Palos Verdes Amateur Radio Club

K6PV

PVARC Meets Every third Wednesday at 7:30 p.m,
Hesse Park, Hawthorne Blvd., Rancho Palos Verdes

Last June, Eric Swartz, WA6HHQ, President of Elecraft showed us the K3. Before the talk was over, Jeff Wolf had decided to buy one of his own. It took him a bit longer to build it. Come see how he did it.

Visit Our Web Site

K6PV

www.palosverdes.com/pvarc

The President Paces Himself

Joe Pace, NZ6L

Over the fall equipment-hunting season, I stopped by our local TRW swap-meet high up in the city of Redondo Beach and found a note from one of my favorite ham buddies, John, that read, "Tracking wounded ceramic resistor. Saw no Collins amplifiers. No wallet damage. Cleaned out traps. Swept shack." This communication was a model of literary economy and, from his point of view, a perfect description of recent activities.

To a flatlander, Gerald's nonchalant attitude toward tracking a good deal on a ceramic resistor might be startling, but to a ham, this note was not a surprise. Life is simply a matter of what one is used to.

And as we are fortunate to experience, we share a hobby wrought with the finest marriage of innovation, equipment, and camaraderie there is.

Descending from hunter-gatherers, the gain of a few healthy one ohm ceramic resistors made me proud and welcomed in my tribe, but most importantly reminded me that I am part of a tribe, the worldwide amateur radio community.

We, in the amateur radio community are truly members of a tribe, not just in the informal sense.

We organize ourselves in a multitude of sociopolitical organizations consisting of a number of families, clans, or other groups who share a common interest and culture and among whom leadership is typically neither formalized nor permanent.

We number over six hundred and sixty thousand in the United States of America, and over six million in the world.

We have a natural tendency to think globally, and act locally.

We help our neighbors, whether they are on the other side of the hill, or the other side of the planet.

The PVARC continues to support our local communities and our members reach out to the world-wide community throughout the year with their involvement in communications support and expeditions furthering amateur radio.

We've got a fabulous year of events ahead, beginning with the PVARC IOTA expedition this month, followed by the PV Marathon, Field Day, RHE 5/10K, Lighthouse Weekend, and more.

Thank you all very much for your personal contributions and participation in the PVARC and for your contributions to our society. We have a wonderful year ahead of us!

Ham Radio Cruise

Information from Walt,K1DFO

Departs Ft Lauderdale - February 27

Returns March 7

Information about the cruise can be found on page one of the PVARC web site: http://www.palosverdes.com/pvarc/

Then contact the Ham in charge of this cruise,.Vernon Fix, W4THN, w4thn@arrl.net

He'll put you in touch with the travel agent who is in charge of booking the hams for the cruise. She can also arrange for a hotel room for the night before the cruise departs.

Walt says he will be going as will a couple of County Hunter hams he knows.

de the VP

Knut J. Myhre, N6BNP

As I sit down to write a few words for the QRO for the last time as the Club VP, I'd like to make some reflections about the last year. Being on the board for the Club helps one understand many aspects of the operation of the Club; problems and how they are solved, planning different events and, naturally, the economy. I got into the VP position as a "greenhorn rookie", but was able to do my job because of other member's willingness to assist me. For all the help and encouragement, I am grateful and want say THANK YOU! We are fortunate to have a diverse membership with talents and knowledge in different interests. I would encourage everyone to volunteer--especially our younger members, in order to learn how the Club operates.

As most of you have experienced over the last couple of years the conds on the bands have really been bad with very few openings for DX. Well, that seems now at last to be slowly changing. Almost every day we can see reports of sunspots occurring and actually DX openings happening more frequently. I have, however, been very impatient waiting and thought there must be some other radio amateur daily activity that can fill the void. Some time back I figured the radio amateur satellite operations could not be that dependent on the sunspots. Through many trials and errors I got together something that actually was not depleting the bank account, but was fun and exciting.

The problem was really to keep the satellite antennas in place through strong wind, rain - what else is new? - and at the same time keep peace with my neighborhood. Then, I read an article in the AMSAT Journal about someone who operated some of the low flying satellites only with his 5-watt hand held and a small hand held antenna. Here was something I could try.

I downloaded and installed a satellite-finding program from AMSAT (it is free) studied this program and found it would not be too difficult to try to catch one of these birds. After some trial and error where I gained experience, I was finally able one day to hear qso's on one satellite. Very exciting indeed.

I learned how to tune my handheld taking into account the Doppler shift on the received frequency as the bird passes overhead. I pushed the send button and made my appearance known - this is on FM - and lo and behold, I got a call from Ron, W6ZQ, in Arizona. This was on the AO-27 satellite and Ron gave me a good report. Guess, who got excited?

This was fun and I have since made a number of qso's on the AO-27 and the AO-51, just with my hand held VX-7 and a small dual-band yagi, also hand held. The action on the birds is usually fast so you don't have much time available. The satellite is in a low flying orbit and the footprint on the globe gives you about 10 to 15 minutes for a few qso's on every pass. It is fun, you meet a very friendly crowd, and it's some thing you can easily try.

Our next Club meeting will be on February 17, and the program will be Jeff, K6JW, telling us with photos and video, how he successfully put his K3 transceiver together. Jeff is a master at putting radios and associated equipment together, and it will be interesting to hear how he did it. I put my K3 kit together also, so I'm looking forward to this and hope to see you all at the meeting.

Getting Ready For Another Great IOTA!
Ray Day, N6HE

As you know if you saw my presentation to the Club on "Getting Started in Digital Communications," I've been having fun "going digital."

The latest: I got a W3YY opto-isolated interface (see http://www.w3yy.com/fsk.htm) for CW and RTTY - to connect a computer (desktop or laptop) with CW- and/or RTTY-generation capability properly to a HF Transceiver. The unit comes in kit version or fully assembled. W3YY provides detailed a connection (only 4 connections - all external) diagram for many rigs (yours is probably on the list - mine was) and you can read peer reviews of it at http://www.eham.net/reviews/detail/8519 . Uses your computer's Serial (COM) port; if you have a laptop and/or fairly new computer (without a serial port), there is an optional (this is what I use for the laptop) USB-Serial adapter cable that works great (the hookup to a USB port was easy and worked perfectly - this is unusual...most I've tried in the past were very quirky). So I've moved from the AFSK (quick and easy) to pure FSK (technically more direct) in RTTY. Life is good!

Computer interfacing is becoming more and more a part of amateur radio - but I really like RTTY and this forced me to start my learning of how software/computers and radios talk to each other. My CW memory keyer now even connects to my computer through a USB port - I can program the memories by connecting the keyer (a HamGadgets' MK-1 - see www.hamgadgets.com/store/product_info.php?products_id=106) and typing the messages on the computer keyboard, then *poof* they're loaded into keyer message memories (30 memories). The darn thing even is flash-upgradable! Life is good even more!

And there's a GREAT Get-started-on-RTTY resource at www.aa5au.com/rtty <http://www.aa5au.com/rtty> - all you need to know. If this (interfacing or RTTY or PSK31) interests you and you have questions you'd like answered, I invite you to call me or email me with the contact info in the club roster.

The reason for the CW/RTTY interfacing with my laptop was to prepare for our Palos Verdes Amateur Radio Club trip over to *Catalina Island* (Two Harbors) *Feb. 24 - 28* to activate Santa Catalina for the RSGB IOTA (Islands On The Air) program. Catalina is in the NA-066 island group. I wanted to have a portable PSK31-CW-RTTY-laptop station both to have fun with and to introduce others to these modes. So now we're ready to go. This means that we'll have one SSB station and one PSK31-RTTY-CW station on the air simultaneously, so whatever you like, it'll be there for you. IT'S NOT TOO LATE TO SIGN UP FOR THIS FUN EVENT - call or email me and I'll brief you on the plans and arrangements.

Everyone (Old-Timer or Newbie) is invited...the hamming is fun, goofing around with other hams is fun, and hiking/exploring is available, too. You might even get to say HI to a buffalo or two (at the proper distance, of course). 73,Ray, N6HE

February 24 to the 28, 2010

The Date's Set And We're Going Back!
To Two Harbors, Catalina

February 24 to the 28, 2010
(Wednesday through Sunday

for Another IOTA (Islands On The Air)

If you missed the other three IOTAs, you have yet another chance to 'rough' it with us.

Plan is same as last year – 2 stations, probably 1 SSB and 1 CW...but we'll go with the flow

Check your calendars and then
Contact Ray Day,N6HE, to let him know you're interested, at: rayday@cox.net

Could use an operator or two on Sunday, March 21st

Ridgecrest Middle School 5K

It starts and ends at Ernie Howlett Park on Hawthorne Blvd. The run is totally on horse trails. We will have radio operators at several locations. walt.ordway@yahoo.com

L.A. Marathon - the new route will go from Dodger Stadium to the Santa Monica Pier, and will include Beverly Hills, Hollywood, and major studios.Registration is on-lineat:**http://www.doitsports.com/volu**

From Bryant Winchell, W2RGG:

Space Weather News for Feb. 8, 2010

BIG SUNSPOT: The sudden emergence of big sunspot 1045 over the weekend has caused a sharp uptick in solar activity. The active region has produced three M-class and almost a dozen C-class solar flares since it appeared on Saturday. The strongest blast, an M6-class eruption on Feb. 7th, may havehurled a coronal mass ejection toward Earth. High-latitude sky watchers should be alert for auroras in the nights ahead as a result of this activity. Also, ham radio operators are picking up strong solar radio bursts using shortwave receivers. Sample sounds and images may be found at http://spaceweather.com.

Treasurer's Report

Bill Harper

February 2009

PVARC Balance	$2,704.22
John Alexander Fund:	$1,033.00
Repeater Fund:	$1,105.66
Total Bank Balance	$4,842.88
Special Fund (included in PVARC Balance)	$ 156.52
Membership 2009	129
Renewals 2010	64

Member's Corner

Mark Your 2010 Calendar

March 21	Ridgecrest School 5K
April 24, May 1	Tech Course
May 1	P. V. Loop Trail Relay
May 15	PV Marathon
August 14	R. H. E. 5K/10K
September 19	Concours d'Elegance

Board of Directors

President	Joe Pace, NZ6L
Vice President	Knut Myhre, N6BNP
Treasurer	Bill Harper, WA6ESC
Secretary	Bill Leighton, KG6WVF
Past President	Ginger Clark, KG6TAU
Director (1)	Mel Hughes, K6SY
Director (2)	Jeff Wolf, K6JW

Appointed Offices

QRO Editor	Ginger Clark, KG6TAU
Asst to Editor	Paige Omoto, KI6MAH
QRO Proofreader	Rick Murray, K6WXA
Web Page Editor	John Freeman, WW6WW
Club Librarian	Bryant Winchell,W2RGG
VE Coordinator	Dave Scholler,KG6BPH
VE Liason	Diana Feinberg AI6DF
LAACARC Rep	Joe Locascio, K5KT

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WebMaster	310-541-6971

Need a Club Badge?

Karen Freeman, KG6BNN

310-541-6971

Need a Club Patch?

Or a Club Jacket?

Dave Scholler, KG6BPH

310-373-3816

Antenna Tuning with the Yaesu FT-857D

Another Informative Article from the Intrepid K6JW

Jeff Wolf, K6JW

The Yaesu FT-857/897 series of HF/VHF/UHF transceivers enjoys great popularity among both entry level and experienced hams. Newer hams find these radios both affordable and loaded with enough features to make them highly usable, while more experienced amateurs, usually after adding one or more advanced options, have enjoyed them for mobile, portable, and even light DXpedition operations. Although not high end units, their performance "for what they are" is solid and reliable, and so they've understandably earned their enthusiastic following.

The 857 and 897 (current models being the 857D and 897D) are identical in their important RF circuitry but, in certain other respects, each is optimized for a particular purpose. The 857D is very compact – only a little larger than many mobile vhf/uhf transceivers, and it has a detachable front panel, making it easier to install in modern vehicles that long ago filled in the formerly available, under-dash space we old-timers used to use for our mobile rigs. The 897D is larger – but not very large – and is targeted for base station or portable use. Its larger size allows it to accommodate internally placed batteries or an accessory switching power supply that can replace the lower cabinet cover, and a matching bolt-to-the-side automatic antenna tuner made by Yaesu or, as an aftermarket unit, made by LDG Electronics. These tuners can also be used with the 857D, although they can't be directly attached to the smaller radio.

Recently, I wanted to prepare my FT-857D for portable and DXpedition use. In thinking through how to configure the various elements of the setup, I came up against an inconvenient quirk in the radio's design. (K6JW's First Immutable Law of Transceivers: All of them have quirks.) It turns out that there is no front panel pushbutton that places the radio into transmit mode with generation of a low power (CW) carrier for antenna tuning. Yes, the radio can be switched into a tuning mode for screwdriver type mobile antennas such as the Yaesu ATAS system but, say, for using a manual or automatic tuner hooked to a dipole, the only way the stock radio can generate the necessary carrier is to change the mode to CW, go into the menu system to drop power (who wants to tune at 100 watts?), and then hold key down. Finally, after tuning, whether with an automatic or manual tuner, one has to readjust power to the desired level. Ugh! Can't this be done with one button or switch?

Well, yes, it can.

There's an outfit called "The Better RF Company" that makes a $45 gizmo that plugs into the CAT/Linear socket on the back of the 857D/897D that sort of does it. Yes, it allows a low power carrier to be generated but, oops, it still requires the operator to go into the menu, dial up the "Tune" function, and only then push a button. Still too cumbersome in my view, and who wants to spend that kind of money for what should be a simple task? Not me, so I began to do a little research.

Some years back, I owned an ICOM IC-706MKII, another small transceiver designed for portable and mobile use. At the same time, I bought a kit from LDG Electronics for an automatic antenna tuner (AT-

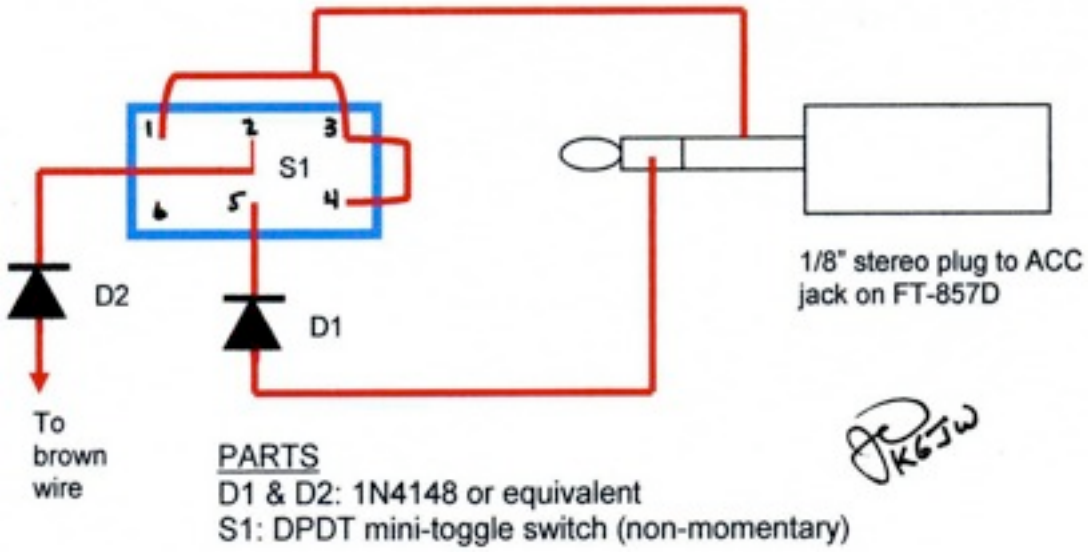
11MP) that included a feature allowing it to interface specifically with the ICOM radio for one button auto tuning with a steady carrier being generated by the radio. I e-mailed LDG to ask whether the tuner could be adapted for the 857D and received the rather curt reply that, no, it couldn't. Period. Well, them there was fightin' words for this ol' ham, and suddenly I got really motivated to come up with a solution.

So, I took every guy's course of last resort: I read the 857D's instruction manual. That's when I discovered pages 32 and 33. On page 32, I learned about the little brown wire in the power cord pigtail the back of the radio. Sure enough, that brown wire, when grounded, resets the radio from whatever the menu-set output power may be to 20 watts. (The purpose of the wire is to reduce output power when an external battery source is used to run the radio.) Then, page 33 told me that grounding the ring terminal of the 1/8" stereo accessory socket on the rear panel will put the radio into transmit mode with generation of a steady CW carrier. Bingo!

A little internet searching turned up some suggestions for setting up the circuit safely, and so, for about 40 cents worth of diodes, a couple of phono plugs and panel jacks, a DPDT on-off-on (non-momentary) mini-toggle switch, some hookup wire, and an unused project enclosure from my junk box, I put together the definitive, one-switch solution that allows me to trigger auto tuning with my old AT-11MP tuner. (take *that*, LDG!)

The little circuit actually does two separate things. First, when the switch is thrown from the off position to the tune position, the radio transmits a 20 watt carrier, allowing the auto tuner to do its thing. Of course, a manual tuner would work just as well. The issue here is the carrier generation, not the type of tuner you're using. Second, throwing the switch to the 20 watt position does not put the radio into transmit but does set the radio to its low (20 watt) power mode. This feature is optional, and you can leave it out if you don't feel the need for it. (Use an SPST on-off switch (momentary if you prefer) instead of the DPDT switch if you don't want the low power option.)

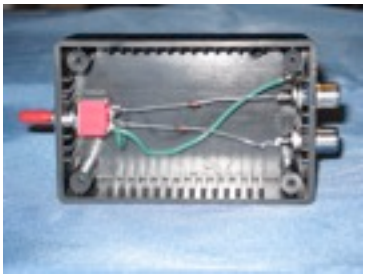
So, in semi-schematic, pictorial fashion to make it easier for inexperienced builders to grasp, here's the circuit:



And, of course, the finished product:

Front view

Rear view



Bottom cover removed to show the "guts"

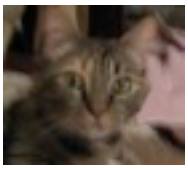
You may be wondering about those two diodes in the circuit. Their purpose is to isolate the transmit enable and power reduction circuits from one another. They operate at different potentials and, without isolation, one or both of the functions may be disrupted and the radio damaged. (By the same token, in the highly unlikely event that one or both diodes should fail, damage to the radio could occur. There are other ways to accomplish the isolation, but diodes are cheap, simple, and reliable enough for me. Remember: nothing in life or amateur radio is without risk…)

The connection to the brown wire in the radio pigtail may be made by adding a pin at the "pin 3" location of the connector on the standard power supply cable (the brown wire dead ends in the radio's pigtail connector) or by cutting the brown wire loose from the pigtail connector and directly connecting it to the tuning unit. Please note that this project could possibly be adapted for the FT-897/897D, but it would require access to the battery compartment to reach the 897's "brown wire" function. I haven't tried to do this and, frankly, if you've got one of these radios, I'd recommend biting the bullet and buying the either the Yaesu matched autotuner or the LDG AT-897 aftermarket unit. Either is an excellent solution that resolves the tuning issue for that particular radio.

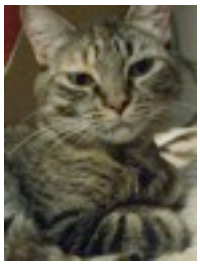
If you'd like to build this simple and very useful project but have none of the parts in your junk box, you can buy everything needed from one of our local electronics stores (e.g., Radio Shack or Torrance Electronics) for $15 or less. If you're a PVARC member in good standing, however, give me a call me before buying anything. I've got extra diodes and all the wire you'll need – all free to Club members. To replicate my unit with the necessary cables, you'll need to obtain the project box, switch, phono connectors (3 male, 2 female panel mount, one female in-line) and 1/8" stereo plug on your own.

In summary, using this handy little device with an FT-857/857D, a low power (20 watt) CW signal can be generated quite simply by flipping a switch without any need to access any menus in the radio. Since access to a tuning carrier is an almost everyday need (unless you're using a SteppIR), one is certainly led to wonder why Yaesu didn't accommodate the function in the first place. But, then, if Yaesu *had* done it, I wouldn't have had so much fun figuring out a solution on my own. Ain't ham radio grand?

(NOTE: If you'd like a copy of this article via e-mail, contact Jeff directly.)**!**



Cleo Has A Home!!



When little Cleo was first introduced here, Patty Harper took her picture to a luncheon and one of Patty's friends, Marilyn Ohtmans, W6MSO, fell for Cleo. But since she and husband were moving up north and had their next two months mapped out, Marilyn couldn't take Cleo until January. Frankly, because I didn't hear from her in the interim, I thought we wouldn't see Marilyn again. Thankfully, I was wrong.

Cleo has gone to live with the Oltmans in their new home in Bishop. It's a good match. They had a cat just like Cleo before and little Cleo will be well loved. Looks like Cleo's going to be part of a ham family after all.

From Steve Barryte, KI6GUY

NASA-funded technologies are currently assisting hurricane disaster relief in Haiti. GATR Technologies (Huntsville, AL) licensed inflatable antenna systems technologies developed by ManTech Nexvolve under NASA Small Business Innovation Research (SBIR) funding. The result was a Terrestrial Inflatable SATCOM Radome Antenna System -- the world's first FCC-licensed inflatable satellite antenna. The GATR systems are currently supplying communication support for the recovery efforts in Haiti.

GATR units enable high-bandwidth Internet, phone, and data access for deployments and projects in Afghanistan, South Africa, South America, Haiti, and Korea, as well as assisting hurricane disaster recovery around the United States.
http://www.gatr.com

February is Election time
Here's who we have on the slate

President: Joe Pace, NZ6L

Vice President Hal Lazar, KI6SPB

Treasurer Diana Feinberg, AI6DF

Secretary Chuck McCown,K6CTM

John, WW6WW our busy webmaster, wants to remind you that if you can't successfully get the QRO by email, you can read it on-line at:

Visit Our Web Site
K6PV
www.palosverdes.com/pvarc

Ten years ago

(Knut, N6BNP, cleaned out his closets and came up with some old QROs. Here's what was happening February 2000 at the PVARC--thanks Knut!)

Nominations and Elections were held in January so by February the board was in place:

President Steve Smith, KO6ZC, **Past President** Jack Carter, KC6WXY
Acting Vice President Jack Carter, KC6WXY, **Secretary/Treasurer** Walt Ordway, K1DFO
and the **QRO Editor** was Robert Keefer, KO6UA.

Past President, Jack Carter, KC6WXY, wrote a column summarizing the 1999 year and making wishes for the coming year. Some of his list sounds so familiar and some is a surprise at what the Club was involved in ten years ago.. Here's Jack Carter's February, 2000, column:

1999:

The Club's recommendations regarding the RPV antenna ordinance were largely accepted, notably all restrictions on the smaller, most popular antennas, were removed. More importantly, we were able to establish good relations and credibility with the RPV city council and the staff.

Our 1999 Field day effort produced our highest score in many years, indicating a higher interest and participation by club members.

We made our first effort at fielding a JOTA activity to attract young people from Scouting to amateur radio. (Jamboree On The Air)

We have continued to support and offer or Technician License training claasses

We have actively supported the PVPUSD Emergency Radio Communications Net

We have continued to support the cable cast of RPV City Council Meetings by supplying camera operators.

We have again had a great Summer Club Picnic and enjoyed the friendship of members of the RPV city council.

We supported the Golden Spike Days and ground-breaking for the new water tower at the Lomita Railroad Museum by setting up a portable station and operating CW all day.

We have laid the groundwork for a new Club activity, the International Lighthouse and Lightship weekend on 19-20 August. This has sparked a lot of interest among members and can be the basis of a great anual event. The plan is to combine it with the Club picnic at Point Vicente Lighthouse.

Our annual December Holiday party at the San Pedro Elk's Club continues to draw a crowd.

As for the future, I'd like to see:

More License testing between now and 15 april to support an expected increased upgrading interest.

A stronger JOTA effort with more precoordination with Scout Troops.

A renewed effort at attracting PVP High School students to amateur radio.

More public exposure at Field Day.

More members involve in DCS.

More volunteers for camera crews at RPV City council meetings.

More young Club members forming a sub-club group.

At least one T-hunt a year (this has great interest for young hams and is a fine time for older members to help out those getting started.)

73, Jack

Amateur Radio Course

FCC "Technician" course (Level One)

A two session course
held on
April 24th and May 1st
10:00 AM to 2:00 PM both Saturdays

FCC tests will be on May 8 (the next weekend)
10 AM to noon

Hesse Park, 29301 Hawthorne Blvd.
Rancho Palos Verdes

- No pre-registration or fee required -
- Taking the FCC Test is $15 -

Optional Material
- Gordon West book with FCC test questions - $21,
- Copy of my Power Point charts, $15 -
Students (thru grade 12) who take this course and get their license will be reimbursed up to $50 by the Palos Verdes Amateur Radio Club

For more information contact
Walt, K1DFO, at walt.ordway@yahoo.com

K6PV
Palos Verdes Amateur Radio Club
P.O. Box 2316
Palos Verdes Peninsula, CA 90274
www.palosverdes.com/pvarc

New Membership Application and Member Renewal Form

New: _____ or Renewal: _____ Membership Date: _____

Individual _____ ($15/Year) or Household and/or Family Membership _____ ($17/Year)

(Applying) New Member Information: or Member Renewal: same as Last Year? YES___NO___

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 Date: _____
(Only: Month - Day)

Member of: (DCS, RACES, ARES, PVAN, NART) _____ District _____ Unit ID # _____

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

Name_____ Call _____ Class_____ ARRL____ Birth Date: _____
(Only: Month - Day)

Name_____ Call _____ Class_____ ARRL____ Birth Date: _____
(Only: Month - Day)

Name_____ Call _____ Class_____ ARRL____ Birth Date: _____
(Only: Month - Day)

Individual membership ($15.00) $_____
Household and/or Family membership ($17.00) $_____
Donation to the John Alexander Fund $_____
Donation to the Repeater Fund $_____
Donation to PVARC $_____
Cash: _____ or Check #: _____ Date_____ TOTAL $_____

Please make checks payable to: Palos Verdes Amateur Radio Club (PVARC)

NOTE: Dues are based on January 1st to December 31st of the calendar year.