Palos Verdes Amateur Radio Club



PVARC Meets the 3rd Wednesday at 7:30 Hesse Park, 29310 Hawthorne Blvd, Rancho Palos Verdes, Ca



Stephen Smith, WA8LMF

APRS, Automatic Position Reporting System, is a combination of <u>GPS</u>, <u>amateur radio</u> and the <u>Internet</u>, APRS produces real-time position reports and map displays of the location of home

stations, moving vehicles, weather, and more.

Our Speaker, Stephen Smith, WA8LMF, will set up two complete demo radio installations across the room from each other, to show how an APRS system works.

WA8LMF, is a telecommunications mobile radio systems engineer whose specialty is measuring the performance and coverage of VHF/UHF/800 MHZ two-way radio systems used by various county agencies including the Sheriff's department, county fire department,

paramedics and general government users.





October 2010



The President Paces Himself Joe Pace, NZ6L



Homebrew key from old hard drive & PCB

Of the fall season

months, October has been my favorite time where seasonal change is punctuated by broad strokes of fall colors throughout the neighborhoods, the days definitely feel shorter, pumpkin patches blossom in fallow fields and old car washes, and home brew projects for the Winter begin to come to mind.

Growing up in New Jersey, this was a time when preparations for the winter began. Replacing the window screens with storm windows, clearing the gutters, checking the shutters for needed repairs, and swapping road tires for snow tires were the chores of the day. The swim clubs were closed, but it wasn't yet cold enough to have snow to sled over or iced ponds on which to skate. The humidity of late summer was gone, and we could feel we were standing on the threshold to winter.

Scouting was big in our community, and we were very fortunate to have energetic parents willing to take our packs under their wings and teach us useful skills, opening up new worlds of discovery. In the Cub Scouts and Webelos, we would rotate between our respective parent's homes from month to month, learning about first aid, knot tying, radio & television, tie-dying, sports, Morse code, basic electronics & soldering, history, traditional methods of making

things, arts & crafts, woodworking, more than I can remember.

One of the most memorable projects we worked on together was in preparation for a week-long winter jamboree in the nearby Wachung Mountains, where these skills were put to use in joint exercises with other packs.



We built simple telegraph keys and sounders from scrap materials, not too different than the one shown in this picture. And while at the jamboree, hooked them up to aerial wires that had been strung between different camps and we were able to use our devices to send and receive messages in, albeit very slow, code with the other packs. This was a great introduction to what would eventually become a career in digital communications, and a dear hobby.

What brought this to mind is that next weekend, October 16th-17th, is the 53rd International Jamboree on the Air (JOTA). Several of our club members are deeply involved in Scouting and have been helping young scouts to prepare for this upcoming Jamboree, where they will be operating from volunteering ham shacks in our community.

/								
		JOTA Suggested Frequencies						
	Band	SSB (phone)	CW (morse)					
	80 m	3.690 & 3.940 MHz	3.570 MHz					
	40 m	7.090 & 7.190 MHz	7.030 MHz					
	20 m	14.290 MHz	14.060 MHz					
	17 m	18.140 MHz	18.080 MHz					
	15 m	21.360 MHz	21.140 MHz					
	12 m	24.960 MHz	24.910 MHz					
	10 m	28.390 MHz	28.180 MHz					
	6 m	50.160 MHz	50.160 MHz					

"The JOTA is an annual event in which Scouts and Guides all over the world speak to each other by means of amateur radio contacts. Scouting experiences are exchanged and ideas are shared, via the radio waves." The event begins Saturday at 00:00 hours local time (12:00 AM) to Sunday, 23:59 hours local time (12:00 PM). I encourage you to make as many JOTA QSO's as you can – it just might give a young person the thrill of the hobby that will inspire them for the rest of their life.

Wishing you a prosperous October,

73, Joe, NZ6L

JOTA at the Boy Scout Camporee

October 16th and 17th, 2010

Our very own Curtis Watanabe, KI6KUK, is the dynamo who organized and ran the Amateur Radio station at JOTA for the Los Angeles County Boy Scouts last year, and is doing it again this year.

Here's what he says about it: "JOTA, Jamboree on the Air, is an annual event in which Boy and Girl Scouts and Guides from all over the world speak to each other by means of Amateur Radio.

"I am planning to set up a station for the Boy Scouts and Cub Scouts in conjunction with the Camporee weekend up at Lake Arrowhead. We'll all be camping out in tents and the station will be very basic.

"I'm bringing my Yeasu FT897 and some di-poles. Doris Hughes, K6KSY, is lending us her 20-meter beam. Mel Hughes, K6SY, will be listing this event on the DX. Since Lake Arrowhead is 7,900 feet high, we're hoping to contact Scouts around the world.





"I organized this last year but without any publicity at all and we still got about 50 scouts participating. This year, I've contacted the Camporee organizer, and have distributed flyers to everyone so I think we'll get about 500 Scouts participating. Those Scouts who operate will be given a very cool patch"

Curtis is planning to have the JOTA station available for his Scouts to operate all day Saturday, He will then tear down on



Sunday morning, come home, and take a group of Cub Scouts who were too young to join the Camporee over to Mel Hughes' shack to operate there and maybe earn their own patches,too!

The tireless Curtis Watanabe and the always supportive team of Mel and Doris Hughes deserve the thanks of PVARC members and all amateur radio enthusiasts for making ham radio available to children of all ages and for helping to create the next generation of hams.

(Another Scout Master and ham radio supporter in prior years was Matt Orlich, WA6AJC, shown here in last year's event, second from the left next to Curtis Watanabe. Thanks Matt!





PVARC Provides Radio Support at Inaugural RAT Beach Bike Tour

By Diana Feinberg, AI6DF

The annual 26-mile Palos Verdes Marathon may seem long, but transpose its digits and you get the 62-mile length of the 2010 RAT Beach Bike Tour on September 25th. PVARC provided amateur radio support for this first-time charity bicycle tour covering a geographic area well beyond the Palos Verdes Peninsula.

Diana Feinberg, AI6DF, Net Control at RAT Beach The tour went from Torrance Beach through San Photo Homer Meek, K6HKT Pedro to Pt. Fermin, across the Peninsula (pedaling the

ies to Playa del Rey before returning to RAT Beach. In addition to this 62-mile course, there were 31mile and 15.5-miles courses along slightly different routes. The South Bay Sunrise Rotary Club asked PVARC for radio coverage of this unique event just four weeks beforehand. As this was the bike tour's first year, the organizers still had many details to iron out. We did not know the particulars for PVARC's involvement until 11 days before the event. PVARC's net control operating position at RAT Beach was also unique. As photographed by Homer

steep uphill on Hawthorne from Golden Cove Center to Peninsula Center), then through the Beach Cit-

Meek, K6HKT, we operated atop two pallets in the RAT Beach parking lot from 0530 to 1430 hours. The Rolling Hills Amateur Radio Club 445 MHz repeater, K6RH, provided a good signal to most areas but we periodically had multi-path distortion due to several large metal-sided trucks near our vertical antenna.

The bike tour was a tremendous success benefitting three South Bay non-profit organizations serving individuals with disabilities or special needs. The Rotary Club had envisioned a maximum of 250 cyclists, but registration reached 370 several days before the event and nearly 500 cyclists actually participated.

We greatly appreciated the amateur operators who volunteered near the last-minute to help this inaugural event run smoothly:

Deane Bouvier, N5DQ (El Segundo stop)

Lovell Chase, KI6VZS (Roving van)

Steve Collins, KI6TEQ (Roving van)

Matthew Cruse, N6MDC (Hermosa Beach stop)

Cynthia Gonyea, KJ6GPG (Pt. Fermin stop)

Homer Meek, K6HKT (Roving truck and back-up Net Control)

Matt Orlich, WA6AJC (Loan of mobile radios and antennas)

Stuart Salot, W7UW (Roving truck)

Daniel Yang, K6DPY (Rolling Hills Estates stop)



Opportunities

October

October 20,-General Meeting

November

November 17, General Meeting

December

December 15, Wednesday--Holiday Dinner--Pt. Vicente Interpretive Center. Happy Hour at 6 p.m., Dinner at 7 p.m. Tickets from the treasurer, AI6DF.

Job Opportunity Editor of the *QRO*

Newsletter for the Palos Verdes Amateur Radio Club A creative fun job that reaps plenty of personal rewards. Bit of work once a month.

You can make the job as difficult or as easy as you want. The goal is to let Club members know what's going on with their Club.

You'll have plenty of good reliable writers and plenty of photographs.

Job begins now or no later than December.

Contact current editor Ginger, KG6TAU, 310-378-7894 or ginger(dot) garnett@gmail(dot)com

Treasurer's Report

Diana Feinberg, AI6DF

October 2010

77

PVARC Balance \$2,120.67 John Alexander Fund: \$956.00 Repeater Fund: \$1,168.66 Total Bank Balance \$4,245.33 Membership 2008 134

ARRL Members



Need a Club Badge? Contact Karen Freeman, KG6BNN 310-541-6971



Need a Club Patch? or a Club Jacket? You can get either from Dave Scholler, KG6BPH 310-373-166

Members

We'd sure like to hear what you're doing, what bands you're on, what kind of changes you've made to your shack--in other words, what kind of fun you're having.



Board of Directors

President Joe Pace, NZ6L
Vice President Hal Lazar, KI6SPB
Treasurer Diana Feinberg, AI6DF
Secretary Chuck McCown, K6CTM
Past President Ginger Clark, KG6TAU
Directors: Mel Hughes, K6SY
Jeff Wolf, K6JW

Appointed Offices

ORO Editor Ginger Clark, KG6TAU Asst to Editor Paige Omoto, KI6MAH Web Page Editor John Freeman, WW6WW Club Librarian Bryant Winchell, W2RGG VE Coordinator Diana Feinberg, AI6DF VE Liason Jeff Wolf K6JW /Alan Soderberg W8CU LAACARC Rep Joe Locascio, K5KT

Contacts

QRO Editor 310-378-7894 WebMaster 310-541-6971

CLUB NET: On any given Tuesday @ 19:30 is the PVARC Net on the K6PV repeater 447.120(-)100.0. In West PV, on cross-band 145.710 (simplex) 71.9.

The present net control operator for the third Tuesday night PVARC net is looking for a replacement. This is an opportunity to exercise your radio equipment, and enjoy contacts with fellow club members. If interested, contact Homer, 310 326 3168.

Member in the News

If you read your October QST you might have noticed a familiar name on Page 20. Jeff Wolf, K6JW sent them a photo of the Wolf's home.

In the front, their neighborhood beautification award sign shows clearly and in the back, equally clearly, is Jeff's state-of-the-art tower.

Obviously the city of Rolling Hills Estates has discovered the true beauty of a well-made tower.

Palos Verdes Concours Walt Ordway, K1DFO

As many of you know, a few of us hand out the commercial HT radios at the Palos Verdes Concours each year. The Concour classic car show is held at the Trump Golf Course. Since we hams are volunteers, we get free parking, free admission and a free box lunch. That is worth over \$50, and it is for free. This year we had several ham radio folks there to give out the commercial HT radios before the event started. Here is who worked the event: Al Adler W6VA, Cynthia Gonyea KJ6GPG, Joe Locasio K5KT, Marian Locasio K5KKT, Jim Scrimger KG6ITN, Stu Sokolin W6TA, Herb Stark KO6RC and Walt Ordway K1DFO. It is a great event, and maybe next year some other club members may want to work the event.



HAPPY HALLOWE'EN





Stay Tuned! Stay Tuned!
Another IOTA at Two Harbors!
Waiting for the dates!
Waiting for the dates!







Palos Verdes Amateur Radio Club Annual Christmas Holiday Dinner At the Beautiful Point Vicente Interpretive Center

31501 Palos Verdes Drive West, Rancho Palos Verdes Wednesday, December 15th, 2010

Happy Hour at 6:00 PM, followed by dinner and program at 7:00 PM

Dinner Menu:

Macadamia encrusted Salmon with a pineapple vanilla butter sauce; Carving station with Sirloin of Beef plus Leek Mashed Potatoes, Vegetables, Rolls & Butter. A Dinner Salad is included with mixed greens, pecans, sliced apple and gorgonzola with a Raspberry Vinaigrette. Appetizers include an Assorted Cheese Platter with Gourmet Crackers and Artichoke Dip or Shrimp with Cocktail Sauce. Dessert follows with a Cheesecake Bar with an array of toppings.

\$39.00 per person.

For any questions, please contact: Joe Pace, pace@nz6l.net, 310-831-3750





Catered by "Entertaining Friends" of Torrance

ARES® Southwest District Presents





The Proper Care and Maintenance of your Honda EU200I **Portable Generator**



By: Mort Arditti, NA6MA, ARES NW

What: How to care and maintain your Portable Generator

(HONDA EU200I featured)

When: Saturday, October 16 20, 2010, 10:00am*-11:45pm

Where: Providence Little Co. of Mary Hospital, 1300 W. 7th St., San

Pedro. Go to: East entrance, 1st Floor, DeMucci Room

RSVP/Cost: Not required / \$0.00

Speaker: Mort Arditti NA6MA, ARRL/ARES NW member Questions: Mercedes Prado K6MMP, SW DEC, 310.422.0881

You'll learn to:

- **Understand** the basic features of a generator and how they all work together
- Clean, maintain, and maximize your investment using the proper tools and the proper supplies
- Trouble-shoot and repair your generator with minimum investment
- Avoid the costly mistakes or "lessons learned" from others

What to bring:

Pen/pencil and pad, glasses if needed, water, snacks or brown bag (HT not required for this session). The class will start right after the ARES SOUTHWEST 09:00am regular meeting, at approx 10:00am.

Class Description:

If you missed his recent presentation at ARES NW, or recently bought a generator and are not sure what to do next, or are considering a purchase as part of your emergency preparedness supplies or your "go-kit," this class is for you! Mort will feature the popular HONDA EU2000I model. However, the information is useful and applicable for other models as he will cover fogging the cylinder, and ensuring fire safety.

About the Speaker:

Mort Arditti NA6MA is an electronics engineer (retired) who designed custom electronic medical equipment for cardiac research and the US Space Station. Born in Bulgaria, he served the Israeli Air Force as an electronics technician. He has published a Prentice-Hall book entitled "Medical Instrumentation for Health Care". He volunteers at the Doheny Eye Institute (affiliated with USC Medical School) and is an active ARES NW member and supports our community events and races. Mort holds an Extra Amateur Radio License. NA6MA@arrl.net

(*)Our ARES SW regular meetings are held at 9:00am on 3rd Wednesday of every month. Presentations follow about an hour ++later. For this and other presentation ideas, contact Mercedes K6MMP, SW District Emergency Coordinator at K6mmp@arrl.net or visit our website at WWW.ARRLLAX.org

ARES® Southwest District Presents





The Radio Amateur's NTS "Traffic School"

By: Kate Hutton K6HTN, LAX Section Traffic Manager



What: Training and exercise in message handling skills for all

emergency communications volunteers

When: Sat., November 20, 2010, 10:00am*-1:00pm

Where: Providence Little Co. of Mary Hospital, 1300 W. 7th St., San

Pedro. Go to: East entrance, 1st Floor, DeMucci Room

RSVP/Cost: Not required / \$0.00

Speaker: Kate Hutton K6HTN, ARRL/LAX Section Traffic Manager

Questions: Mercedes Prado K6MMP, SW DEC 310.422.0881

You'll learn to:

- Relay messages ("radiograms") around the US & Canada
- Apply CW, SSB, FM & digital modes
- Participate in the NTS system and other valuable public service volunteer opportunities
- Explain the <u>non-dependability</u> on infrastructure such as the telephones, cell towers, or internet
- Use this mode as a vital message in a disaster

What to bring:

Pen/pencil and pad, glasses (if needed), and lunch (snacks, brown bag, water, etc.). Radio not required. Novice to experienced welcome.

Class Description:

The three-hour training will focus on how to compose and handle formal radio messages ("radiograms"). Examples and class exercises will focus on the format and methods used by the American Radio Relay League (ARRL) National Traffic System (NTS), which have been in place since 1915. These best practices have been optomized over 95 years for high efficiency and accuracy. The ARES and CERT message forms are based on the NTS format because it works. In the age of cell phones and Internet, the NTS still exists for basically three reasons: 1) to be there when disaster strikes and normal communication is unavailable, 2) to train emergency communicators in accurate and efficient message handling and 3) because many hams enjoy honing these basic operating skills. Operating on the NTS traffic nets is an excellent way to prepare emcomm volunteers for handing formal, written traffic in a disaster

About the Speaker:

Dr. Kate Hutton K6HTN is ARRL Los Angeles Section Traffic Manager and in charge of the NTS amateur radio nets that move traffic in and out of Los Angeles. Affectionately known as "Earthquake Kate," she is also a world-renowned seismologist frequently interviewed by the media for her professional commentary. Kate holds a BA/MS/Phd in Astronomy and an Extra Amateur Radio License. K6HTN@arrl.net.

The son of Member Marty Lindquist, KD6FOQ in this month's CQ Magazine

UDIIC SOLVICO

Carpe Digitum Diem: Embracing Advancing Technology in EmComm

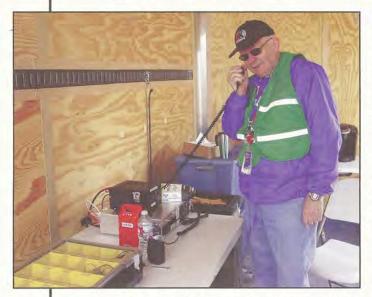
hen looking into the fast-changing arena of digital technologies, emergency communications has been one of amateur radio's greatest beneficiaries demonstrated especially in those cases in which life literally hangs in the balance. Where is the need more urgent for fast, reliable, accurate, and easily obtainable data transfer while using equipment within economic reach and the skill set of most radio amateurs?

Two scenarios this month—one employing Winlink 2000 and the other using the Narrow Band Emergency Messaging System—serve as examples of how amateur ingenuity and dedication help build the bridge between computer keyboard and radio wave to execute our role as public servants and developers of ever-improving modes of communication. Carpe digitum diem . . . Sieze the digital day.

"Hamsters" and Winlink 2000 Solve a High-Sea Mystery

On a Saturday morning last fall, Perry Lundquist, W6AUN, got an e-mail from a Colorado woman deeply worried about the welfare of her husband

*1940 Wetherly Way, Riverside, CA 92506 e-mail: <ki6sn@cg-amateur-radio.com>



Rob Rude, KØRAR, was a key player in putting Winklink 2000 into action to reunite a worried wife in Colorado with her sailor husband in the Sea of Cortez, Baja, California, Mexico after she lost contact with him for four days. Rude is shown here in a communications trailer during Douglas County, Colorado's 2010 Interface Drill. (Courtesy of W6AUN)

aboard the couple's sailboat *Allure* in the Sea of Cortez, between the Baja California Peninsula and mainland Mexico.

"They had been faithfully communicating every day via Skype [internet-based video messaging]," said Lundquist, Amateur Radio Emergency Service® Colorado District 24 Emergency Coordinator. The last time they had talked, her husband had been docked at Bahia de Los Angeles in Baja, but she hadn't heard from him in four days. It's an awfully long way from Castle Rock, Colorado to the Gulf of California.

Her husband was an experienced boat captain, she said, and while they weren't radio amateurs, during the past two years they had sailed together, they had listened to the 75-meter Sonrisa net (3.968 MHz) each morning to hear weather updates and for information about the Baja region (http://sonrisanet.org). They knew other sailors who were radio amateurs who regularly checked into the Sonrisa net and the Chubasco SSB net, as well.

Now stateside and woefully out of touch, the idea of calling on amateur radio operators to help contact her husband came to the worried wife because "a few years before, when they were in Astoria, Oregon, hurricane-force winds brought down all (communications) infrastructure. When this happened, it was the amateur radio operators who were able to communicate," Lundquist said. An American Red Cross internet posting has the details: http://redcrossnw.wordpress.com/2007/12/13/amateur-radio-provides-lifeline-during-disaster/.

"Remembering this, she decided to search the internet for any hams in the local area who might be able to assist her [in contacting her husband], and she came across the ARES® District 24 website" (http://www.aresd24.org).

In this Saturday morning's e-mail "she asked if us 'hamsters,' evidently that's what some sailors call ham radio operators, could provide any assistance," Lundquist said. "In her e-mail she provided a Castle Rock phone number and I was able to confirm her story and collect additional information. I also gained a real sense of the level of concern that she had for her husband."

Lundquist knew that high-frequency propagation wouldn't be favorable and that chances of "being able to check-in to the Sonrisa Net were slim to none. I did some quick web searching to find other Pacific amateur radio maritime nets—there are many—and decided to call an old Navy man for a few suggestions, D24's Rob Rude, KØRAR. He suggested we send a message via Winlink 2000, knowing that HF Winlink was originally created to provide sailors an e-mail option while on the high seas."

Running with that idea, Lundquist "shared the information I collected from the worried wife with Rob and he sent the Winlink 2000 message. The next day I received a phone call from the Castle Rock woman saying she had just talked with her husband."

Evidently, the husband-captain had been contacted "by a sailing couple who heard about the *Allure* on the Amigo Net, a marine high-frequency net on 8.122–8.125 MHz.

As it turned out, "the reason (the couple wasn't) able to communicate via Skype was that while he was docked at Bahia de Los Angeles in the Sea of Cortez her husband was experiencing bad weather (50–60 knot winds) and the rough seas made it impossible to connect to the internet via their satellite-based internet service." Lundquist said.

"For the safety of the vessel, her husband decided to head out toward calmer seas. A fellow sailor heard via Winklink

Perry Lundquist, W6AUN, (background), who led the charge in helping a Colorado woman contact her out-oftouch husband, is shown with Ron Hranac, NØIVN, in the South Metro Fire and Rescue Authority's Emergency Operations Center during the 2008 Democratic National Convention in Denver (Courtesy of W6AUN) 2000 that the captain of the *Allure* was being sought and found Dennis (the husband), who then went back to port to contact his wife via landline phone."

The story and its happy ending were ultimately chronicled in the "Colorado ARES® D24 Newsletter."

Lunquist said Winlink 2000 "was born out of the Airmail software program, which was specifically developed to enable sailboat enthusiasts to send and receive e-mails over HF communications using Pactor3. With the advent of the Winlink 2000 system, Airmail has



become just one of the programs that can be used to send and receive e-mails. Paclink is another popular program that allows you to use your own e-mail client software such as Microsoft Outlook and Outlook Express.

"Instead of just a software program and communications protocol, Winlink 2000 is a complete e-mail system. The system includes five redundant communications messaging servers placed around the world so that if any region of the internet should fail, the Winlink 2000 system will stay operative." One of the servers is in the Pentagon in Washington, DC, he said.

"The really interesting thing about Winklink 2000 is that gateways into the system exist both on HF amateur frequencies and on VHF/UHF frequencies," Lundquist noted. "Here in the Denver area there are at least four RMS [radio message server] nodes with 2-meter transceivers on packet radio frequencies.

"Not only does this usage breathe new life into packet radio, but it also means that anyone with a Technician class license or above can use Winlink 2000 and local amateur radio communications to send and receive e-mail over the internet," Lundquist said. "This capability really excites our served agency representatives because we are able to send and receive e-mails in the field when local infrastructure is down."

District 24 "maintains excellent served agency relationships with the Douglas County Office of Emergency Management, Elbert County Office of Emergency Management, South Metro Fire and Rescue Authority, The Salvation Army, and the local chapter of the American Red Cross," Lundquist said. "We've been organized for about 20 years and have assisted our served agencies with various local emergencies to include flooding, blizzards and severe snow storms, power

outages, 911 outages and wildland fires. In 2002, District 24 and other Colorado Front Range ARES® Districts provided communications support during the Hayman Fire, a 168,000-acre blaze that was the largest in Colorado history."

As D24 EC, Lundquist manages a group "of about 70 emergency com-munications-minded amateur radio volunteers."

"I was first licensed in 1977 and of all the amateur radio related activities I've done—DXing, 10-meter beacon hunting, severe-weather spotting, high-altitude balloon chasing, and so on—emergency communications is the facet I enjoy most. I've been a member of Colorado ARES® District 24 since 1996, and since that time I have met more people and been able to do more cool things than I could have ever imagined."

Lundquist said he has "worked in emergency operations centers during many events, been at the incident command post during several wildland fires, been a part of public safety emergency response planning, and more." In addition to being D24 EC, he is also "... the RACES Radio Officer for both Douglas and Elbert counties. I'm a Communications Unit Leader (COML) for the Douglas County Type 4 Incident Management Team, and an interim board member of the Colorado D-STAR Association."

Lundquist is also an acknowledged contributor to the ARRL's Amateur Radio Emergency Communications Course, Level 1.

Why EmComm on N-Beams is so Darned Good

As reported in the September edition of *CQ*'s "Public Service" column, in 2009 the Hall County (Georgia) ARES® adopted use of the Narrow Band Emergency Messaging System for the transfer of digital data over radio. Now considered one of the leading EmComm groups in the state for digital commu-



Two Amateur Radio Courses

FCC <u>"Technician"</u> course (entrée level)
FCC <u>"General"</u> course (2nd level)
<u>Each</u> course is <u>2 sessions</u>
The 2 sessions are on November 6 & 13

Technician 10:00 AM to 2:00 PM both Saturdays

General 2:15 PM to 5:00 PM both Saturdays

FCC tests will be 10 AM to noon on Nov. 20

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

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

Optional Material

- Gordon West book with FCC test questions, \$22 for Technician and \$23 for General -
 - Copy of my Power Point charts, \$18 -

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

New Membership Application and Member Renewal Form

New:	or Renewal:	Memb	ership Da	te:		
Individual	(\$15/Year) or Hou	usehold and/o	r Family Mem	bership	_ (\$17/Year)	
(Applying) New <i>I</i>	Member Information: or	Member Rene	ewal: same as	Last Year? Y	 'ESNO	
Last Name:	First	First Name:		Spouse:		
Street Address:						
Phone: Home _	Wo	Work		Cell		
Email address: _	(Unless otherwise noted en	nails will be sen	t to the applyin	g member only)		
License Call:	License Class: _	ARRL <i>N</i>	Member (?)	Birth Date:	(Only: Month - Day)	
Member of: (DCS	, RACES, ARES, PVAN, NA	RT)	District	Unit	ID #	
Additional House	ehold and/or Family Memb	ers (if Applic	able):			
Name	Call	Class	ARRL	_ Birth Date:		
Name	Call	Class	ARRL	_ Birth Date: .		
Name	Call	Class	ARRL	_ Birth Date: .	(Only: Month - Day)	
					(Only: Month - Day)	
		d and/or Fami Donation to t Donation	ly membershi he John Alexa on to the Repo Donation	p (\$17.00) \$_ inder Fund \$_ eater Fund \$_ n 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.