Palos Verdes Amateur Radio Club



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

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Preparing for the Worst! Overcoming Operating Challenges in The Gambia

The Gambia is the smallest country on the mainland of Africa.Marty Woll, N6VI, our speaker this month, was part of a team that went there as a part of the 2003 CW Worldwide DX Contest operation at C5Z.

"The team ran into numerous and formidable obstacles that required a team-effort to surmount," said Marty. "This is a case study in "making it work no matter what" with lessons that apply as much to emergency communications as they do to contesting."



Marty Woll, who has been a ham for over forty years, has an impressive list of accomplishments which include currently being ARRLs Vice Director for the Southwestern Division, and a past president of the Southern California DX Club.

Over the years he has set up and operated amateur radio stations on six continents.



The President Paces Himself

Joe Pace, NZ6L

Nearly at the end of 2009, the Military Affiliate Radio Service (MARS) received a new direction that many believe will breathe life back into this historic radio service.

One sign of the changes put in motion is the switch in name from "Affiliate" to "Auxillary," but more on this to follow:

The US Navy's association with Amateur Radio began back in 1913 when Navy Radio, Arlington station (NAA) came into service, providing radio amateurs with a goldmine of CW practice material in the form of weather reports, marine message traffic, time signals, and the number of skilled operators in the nation began to grow, as NAA and other radio services grew together with the rise of interest in amateur radio and radio technology.

Shortly after the US entered WWI on April 7th, 1917, 500 radio amateurs (of the 6000 licensed in the US) enlisted in the US Navy, which



grew to 4000 by the end of the war. This was similar in the other service branches, but not nearly as much as for the US Army Signal Corps, where the seeds of MARS were planted.

The precursor to MARS was the Auxillary Amateur Radio System (AARS), created in 1925 by pioneering members of the US Army Signal Corps, who had begun utilizing radio amateurs to train signal corps





recruits in the new technology of radio communications. AARS served up to the start of WWII, when after the US entered the war in 1941, radio amateurs operations, including the AARS were suspended.

By the end of WWII, 25,000 radio amateurs were serving in the armed forces, as well as many in the corporate and industrial sectors of the nation, and in 1946 Amateur Radio and the AARS went back into full swing as the transmitting ban was lifted.

By 1948, the AARS became two separate Military Amateur Radio Systems (the first MARS), for Army and Air Force, and as more civilian radio volunteers joined the service and its mission moved towards non-military communications, the name was changed in 1952 to the Military Affiliate Radio System. The Navy-Marine Corps established their MARS service in 1963, and from this time forward until December of 2009, the three branches of the Military Affiliate Radio System continued to function as we know it today.

In the Korean, Vietnam, and Gulf wars, MARS operators provided free message service, known as MARS-Grams, as well as phone patch services for servicemen and their families. MARS continues to provide MARS-Gram service, although in the past 15 years, the prevalence of the Internet, non-military telephone services, satellite, e-mail,

and other services on board ships and at remote operating facilities has reduced use of the MARS-Gram services, and phone patch services are no longer used.

In recent years, the three branches of MARS have successfully combined, sharing a common administration and operating procedure, and have realigned their mission to serve the public as a widearea disaster communications service, coordinating and mobilizing assistance from the Army, Air Force, and Navy-Marine Corps. MARS has a well structured radio-based global digital message system, which combined with trained operators through the regions, is able to provide long range communication support independent of external infrastructure, and actually outside of the amateur and FCC controlled bands, so this service does not compete with amateur radio or commercial services band plans.

In 2008, due to severe budget cuts, the MARS program was at risk of being shut down completely. Fortunately, its role in serving in recent disasters, such as Katrina, was recognized, and although

the program survived, all but one non-volunteer staff position were eliminated, and MARS became a completely volunteer-run organization, with an uncertain future, as an affiliate providing services whose usage was generally eroding.

Last December, DoD Directive 4650.2 provided MARS with a clear mission and future as an auxillary service to its member branches, similar to how the Civil Air Patrol (Air Force Auxillary), and US Coast Guard Auxiliary operate. MARS is no longer in a gray area of operating outside of the armed forces services, but will now participate as a part of those services, given missions and responsibilities which MARS is primarily responsible for.



All one needs to become a MARS operator is a Technician Class license, a transceiver and antenna system capable of operating on the MARS HF bands (most amateur HF transceivers can be modified – the frequencies are generally between 40m and 75m between the amateur bands), and completion of the training course in the branch of your choice. (In the LA area, Army and Navy MARS have the most active organizations.)

The mission of MARS today is to provide Department of the Army, Navy, and Air Force and Department of Defense sponsored emergency communications on a local, national, and international basis as an adjunct to normal military communications. In emergencies, MARS helps to ensure normal military communications and provides auxiliary communications (like warnings or instructions) to military, civilian, and/or disaster officials.

And, MARS-Grams are still free and speedy to service people and their families, wherever they may be.

73, Joe, NZ6L / NNN0AGC (Navy-Marine Corps MARS)

A free country is one where it is safe to be unpopular Adlai Stevenson





"First of all: A

HAPPY NEW YEAR to everyone with the sincere hope that 2010 will be a good year for the Palos Verdes Amateur Radio Club, for all members, families and friends of our hobby, Amateur Radio ! The Sun did not help much last year, but a late check on the number of sunspots actually shows small improvements. It looks now that we finally have bottomed out and the number of sunspots are on the upside in an increasing curve. For us and our hobby that is good news and we may presumably look forward to an active year on the HF / VHF / UHF bands.

The Christmas / New Year Holidays season did not give me much of a chance to be on the air to pass holiday greetings to friends far and near. This on account of having houseguests from overseas. Naturally, my radio room had to serve as sleeping quarters and consequently was occupied. Our guests wanted to experience how the holiday season was celebrated in California while at the same time doing a lot of sightseeing and shopping as well. I put quite a few miles on my car driving around, but I benefited myself as well visiting places we haven't been to in many years. The Los Angeles area has quite a number of interesting things and places to visit, we found out for sure.

When everyone left and traveled back to their own countries, I finally got back to my radios, turned them on and listened. The familiar HF noise and voices were very welcome to listen to again and fortunately everything worked fine. It is really a pleasure when one has been off the air

de the VP Knut J. Myhre, N6BNP

for some time to switch on the radios, tune around, check the transmitter output, tune up and realize the antenna is doing good, and to ascertain that one is in business as usual. The whole thing is like returning to something of pleasure with lots of positives and excitement. Needless to say we may look forward to a good "radio" year, meeting old friends and making new friends on the air, participate in our club activities, and thereby really enjoy our wonderful hobby. Again, I wish you all a very Happy New Year ! 73, Knut N6BNP



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.



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 Ridgecrest Middle School 5K

The Ridgecrest Middle School will do their 5K run again this year. It will be on Sunday, 21 March. 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 along the course. If you would like be one of the operators in this event, contact Walt, K1DFO, at walt.ordway@yahoo.com

From Bannister Bray

Here's a movie from Sean Malone about the assembly of the war time Hallicrafters transmitter. Note the use of overhead hoists to move the transmitter componants around. Bannister Bray, AH2CZ http://www.archive.org/details/VoiceofV1944. Would you like to be packing one of these "portable units?



Member's Corner Mark Your 2010 Calendar

and check pages 11 & 14 for the new calendar (you'll see why it's two pages)

March 21	Ridgecrest School 5K
May 1	Palos Verdes Loop Trail Relay
May 15	The PV Marathon
August 7	Rolling Hills Estates 5K/10K
September	19 Concours d'Elegance

Board of Directors

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LAACARC Rep

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Need a Club Badge? Karen Freeman, KG6BNN 310-541-6971 Need a Club Patch? Or a Club Jacket? Dave Scholler, KG6BPH 310-373-3816





HF Radio Purchase Considerations Another Informative Article from the Intrepid K6JW

There are certain "killer questions" that always surface among newer hams. Perhaps the most common one is that of which HF radio to buy. Of course, if one is only interested in emergency preparedness on vhf/uhf, this probably isn't much of an issue since the offerings are, in general, much less varied. But let me suggest that if you aren't planning to get involved with HF operation, you're going to be missing the true essence of amateur radio: its history and lore, excitement, and just plain fun.

The question of which among the many HF radio offerings on the market is the right one for you has no absolute answer. Recognizing this and not wanting to take a hit from nearly everybody who is already operating on HF for offering up specific makes and models,

I'm going to limit the following discussion to a few general considerations in choosing an HF rig that may be useful. For specific make and model recommendations or for help in evaluating any particular potential purchase, you should consult directly with one of the Club's more experienced hams, read QST's product reviews, and try to see and tinker with as many different radios as you can before you buy.

What follows, then, is not meant to be an all inclusive list of everything to think about but, rather, just a sampling of important considerations involved in making up your mind as you check out the new and used market for ham gear. These considerations are important, though, because if you don't know what you want, how will you know when you've found it? We'll do this by first posing two questions you should be asking yourself:

Question #1: What is it that you really want to do with the radio? Are you interested in only

casual contacts (aka "ragchewing")? DXing? Contesting? Paper chasing? Are you looking for a fixed (base) station? For portable or mobile capability? How about remote access operation? Is computer interfacing important to you? These and other considerations will drive your choice to a very great extent, not only for the radio, itself, but for associated accessories. And while pondering all

of this, you must remember that the most critical piece of equipment for your station is

actually not the radio but, rather, the antenna. You should be putting up the best antenna you can, and only then worrying about the radio. As is often said, if you can't hear 'em, you can't work 'em!

Question #2: What is your budget? If the sky were the limit, there would be little problem. Unfortunately, for most of us there are financial constraints on what we can spend on our hobby. So, you should set an upper limit before starting to list the features that are important to you. If your budget is very limited and the list of "needs" gets very long or you discover that the features you want are only present on higher priced rigs, you may want to consider a used radio rather than a new one. If, in contrast, on a limited budget, the list is relatively short, you may be able to get by very nicely with a lower priced, new radio.

With all that as in introduction, here are some general recommendations of my own with regard to selecting an HF radio in 2010:

1. Confine your search to radios that are fully solid state: Older, tube-based radios you may see on the used market, includ-







ing the transitional radios with both solid state and tube circuitry, are fun to own and operate – to a point -- but have significant limitations and require more effort to tune and maintain than more modern solid state rigs. Worse, these older generation units don't have as many interference fighting features as more recently manufactured radios. Also, they generally cannot be computer interfaced, a major disadvantage in our present age of computer logging, radio control, and the popularity of digital mode operation. Stick with all solid state and you'll be much happier in the long run. (NOTE: This injunction does not apply to linear amplifiers, most but not all of which still are tube-based.)

2. Look for radios with built-in antenna tuners: You'll almost certainly want an antenna tuner and you'll find it more economical to purchase a rig with one built into it than to buy an "outboard" tuner, either manual or automatic. There are three exceptions to this. First, if you're looking for one of the currently available compact radios designed for portable or mobile use, you will not find one with a built-in tuner. Second, you may need an external antenna tuner if you're planning to add a linear amplifier to your station. Third, if you're planning on using a SteppIR (multi-band, self-tuning) antenna or antenna(s) custom-built for specific frequencies, you won't need a tuner if operation is to be confined to the designed-in band coverage.

3. Remember to factor the cost of a power supply into the cost of the radio: Most of the radios you'll be seeing require an external source of 12-14 volts DC at 20 amps to operate properly. You may pay a premium if you buy a new "matching" power supply made by the radio's manufacturer to coordinate with the appearance of the radio. Power supplies by aftermarket manufacturers such as Astron and MFJ are popular, reliable and may be a bit less expensive. Prices for new 20-25 amp units are in the \$150 range for lightweight switching type supplies, or about \$130 for conventional supplies. I recommend buying at least a 30 amp supply, however, in order to handle the demands of additional accessories. A reliable power supply should be looked upon as a worthwhile, long term investment.

4. Look for a radio that has two VFOs or, if the budget permits, a main and a subreceiver: These radios have the ability to operate in "split mode": Split mode operation is operation in which you receive and transmit on different frequencies. This is an especially important feature if you are planning to chase DX. Radios with two VFOs can monitor the two frequencies but not simultaneously – you have to switch back and forth between the two, usually by repeatedly pushing, or pushing and holding in, a button on the radio's front panel. The more expensive



radios with a main and sub-receiver can monitor two frequencies simultaneously (usually the frequency on which

the DX is transmitting and the frequency on which the DX is listening). Fortunately, essentially all of the radios you'll see have one of these two options, but you should clarify and clearly understand

the receiving options available to you in whatever radio you are considering purchasing.

5. If you are planning to operate CW, be sure the radio can operate in semi-QSK mode, if not in full QSK mode: Full QSK, or "full break-in" is a mode of operation in which the transceiver goes out of transmit mode between each Morse element (dit and dah). Thus, you can hear "during" your transmission.

This may be useful for conversational CW, when trying to work DX, and it can help you to detect interference or breaking stations. Personally, I prefer semi-QSK, which allows the setting of a time de-

lay for the switchover. This enables me to send with the transition from transmit to receive occurring only between words or when I otherwise pause. I find this less distracting than full QSK mode. Also, you'll need to decide whether it's important for your radio to have a built-in electronic keying circuit so you won't need to buy an external electronic keyer if iambic paddle keying is planned. (This is a whole *other* subject!)

6. Decide whether VOX is important to you: VOX is the term for voice activation of the transmitter. With VOX turned on, all you have to do is speak into your microphone to transmit. When you stop speaking, after a user-determined time delay, the radio switches back into receive mode. VOX is useful during contest operation and when DXing, although it can be a nuisance if you have to speak with others in the shack while operating. Pretty much all newer rigs include VOX as a standard feature. Personally, I never use it. I far prefer to use a footswitch to activate voice operations. Absent a footswitch, I'd rather just push a button on the mic. These mechanical modes of transmitter activation are more secure and precise than VOX, and your barking dog won't trigger transmission. Be aware that VOX and semi- or full QSK operation often go together. A radio without one might also lack the other.

7. *Check for RIT*: RIT stands for "receiver incremental tuning", and it is a very use-

ful function. It allows you to shift your receive frequency without altering your transmitting frequency. The benefit of this is that it allows you to fine tune a station you're in contact without altering your transmit frequency. Thus, the station you're working won't have to retune

your signal even though you retuned his. (Note: On Yaesu radios this function is called the "clarifier".) The flip side of RIT is XIT, or "transmitter incremental tuning". This alters your transmit frequency without altering your receiving frequency. Personally, I don't find much use for XIT, although it can come in handy from time to time in fixed split operation. RIT, however, is very useful.

8. Look for IF shift and/or slope, width, or dual passband controls: These somewhat mutually related features allow you to change the "passband" characteristics of the receiver section of your transceiver. This allows you to narrow, widen, or move the "doorway" that lets signals through and, as a result, minimizes interference from nearby signals when you're trying to listen to a particular station. These features are very helpful when bands are crowded or even just when there's a single station interfering with your QSO. Another interference-fighting feature is notch filtering, which can re-



move squealing noises (called "heterodynes") that are interfering with reception. Some radios offer the ability to have the notch filter automatically eliminate the interfering tone while others offer only manual operation to "notch" it out.

This is a useful function for voice modes, but it often cannot be used on CW without eliminating the very tone you're trying to hear!

9. Look for the presence of accessory slots to accommo-

> date narrow analog filters: Narrow filtering is an option for many radios and accomplishes much in the way of interference reduction. Narrow filters reduce the width of the receiver's passband, the doorway through which signals fit on their way to your ears or computer screen. This has the effect of eliminating interference from nearby stations and allowing you to focus more clearly upon the station you want to copy. Narrow filters are highly desirable and are designed specifically for your preferred modes of operation, whether voice, CW or digital. You should look for a radio with at least two slots for optional filters unless you plan to operate using only one mode, in which case a single-slotted radio may be acceptable, if not very flexible. Be aware that many radios now on the market use partial or even full digital filtering and other digital noise reduction technology to reduce interference from unwanted signals. Radios with full digital filtering generally do not take accessory analog filters except, possibly, in their front end for roofing filtering, a topic beyond the scope of this article.

10. Look for a radio with the best receiver you can find. The transmitter section of



from distant stations you'll almost certainly want to work. If possible, talk to experienced hams about any radio you're considering before you buy. They'll be able to advise you about the receiver performance of whatever radio has caught your eye. *11.There are a lot of glitzy radios out there to choose from, but don't get sucked in by a pretty face alone.*

A new (as opposed to used) radio will cost you anywhere from \$750 at the low end up to around \$14,000 at the upper end, but spending \$14k won't necessarily get you performance worth the price difference. With good band conditions, a \$750 radio can still allow you to work the world when coupled to a good antenna and operated skillfully. Take it from me – I know. I've worked into central Russia using the \$750 radio in my car and a high quality mobile antenna that's been correctly installed. So, assess your needs, your budget, QST's extensive archive of performance reviews (available online to ARRL members), and consult with experienced hams before taking the leap. Do so and you won't suffer the heartbreak of buyer's remorse.

And now, enjoy the hunt!





		January 20th – General Meeting	February 17 th – General Meeting	February 24th-28th – Catalina IOTA Trip	March 17 th – General Meeting	March 21 st – Ridgecrest 5K	April 21 st – General Meeting	May 15 th – Palos Verdes Marathon	May 19 th – General Meeting	June 16 th – General Meeting	June 26th-27th – ARRL Field Day!	July 21st – General Meeting	August 7 th – RHE 5K/10K Run/5K Walk	August 20st-22nd – Lighthouse Weekend	August 22 nd – Summer Picnic at Pt. Vicente	September 15 th – General Meeting	September 19th – PV Concours d'Elegance	October 20th – General Meeting	November 17 th – General Meeting	December 15 nd – Holiday Dinner @ PVIC	(on to the	米でき		And
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But Seriously Folks: Computers with the Ultimate in Economy, Simplicity, and Reliability are Predicted

This visionary R&D prediction was published in the July, 1965 issue of *Computer Design*. This report is not about computers. It's a landmark study of speed. That the study hasn't been implimented suggests big business collusion between the computer giants.

Recent investigations conducted by the Advanced Research Group of the Technological Institute of Advanced Research have led to the development of a transistor with unusually high switching speeds. During a routine study of power accretion in diffused-pi hypo-stable silicon crystals it was noted that, with current held constant at 1 milliampere, switching speed varied directly with voltage level of the input signal as follows:

Input Signal	Switching Speed
+16 v	4 ns
+ 4 v	2 ns
+ 1 v	1 ns

The ratio of switching speed to input voltage is $S=V(to the \frac{1}{2} power)$. This relationship was not noted until the input voltage was accidentally reduced below the reference ground level. In this case, an input of -1 volt resulted in a switching speed of "i". Certain logical difficulties encountered at that point ruled out any practical application of imaginary switching speeds.

The Research Group was re-established, however, and soon discovered that further reduction of input voltage levels produced usable results. Switching speed again became a real value, but a negative value. With a -16 volt signal, for example, the transistor under test switched four nanoseconds before the signal was applied.

The possibilities inherent in this effect were obvious, and once the Group was again



operational, further investigations were conducted on a crash-priority footing. Much of the data resulting from these investigations remain proprietary, but the following general results can be published at this time.

A conventional ADD operation, using a 12-stage network of these special transistors can be performed in minus 8 nanoseconds. Furthermore, a simple feedback loop places the Sum in the Accumulator before the Operand, thereby obviating the necessity of accessing this operand in the first place, thus saving even more time. However, it is in the case of Multiply, Divide, and similar more complex operations that speeds become truly remarkable. In at least one case, the result appeared on

> the output device before the problem had been coded. In fact, with computer logic operating in minus time and memory storing future data, it is foreseen that the major efforts of programmers will be devoted to constructing questions to go with the answers.

Production of these hyper-speed computers will doubtless have a profound effect on marketing techniques and philosophy. If answers to

customer problems are produced before the computer is installed, special sales and rental agreements will certainly be necessary.

However, efforts are now under way to increase operational speeds to the point at which all results will be presented before the computer exists. With no need to design, construct, or debug the machines, the manufacture of computers can be expected to achieve new heights of economy, simplicity, and reliability.





Robert B. Landon, W0IYX SK

We are dismayed to report that long-time Club-member Bob Landon, W0IYX has become an SK as a result of various problems initiated by a debilitating stroke and ending with a heart attack which he suffered in November. As many of you will recall, he was our treasurer. six years ago.

We all know Bob's great love of peacocks, particularly the one who came though his upstairs window, shattering glass all over. The hypothesis that the critter just wanted to use Bob's computer, remains unsubstantiated.

Bob was a nice person and a good friend to many of us. He leaves his daughters Jacqulyn Sue and Rebecca Lynn, and son Patrick Dean, to whom we send our condolences. Below, are some facts about him culled from the lovely article that his two daughters sent to us.

With great sorrow, we announce the death of our wonderful father, Robert B. Landon. Born on February 25, 1932 in Russell, Kansas, he left us peacefully on November 23, 2009 at age 77.

Like most kids who grow up to be engineers, Bob loved experimenting with firecrackers---anything that exploded. He spent his childhood building things--like the time he built a concrete boat and floated it down a storm-swollen river. This particular adventure may have been the beginning his life-long love of sailing.

He did a stint in the Air Force, earned a BS in engineering at Kansas University and an MS in electrical engineering at USC. He worked at Hughes Aircraft and then TRW, Inc, in their satellite program.

After he retired he spent timeflying small aircraft, sailing, scuba diving and volunteering as a docent at the Cabrillo Marine Museum in San Pedro and was treasurer for PVARC. He was also a DCS volunteer.

Bob was preceded in death by Jan, his wife of 51 years. In addition to his three children, he leaves seven grandchildren and two great-grandchildren and an older sister.

Our immediate family is planning to release our father's ashes at sea in February 2010 off the shore of Palos Verdes Peninsula, California. We will travel by boat out of King Harbor, Redondo Beach, (where Dad docked our sailboat) and place the ashes so Dad can look upon his favorite places in the world, Palos Verdes and Catalina Island, where we spent so much of our childhood with Captain Bob at the helm in all things.

We gently suggest that a donation in lieu of flowers be made to the Cabrillo Marine Aquarium. where our father was a docent. The Cabrillo Marine Aquarium is an organization well known for its leadership role in marine science education, aquaculture research and community recreation. Please contact: The Cabrillo Marine Aquarium, 3720 Stephen M. White Drive, San Pedro, 90731, 310-548-7562 or via their website: <u>http://www.cabrillomarineaquarium.org/.</u>



Cleo



Little Cleo has been in these pages for two months.

Haven't yet found her a home, although we've tried and Cleo has been returned somewhat traumatized each time.

So, because we've fallen for her, I think she'll stay here. And if I can just convince each cat that each is truly the Only-Cat, things should be just fine.

Thank you to everyone who gave it a good try!

"We remember the days (1986) when we wondered if \$16 was too much for the PVARC Christmas dinner." said Ann Willert, N6GVP/ DJ0IX, former PVARC president. The Willerts are currently living in Germany.

Could Use Some Help Here

Radio operators are needed at the L.A. Marathon on Sunday March 21, 2010, to provide emergency communications throughout the course.

This year, the new route will go from Dodger Stadium to the Santa Monica Pier, and will include Beverly Hills, Hollywood, and major studios.

Volunteer registration is on-line at: http://www.doitsports.com/volunteer/info.tcl?j ob id=488

> Craig Baker KC6KKR

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January 20th - General Meeting February 17th - General Meeting

Schedule of Events

February 24th-28th - Catalina IOTA Trip March 17th - General Meeting March 21st - Ridgecrest 5K April 21st - General Meeting May 15th - Palos Verdes Marathon May 19th - General Meeting June 16th - General Meeting June 26th-27th - ARRL Field Day! July 21st - General Meeting August 7th - RHE 5K/10K Run/5K Walk August 20st-22nd - Lighthouse Weekend August 22nd – Summer Picnic at Pt. Vicente September 15th - General Meeting September 19th - PV Concours d'Elegance October 20th - General Meeting November 17th - General Meeting December 15nd – Holiday Dinner @ PVIC



Palos Verdes Amateur Radio Club – Schedule of Events 2010

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Two Amateur Radio Courses

FCC <u>"Technician</u>" course (entrée level) FCC <u>"General"</u> course (2nd level) <u>Each course is 2 sessions.</u> <u>The 2 sessions</u> are on Jan 30 & Feb 6

<u>Technician</u> 10:00 AM to 2:00 PM both Saturdays <u>General</u> 2:15 PM to 5:00 PM both Saturdays

FCC tests will be 10 AM to noon on Feb 13 All are at: Hesse Park, 29301 Hawthorne Blvd. Rancho Palos Verdes

No pre-registration required No fee for either course Taking the FCC Test is \$15 -

<u>Optional Material</u> - Gordon West book with FCC test questions, \$20 for Technician and \$23 for General -- 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:	Memb	pership D	ate:						
Individual	_(\$15/Year) or H	ousehold and/o	or Family Me	mbership	_ (\$17/Year)					
(Applying) New Me Last Name:	mber Information: o First	r Member Rene : Name:	ewal: same a	s Last Year? Y	ESNO					
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City:				Zip:						
Phone: Home	w	ork	Cell							
Email address:	(Unless otherwise noted o	emails will be sen	t to the applyi	ng member only)						
License Call:	License Class:	ARRL /	Nember (?)	Birth Date: _	(Only: Month - Day)					
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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.