARC's Catalina IOTA DXpedition

By Jerry Kendrick, NG6R

Catalina is only a couple of months away! As you know, the Palos Verdes Amateur Radio Club makes a yearly trek to activate Catalina Island as part of the Radio Society of Great Britain (RSGB) Islands-on-the-Air (IOTA) program. This island is given the designator NA-066, for the 66th identified island group in North America, the South Channel Islands group that includes Santa Catalina.

The half-dozen or so lucky Club members who travel to Catalina for the five days in February 2017 will enjoy "ham camp" at its finest. Picturesque island setting, camaraderie, good food, multiple HF ham stations operating simultaneously with sizable pile-ups of worldwide "IOTA chasers" day and night—who could ask for anything more?! **AND**, this year will mark a major turning point in operations, as described in this article.

In past years there was a need to set up multiple antennas—all in close proximity—to accommodate the (sometimes) three separate HF stations operating simultaneously. Cross-band interference is frequently an issue, even after the lengthy erection and setup of multiple antennas, at least one for each station.

Club member Ray N6HE is the de facto leader of the annual sojourn and the person most aware of the significant setup and operations effort involved. Ray began to muse about using a single antenna (like the 6-band NA4RR hex beam the Club owns) for potentially all of the stations to use simultaneously. What a great idea! But could it be done? Could two or three 100W transceivers all connect to a single antenna, with its single coaxial cable feed line, and not only not destroy each other's receivers, but also not even be detectable one by the other?

Ray had seen a June 2010 *QST* article by Gary K6KV describing an HF triplexer enabling simultaneous operation of 10m, 15m and 20m bands by up to three separate stations on a single antenna. K6KV

discussed the theory, built such a device, and tested it with success at ARRL Field Day. Ray's enthusiasm was infectious and we became increasingly interested in such a device's feasibility for our IOTA operation.

In the years following that *QST* article's publication, several commercial filter manufacturers began to offer improved versions of this concept. One such supplier is VA6AM. He will sell a 10m/15m/20m triplexer already built, tuned, productized in a nice enclosure, fully tested and ready for service in one's Field Day, DXpedition, contest or IOTA operation—any application where two or more transceivers need to operate in close proximity and would benefit from sharing an antenna. Or, he'll also supply just the bare unpopulated printed circuit board (PCB) [with a schematic, some photos and minimal instructions on the website] if you want to build up your own unit. We opted for that approach. He also cites where you can acquire the capacitors and inductor toroids that are needed to build up the triplexer.

Figure 1 below shows the parts that we accumulated for the buildup.

Continued on next page ►

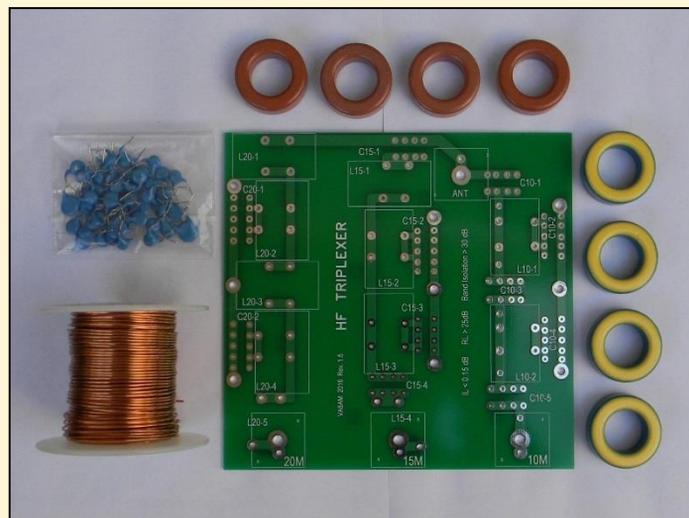


Figure 1. Parts assembled to begin construction of HF triplexer

HF Triplexer for the PVARC's Catalina IOTA DXpedition

► *Continued from previous page*

Figure 2 (right) shows the fully populated board during interim 15m channel characterization testing.

Recall that the objective of such a device is to allow a given desired band signal to pass with very little attenuation (insertion loss) and for signals in other adjacent bands to be highly attenuated (isolation performance). A spectrum analyzer or network analyzer is invaluable for measuring these parameters. We can see the attenuation performance of the 15m leg of this triplexer as a function of frequency in Figure 3, using the author's Rigol DSA815TG spectrum analyzer. Note that the center frequency in this graph is 20 MHz and the span is +/- 10 MHz, or 2 MHz per vertical division line.

You can see in Figure 3 that the 15m band of 21.0 MHz – 21.45 MHz has very little insertion loss (just a few tenths of a dB), whereas the 20m band of 14.0 MHz – 14.35 MHz (markers 1 and 2) has almost 30dB (three orders of magnitude) of attenuation at the band edges (even more for frequencies deeper into the notch). The 10m band (markers 3 and 4) also has more than 25dB of isolation from the 15m band.

While these isolation numbers are good, they aren't quite good enough to allow operation with only the triplexer. All the commercial triplexer manufacturers, as well as K6KV, the originator of the HF triplexer concept, warn about the need for band pass filters (BPFs) ahead of the triplexer. There will be three BPFs, one for each of the three bands 10m, 15m and 20m. There are several commercial manufacturers of these BPFs, including Dunestar, ICE and W3NQN-designed filters of Array Solutions. Instead, we opted to design and construct our own homemade BPFs for each of these three bands.

These homemade BPFs have two key features:

1. They were designed using a free on-line software program called ELSIE. (This is a play on words, as L is the electrical symbol for

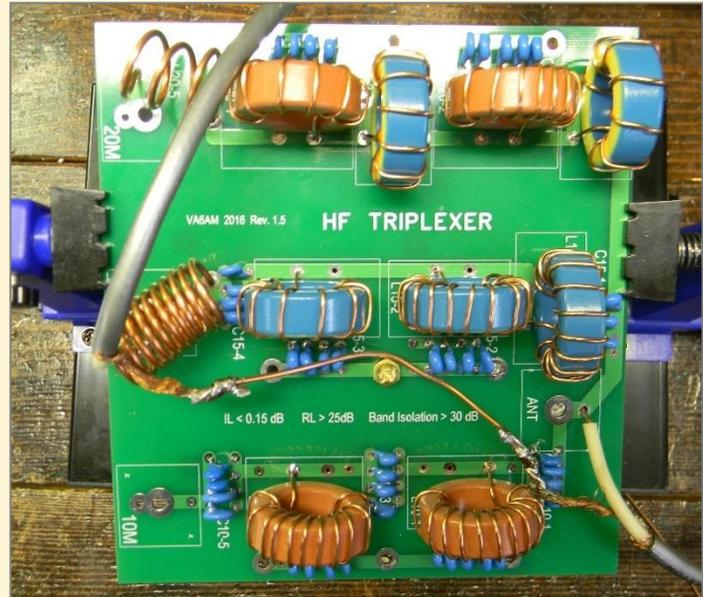


Figure 2. Fully assembled triplexer PCB undergoing 15m channel inductor tuning and characterization testing

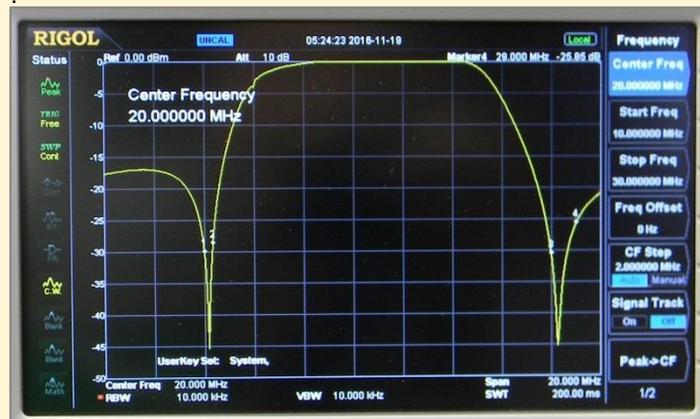


Figure 3. Triplexer 15m channel characterization test result; note deep notches at 20m and 10m, carefully tuned by adjusting wire turn spacing on appropriate inductor toroids

inductance and C is the symbol for capacitance.) So, appropriate arrangement of L's and C's is the basis for filter design, and...

2. All the BPFs were constructed with a common physical form factor by completely gutting discarded low pass filters (LPFs), once common in most ham shacks for TV interference reduction, back when analog television was still active. (With the conversion to digital TV several years ago, these once-ubiquitous LPFs are now

Continued on next page ►

HF Triplexer for the PVARC's Catalina IOTA DXpedition

► *Continued from previous page*

dust collectors probably relegated to a box in the garage attic.) Thanks to Malin KO6MD, John N6AX, Gary WA6MEM, Jeff K6JW and Ray N6HE for heeding our general call for these units and contributing to the cause.

As an example, Figure 4 shows the internal configuration of one of the homemade BPFs, this one for 15m. ELSIE enabled the author to try out various design approaches and configurations of L's and C's to meet the objective of low insertion loss at 15m and good isolation performance at adjacent bands. An on-line inductance calculator that considers coil diameter, number of turns and coil length enabled construction of the air gap inductors, based on inductance values (in nano-henries) determined using ELSIE. High voltage (3kV or higher) disc capacitors of various values are readily available from multiple sources on-line.

Figure 5 (right) shows the performance for this 15m BPF.

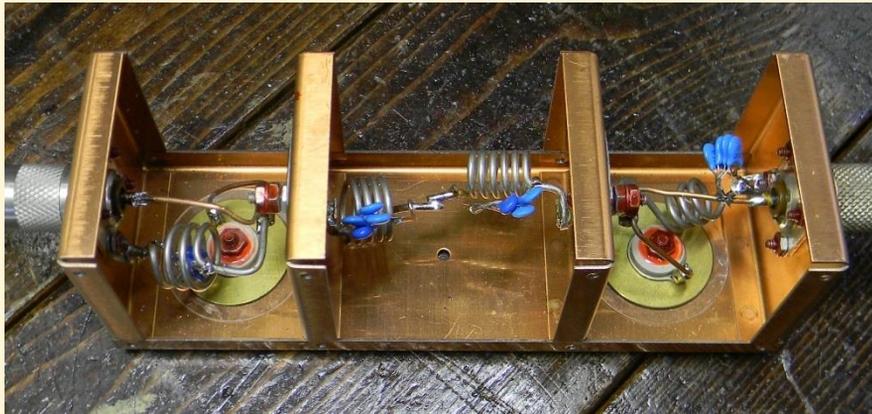
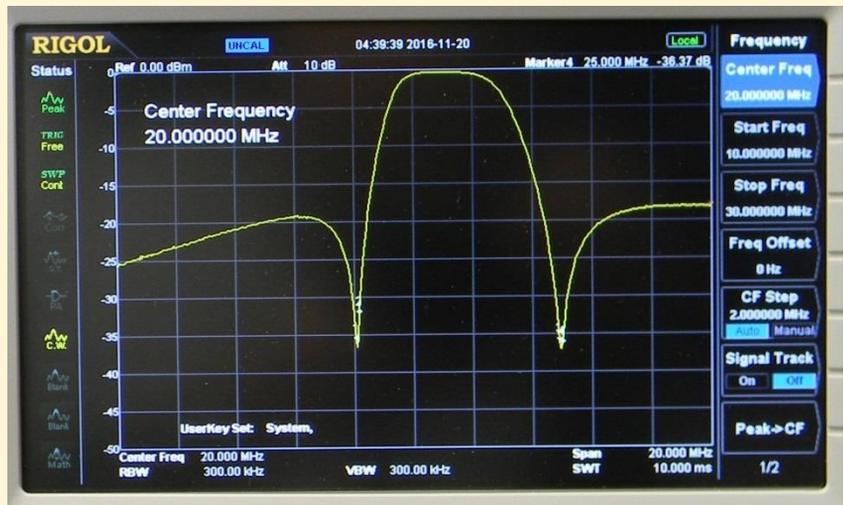


Figure 4 (above). 15m BPF constructed inside gutted TV interference LPF; each triplexer leg (10m, 15m and 20m) will have its own uniquely configured companion BPF. Figure 5 (below). 15m BPF characterization test result; note deep notches at 17m and 12m; also note >20dB isolation at 20m.



Note that the 15m BPF, just like the 15m leg of the triplexer that follows it, has very good insertion loss. For adjacent bands, we opted to place "notches" at 17m (18.068-18.168MHz) and 12m (24.89-24.99MHz), should we also operate those bands using other antennas in close proximity. Referring back to Figure 3, we can see that the 30dB of isolation at 20m in the triplexer, added to the 20dB+ of isolation at 20m in the BPF, combine to provide about 50dB of overall isolation of 20m from the 15m user. This was our goal, to provide about 50dB or more of isolation of all three bands going through the triplexer to the common antenna. That 50dB of isolation not only prevents receiver damage in a connected transceiver on one band due to transmission from a different connected transceiver on another band, but it actually prevents each transceiver from even sensing the other's presence.

All that remains is to complete the packaging of the BPFs, productize the triplexer by securing the populated PCB into a metal enclosure, and of course conduct final integrated testing of the triplexer box with its companion BPFs. Final integrated testing is critically important and is scheduled for late December or early January 2017. Some skepticism still persists that we'll actually be able to hook up three 100W transceivers to a single antenna and securely operate each one as if it's totally isolated and dedicated to its own individual antenna. The convincing proof will emerge during this final test phase. If (When!) this works, HF operations at Catalina IOTA will never be the same again. ■

PVARC communicates at Palos Verdes 1/2 Marathon

A PVARC operator team provided auxiliary communication at the 2016 Lexus LaceUp Palos Verdes Half Marathon on November 19 with a changed route and event organizer needs.

Volunteering to operate at our designated locations were (in no particular order): Chris Storey, KA6WNK; Bob Millard, KE6JI; Ken Carr, K6HRN; Walt Ordway, K1DFO; Bob Closson, W6HIP; Steve Collins, KI6TEQ; Malin Dollinger, KO6MD; Dale Hanks, N6NNW; Gary Lopes, WA6MEM (technical support); Herb Stark, KO6RC; Marty Dodell, KF6VSY; Ray Day, N6HE; and Bob Sylvest, AB6SY. Mike Semos, N6DBS, also was part of the operator team.

The current Palos Verdes Half-Marathon is operated by a professional race management firm that heavily uses cellphones and rented Part 90 commercial radios at their events. Amateur radio's role (and that of some other volunteers) has changed somewhat but we are still glad to provide public service for events such as this. ■

18 new licenses earned at latest PVARC test session

The PVARC's Volunteer Examiner test session also held on November 19 concurrently with the Palos Verdes Half Marathon resulted in 18 new amateur radio licenses.

This Hesse Park session had 19 test-takers who earned 13 Technician licenses, four General licenses, and one Extra Class license.

Jerry Shaw, KI6RRD, served as lead Volunteer Examiner with fellow VE's Ray Day, N6HE; Curtis Jones, AE6CJ; Matt Cruse, N6MDC; and Dan Colburn, W6DC. Dave Scholler, KG6BPH, coordinated arrangements for the test session which followed Walt Ordway's, K1DFO, most recent classes. Walt's next classes are Feb. 4 and 11 with a VE test session on Feb. 18. ■

◆ 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	Laura Behenna, KK6BFI
Treasurer	Bob Sylvest, AB6SY
Secretary	Ron Wagner, AC6RW
Directors	Clay Davis, AB9A, Ray Day, N6HE

Appointed Offices:

QRO Editor	Diana Feinberg, AI6DF
Webmaster	John Freeman, WW6WW
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: 310-544-2917, ai6df@arrl.net
Webmaster: 310-541-6971, jfree@cox.net

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:

Third Wednesday (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:

Karen Freeman, KG6BNN, 310-541-6971

To order a Club jacket or patch:

Dave Scholler, KG6BPH, 310-373-8166

QRO is published monthly by the Palos Verdes Amateur Radio Club, ©2016 all rights reserved. For permission to reprint please contact PVARC at: k6pv@arrl.net

Front page photo — *The Pt. Vicente Lighthouse shows its holiday spirit in this December 2013 photo.*

PHOTO: DIANA FEINBERG, AI6DF

PVARC Short News Items

The PVARC's upcoming meeting topics...and beyond

At our January 2017 monthly meeting **QRO** Editor Diana Feinberg, AI6DF, is presenting "Recent and Upcoming Developments in the 220 MHz Amateur Band." This presentation covers not only the unique history of this amateur band but a plethora of new 220 ham equipment that became available during the past four years—and a new threat this band faces.

The PVARC's February 2017 meeting will be another always-popular "Show Us Your Shack" program. Four or five PVARC members will briefly present what their ham shack looks like or a radio-related project they recently worked on. How about you? If you would like to describe your radio operation or project please advise our Vice President Laura Behenna, KK6BFI, at lbehenna@att.net

At our March 2017 meeting Ray Day, N6HE, will report on the PVARC's February 22-26, 2017, Islands on the Air DXpedition to Catalina Island. ■

PVARC Webmaster needed. How about you?

Our long-serving Webmaster John Freeman, WW6WW, announced his intention to turn the Webmaster role to another PVARC member. John has done an excellent job maintaining our website over the years, including transitioning it last Fall to another web-hosting service, and he is glad to work with anyone succeeding him. Thank you, John—we've really appreciated all your work.

How about you? The PVARC needs a member to maintain our website, which doesn't have the complex requirements of other sites (i.e., we have no e-commerce needs, no blogs or chat rooms due to insurance issues, etc.) We do post news items about the PVARC, updated club rosters, projects, and monthly **QRO** newsletter issues. Please advise Diana, AI6DF, at ai6df@arrl.net if you are interested in serving as PVARC Webmaster. If you have any questions about what's involved with our website feel free to contact John Freeman, WW6WW, at jrfree@cox.net. ■



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: jdavidsscholler@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. ■

PVARC News Items

Planning for Feb. 2017 IOTA DXpedition continues

The PVARC's next mini-DXpedition to Two Harbors on Catalina Island happens during February 22-26, 2017. Next year's Islands on the Air DXpedition to Catalina returns to the same week of the year when most of our previous trips occurred.

K6PV/6 DXpedition team leader Ray Day, N6HE, has made all arrangements with the Catalina Island Company for our cabins at Two Harbors and our operator team is now almost finalized.

As mentioned elsewhere in this **QRO** issue the team hopes to assemble only one hexbeam antenna on Catalina and use a triplexer for multiple band operation simultaneously with one antenna. Our HF transceivers on Catalina are expected to be an Icom IC-7300, a Kenwood TS-590S, and an Elecraft KX-3 with amplifier.

By returning our DXpedition to February's last full weekend our operator team can participate again in the frenzied North American RTTY QSO Party and the challenging CQ Worldwide 160-meter SSB contest from Two Harbors. ■

Helpful guidelines when submitting QRO articles

Our **QRO** newsletter welcomes articles about technical subjects and PVARC members' amateur radio activities of interest to fellow club members.

To facilitate layout and editing using the software that produces **QRO** 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 2015-2016

JOHN CASHEN, W5UG
(RETURNING MEMBER)

INGO WERK, KK6EWB

TOM BUDAR, K6RPV

JONATHAN GREEN, KK6VWK

SAEHUI HWANG, KM6BCO

MARK CHILDIR, KM6BCL

DALE GEHR, KM6BCI

ROMYLEEN MITRA, KM6BCJ

NICHOLAS KOWALCZYK, KM6BCN

ANNETTE SOLOMON, KM6DRA

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, KM6GYK

THOMAS ESSENPREIS, KB9ENS

MARK GREENBERG, KM6GYC

LORI TANIMURA, KM6GXY

CHERI TANIMURA, KM6GXX

Palos Verdes Amateur Radio Club

2016 Calendar

2016 Major Contest Dates

■ ARRL ■ CQ Magazine and Other

- Jan. 29-31: CQ Worldwide 160-Meter (CW)
- Jan. 31-Feb 2: ARRL January VHF Sweepstakes
- Feb. 12-14: CQ Worldwide RTTY WPX
- Feb. 19-21: ARRL DX (CW)
- Feb. 27: North American RTTY QSO Party
- Feb. 26-28: CQ Worldwide 160-Meter (SSB)
- Mar. 4-6: ARRL DX (SSB)
- Mar. 25-27: CQ Worldwide SSB WPX
- May 27-29: CQ Worldwide CW WPX
- Jun. 11-12: ARRL June VHF Contest
- Jun. 22-26: ARRL Field Day
- July 9-10: IARU World Championships
- July 16-17: CQ Worldwide VHF
- July 16: North American RTTY QSO Party
- Aug. 6-7: ARRL UHF Contest
- Sept. 10-11: ARRL September VHF Contest
- Sept. 23-25: CQ Worldwide RTTY DX
- Oct. 1-2: California QSO Party
- Oct. 28-30: CQ Worldwide SSB DX
- Nov. 5-6: ARRL Sweepstakes (CW)
- Nov. 19-20: ARRL Sweepstakes (SSB)
- Nov. 25-27: CQ Worldwide CW DX
- Dec. 9-11: ARRL 10-Meter Contest

January						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

February						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29				
30	31					

March						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

May						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

June						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

July						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

August						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

October						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

November						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

December						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

PVARC Meetings & Meals

Meetings 7:30 pm **3rd Wednesdays** except August and December at Fred Hesse Park, 29301 Hawthorne Blvd., Rancho Palos Verdes. Guests welcome.

A no-host dinner at 5:30 pm before club meetings is held at the Red Onion Restaurant, 736 Silver Spur Road, Rolling Hills Estates.

2nd Saturday each month, 10 am: PVARC "HF Enthusiasts Group", location to be announced each month.

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

December 8: Holiday dinner, Los Verdes Golf Course, Rancho Palos Verdes.

PVARC Public Service Events

- Apr. 24:** Ridgecrest Int. School 5K
- Aug. 13:** Rolling Hills Estates "Hills Are Alive" 5K/10K
- Sept. 5:** "Conquer the Bridge" Race
- Sept. 24:** RAT Beach Bike Tour
- Nov. 19:** P.V. Half-Marathon/10K

Major Ham Radio Conventions

- Feb. 19-20:** ARRL SW Div. & Yuma Hamfest, Yuma, AZ
- March 12:** Palm Springs Hamfest
- Apr. 15-17:** International DX Convention, Visalia, CA
- Apr. 29-May 1:** ARRL Nevada Convention, Las Vegas, NV
- May 20-22:** Dayton HamVention
- Oct. 14-16:** Pacificon, Santa Clara, CA

PVARC HF Operating Events

- April 27- May 1:** Islands On The Air DXpedition, Catalina Island;
- June 25-26:** ARRL Field Day;
- Aug. 19-21:** Intl. Lighthouse Weekend, Pt. Vicente Lighthouse (cancelled)

PVARC Ham License Classes

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

Feb. 20 & 27; June 4 & 11; Aug. 27 & Sept. 10; additional dates to be announced.

Palos Verdes Amateur Radio Club Calendar 2017

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	29	30	31	1	2	3	4	26	27	28	1	2	3	4	26	27	28	29	30	31	1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31	1	2	3	4	26	27	28	1	2	3	4	26	27	28	29	30	31	1	23	24	25	26	27	28	29
5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8	30	1	2	3	4	5	6

MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
30	1	2	3	4	5	6	28	29	30	31	1	2	3	25	26	27	28	29	30	1	30	31	1	2	3	4	5
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
28	29	30	31	1	2	3	25	26	27	28	29	30	1	23	24	25	26	27	28	29	27	28	29	30	31	1	2
4	5	6	7	8	9	10	2	3	4	5	6	7	8	30	31	1	2	3	4	5	3	4	5	6	7	8	9

SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
27	28	29	30	31	1	2	1	2	3	4	5	6	7	29	30	31	1	2	3	4	26	27	28	29	30	1	2
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
24	25	26	27	28	29	30	29	30	31	1	2	3	4	26	27	28	29	30	1	2	24	25	26	27	28	29	30
1	2	3	4	5	6	7	5	6	7	8	9	10	11	3	4	5	6	7	8	9	31	1	2	3	4	5	6

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 **3rd Wednesdays** except August and December at Fred Hesse Park, 29301 Hawthorne Blvd., Rancho Palos Verdes. Guests welcome.

A 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 6: Holiday dinner, TBD.

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
- Sept. 23:** RAT Beach Bike Tour
- Nov. 18:** P.V. Half-Marathon/10K

Major Ham Radio Conventions

- Feb. 4:** Palm Springs Hamfest
- Feb. 17-18:** Yuma Hamfest, Yuma, AZ
- Apr. 14-16:** 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; additional dates to be announced.

QST QST QST QST

HAMCON 2017 LOGO DESIGN CONTEST

Sharpen your colored pencils, put new points on your favorite crayons, hone your computer graphic skills, clean your watercolor brushes

Members of the 12 Clubs Participating in the Convention Organization are Eligible to Enter ONE or MORE Logo Designs.

Winner Will Receive Acknowledgement, Free Admission to Convention & Saturday Banquet Dinner Ticket

Logo Contest Rules:

1. Design must include the ARRL Logo (download from ARRL web site).
2. Convey Convention Theme "Radio for Everyone". (DXer, Emergency Communications, Microwave or Repeater Enthusiast, Experimenter, Antenna Designs etc.).
3. **ANY** shape is OK! (round, square, triangle, irregular).
4. Limit design to 6 colors (black and white are colors).
5. Avoid fine detail (design will be used on convention pin 1.5" dia. or 1.5" height & width max).
6. Use only "sans serif" fonts (Arial, Calibri, Helvetica, etc.).
7. All entries must be submitted on 8-1/2" X 11" white paper as an E-mail attachment.
8. All entries will become the property of HAMCON 2017 and can be used at the discretion of the Convention Planning Committee.
9. Deadline for ALL entries is December 15, 2016.

Submit design to Convention Secretary, Brad Rachielles, as an E-mail attachment to: **bradrachielles@dslextreme.com**



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: _____

Tell your friends and relatives about the PVARC's upcoming Technician and General license classes



Whether for emergency communication, communicating around the world, or learning a bit about electronics, there's nothing else like amateur radio (also known as "ham radio"). Amateur radio operators have long provided the communication "when all else fails" during disasters. Please tell your friends and relatives that with a short course, they can join the over 710,000 men, women, and children in the United States from all walks of life who are licensed to operate ham radios.

Two Free Amateur Radio Courses

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

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

Each course is 2 sessions

The next sessions are on 4 February and 11 February, 2017

Technician 9:30 AM to 1:45 PM both Saturdays

General 2:00 PM to 5:00 PM both Saturdays

FCC tests will be 10:00 AM to Noon on Saturday, February 18, 2017.

The Palos Verdes Amateur Radio Club will make a brief presentation at 9:30 AM at the start of the 4 February Technician class on how to get further involved with amateur radio.

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

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

No fee for either course; taking the FCC Test is \$15. Optional Material (sold at cost):

- Gordon West book with all the FCC test questions,

\$22 for the Technician, \$26 for the General;

- Copy of PowerPoint charts: \$20 for the Technician, \$20 for the General.

For courses sponsored by the Palos Verdes Amateur Radio Club, students thru grade 12 who also pass their examination at a PVARC 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 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.

For more information contact Walt, K1DFO, at waltordway@juno.com

2017 Arizona Section Convention

Yuma Hamfest

Yuma, Arizona

Feb. 17 & 18, 2017



Yuma County Fairgrounds
2520 East 32nd Street, Yuma, Arizona

www.yumahamfest.org

Check the Website for Additional Information

<p>Gates Open for Camping Thursday, 2 pm Vendor Setup Friday, 7 am - Noon</p>	<p>Event Hours Friday, Noon - 5 pm Saturday, 8 am - 5 pm</p>	<p>Hamfest Dinner & Grand Prize Drawing Saturday Night 6:00 - 8:00 pm</p>
---	--	---

Vendors & Exhibitors
Consignment Sales
License Testing
Hourly Door Prizes
On-site RV Camping
Hamfest Dinner
ARRL Speaker
Transmitter Hunt
\$5.00 Admission

Tailgating (Swap Meet)
Full Seminar Schedule
DXCC Card Checking
Incredible Grand Prizes
Emergency Preparedness
Admission Prize
Hospitality Area
Near Space Balloon Launch
Antenna Clinic

Hamfest Talk-In Frequency: 146.780 (-) PL 103.5 Hz

Email Contact: info@yumahamfest.org



We are proud to have the Amateur Radio Council of Arizona (ARCA) as a sponsor of our event.

The Yuma Hamfest is an American Radio Relay League (ARRL) sanctioned event.



Presented by the Yuma Amateur Radio Hamfest Organization