

# Palos Verdes Amateur Radio Club



# K6PV



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

## MIDWAY ISLAND 2009



## K4M

DXCC Entity KH4



In October, 2009, nineteen Dxers from all over the world--Italy, California, Hawaii, Georgia, Germany, Singapore, Arizona--converged onto Midway Island to begin eight days of intense DXing.

Whether you managed to get through the pileup and reach this lighthearted group, (counting yourself as one of their 61,077 QSOs) or not, you'll find this to be an informative tale of how it's done.



Visit Our Web Site

# K6PV

[www.palosverdes.com/pvarc](http://www.palosverdes.com/pvarc)



# The President Paces Himself

Joe Pace, NZ6L

Every September, The Department of Homeland Security's Federal Emergency Management Agency (FEMA) makes a special effort to remind us all about emergency preparedness, and it's a good time to take stock of our family's disaster planning and supplies, insuring they are current and in good shape in the event we will hopefully never need to use them.

The geography of our peninsula poses some very real and challenging situations that will most likely impact our families and community in the event of a major earthquake -- water and electricity being paramount. All of our water is from a small supply of gravity fed tanks on the hill which require electricity to refill, the aqueducts that feed Los Angeles all cross major fault lines, and much of the electricity does as well. (Many of the electricity plants in our area are auxiliary/supplemental plants and are not able to provide primary grid power.)

Access to potable water for a significant number of days (weeks), medication, food (thank goodness for peafowl), and supplies notwithstanding, a well-considered plan and routine practice with your family can't be overstated.

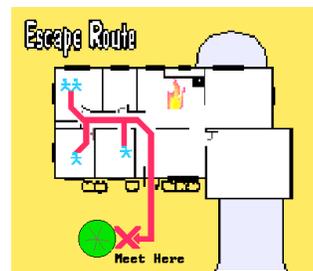


In an earthquake, our homes may very likely become uninhabitable very quickly, so it's a good idea to store supplies in an area that is less prone to collapse and will be safe to enter afterwards, and to have a careful escape plan that your whole family can do in their sleep if need be.

A careful escape plan begins with careful preparation, proper placement of smoke detectors and regular Exit Drills In The Home (EDITH) practice. Hopefully you will never have an earthquake or fire at your home, but should this occur your safety and that of your family will depend on calm, rational actions of the occupants. Exit drills in the home and a carefully designed escape plan can be the key to a safe escape.

Here are five critical steps for emergency preparedness:

1. Make a plan for yourself, your family, and your household.
2. Arrange a long distance telephone contact that everyone in your family can use to tell
  - where and how they are.
3. Prepare an emergency supplies kit for you and your family, enough for five days for
  - each person (ten days is better).
4. Prepare your home to survive an earthquake.
5. Get to know your neighbors and organize your neighborhood.



Wishing you and your family a safe and prosperous fall season!

73,  
Joe, NZ6L



| September 2010 |    |    |    |    |    |    |
|----------------|----|----|----|----|----|----|
| 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 2010 |    |    |    |    |    |    |
|--------------|----|----|----|----|----|----|
| 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 2010 |    |    |    |    |    |    |
|---------------|----|----|----|----|----|----|
| 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 |    |    |    |    |

| December 2010 |    |    |    |    |    |    |
|---------------|----|----|----|----|----|----|
| 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 |    |

| Schedule of Events<br>2010                |                              |
|---|------------------------------|
| August 14 <sup>th</sup>                   | RHE 5K/10K Run/5K Walk       |
| August 20 <sup>st</sup> -22 <sup>nd</sup> | Lighthouse Weekend           |
| August 22 <sup>nd</sup>                   | Summer Picnic at Pt. Vicente |
| September 15 <sup>th</sup>                | General Meeting              |
| September 18-19 <sup>th</sup>             | Concours d'Elegance          |
| October 20 <sup>th</sup>                  | General Meeting              |
| November 17 <sup>th</sup>                 | General Meeting              |
| December 15 <sup>nd</sup>                 | Holiday Dinner @ PVIC        |

### Save The Date



PVARC Holiday Dinner  
Wednesday evening, December 15th



**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.

### 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  |
| 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     |

### Treasurer's Report

Diana Feinberg, AI6DF  
September 2010

|                      |                   |
|----------------------|-------------------|
| PVARC Balance        | \$2,371.91        |
| John Alexander Fund: | \$ ,956.00        |
| Repeater Fund:       | \$1,168.66        |
| Special Fund         | <u>\$ 59.52</u>   |
| Total Bank Balance   | <u>\$4,496.57</u> |

|                          |     |
|--------------------------|-----|
| Membership 2010          | 127 |
| PVARC current membership | 134 |
| ARRL members are         | 77  |

### Contacts

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

## Club Business

### Rolling Hills Estates 10K/5K

Walt Ordway, K1DFO

Saturday, 14 August, several operators provided radio communications for the 29<sup>th</sup> Rolling Hills Estates 10K & 5K event. It all went well and we had a good time. There were over 500 runners for the two events. There was only one bad injury and that person was taken to Torrance Memorial hospital, but is said to be ok.

As some of you may know, this event takes place almost entirely on horse trails in Rolling Hills Estates, and one mile of paved road through the Botanical Gardens. As we noted in past years, the horse trails make the "sweeper" function a bit of a challenge. Melody KI6SPA and Richard KJ6CBA handled that for us and they do that on their horses.

The radio folks that supported this year's event were: Brad W6BJM, Mike N6DBS, Lovell KI6VZS, Steve KI6TEQ, Joe, NZ6L, Matthew N6MDC, Robin KI6VSH, Curtis KI6KUK, Herb KO6RC, Karen KG6BNN, John WW6WW, Jay KI6VFY, Melody KI6SPA, Richard KJ6CBA, Cynthia KJ6GPG and the net control Walt K1DFO.

If it sounds like fun, join the group next year on Saturday 13 August 2011.

### Conquer the Bridge

Walt Ordway, K1DFO

As many of you know, on Labor Day of 2009 the race director of the Rolling Hills Estates 10K/5K also conducted a 5 mile race from San Pedro, over the Terminal Island Bridge and back. He called it Conquer the Bridge. He asked us to handle the radio communications, like we do for the RHE 10K/5K. It was a very good event and there were around 1,500 runners.

Well, he decided to do the race again this year. So, at 8 a.m. on Labor Day, the second Conquer the Bridge was held. This time there were over 2,000 runners. The race actually starts at Harbor Blvd and 5<sup>th</sup> Street (one block from the Maritime Museum). Then it goes up Harbor Blvd to the Terminal Island Bridge, then east over the bridge to Navy Way on Terminal Island where it turns around and comes back.

We had 13 operators. Here's the list: Diana AI6DF, Jack K6JWR, Matthew N6MDC, Treva N6HMS, Don KI6VRZ, Cynthia KJ6GPG, Joe NZ6L, Steve KI6TEQ, Denzel KG6QWJ, Ginger KG6TAU, Bob KI6BUK, Scotty K6ZNL and Walt K1DFO. Radio communications went very well.

The race director said that he will do the race again on Labor Day in 2011. However, since the event starts and finishes right at the URAC radio club (Maritime Museum), they will be in charge of organizing the communications. URAC will welcome folks from the PVARC who want to work the event again.

## Club Business

### **Operators Needed on Sept. 25th For Bike Tour Communications Diana Feinberg, AI6DF**

PVARC has been asked to provide radio communications for the South Bay Sunrise Rotary Club's first annual RAT Beach Charity Bike Tour on Saturday, September 25.

This bicycle tour starts and ends at Redondo and Torrance Beach in Torrance's Hollywood Riviera section (hence the name RAT Beach—there are no real rats) and has three courses covering 62, 31, and 15.5 miles respectively.

We need amateur operators at four SAG stops (a bicycle tour term), in two roving trucks, and at RAT Beach. Please contact Diana, AI6DF, at [ai6df@verizon.net](mailto:ai6df@verizon.net) if you are available to work at this event or would like more information. The event website is at <http://ratbeachbiketour.com/index.html> and operators will receive a T-shirt in appreciation for their service. The event runs from 6:30 am to 1:00 pm and half-shifts are available.

The three charities benefitting from this Rotary bike tour are based in Torrance and serve individuals with special needs throughout the South Bay:

- \* The Pediatric Therapy Network (provides therapy for children with special needs)

- \* The Scott Newman Center (programs for youth substance abuse and domestic violence prevention)

- \* The ARC-South Bay Chapter (provides work and living skills for developmentally disabled and retarded children and adults.). ARC-South Bay is a member of the California and U.S. ARC organizations

## Welcome New Members!

Diana Feinberg, KI6DF

**Please welcome and meet our members who have joined PVARC during 2010:**

Walter Lang, KJ6CAS

Clay Davis, KJ6FHN, now AB9A

Saraj Cory, KU6F

Daniel Yang, K6DPY

Donald Culler, KJ6FLI

Melody Colbert, KI6SPA

Richard Fowell, KJ6CBA

Peter Landon, KE6JPM

Ed Atkinson, W6PNZ

Joe Fierstein, KJ6IRE

John Ickes, W0HAX

Frank Champion, N6HLR

Cynthia Gonyea, KJ6GPG

## John Alexander Fund Recipients

**Diana Feinberg,**

Students Ben Semel, KJ6KBS, of Palos Verdes Estates and Alan Williams, KJ6KBR, of Rancho Palos Verdes, last month received PVARC's John Alexander Fund reimbursements. We congratulate Ben and Alan for passing their Technician license exams at our August 7<sup>th</sup> VE session and welcome them to the amateur radio community.

PVARC's John Alexander Fund reimburses documented expenses up to \$50 for students under 18 who take Walt Ordway's, K1DFO, license training classes and become licensed. John Alexander, K6SVL (SK), was a founding member of PVARC, a noted DXer, and a mentor to many hams. Following his death in 1996, PVARC established a fund in John's name to continue his dedication helping new licensees, and especially young hams, become competent amateur operators.



Photos thanks to Matt Orlich, WA6AJC, and Curtis Watanabe, KI6KUK.

## “A clear objective with a bias for action”\*

That pretty much described the PVARC group who operated our traditional August lighthouse weekend at Pt Vicente lighthouse from about 5 p.m. on Friday to around 2 p.m. on Sunday. We made 186 contacts including a couple of lighthouses in New Zealand and Australia. In all we worked at least five lighthouses (maybe more) and the Columbia Lightship.

This year, for the first time, we operated as guests of the Coast Guard Auxiliary using the call K6A, rather than as guests of the U. S. Coast Guard using our own call. While we set up our shack inside the lighthouse, the CGA drove in a very nice portable rig, with lots of up-to-date equipment (like a solar panel). The driver and operator for the weekend was Gordon West, WB6NOA, who cheerily operated all weekend with occasional visits from other CGA members. Over the three days we worked his rig, he worked our rig, we all shared pizza.



\*“A clear objective with a bias for action,” is a quote in another context from Captain J. Kipling (Kip) Loutit, who for two years was commanding officer of the U.S. Coast Guard’s Integrated Support Command in San Pedro. Captain Loutit, an MIT graduate, his wife, Wendy, a PhD in Strategic Planning and their two small children, lived on the lighthouse grounds. He welcomed us to his lighthouse for our lighthouse/lightship weekend and brought his family to our picnic. He even spoke at one of our meetings. His outstanding tenure was memorable because he encouraged the Coast Guard and the local community to work together in a way that no prior Commander had ever done. He and his family were transferred to Norfolk, Va, in October 2006



For more great pictures with better resolution, be sure to look for them on the website: <http://www.palosverdes.com/pvarc/>





# Random Notes On the Kenwood TK-840

## Matt Orlich, WA6AJC



Kenwood TK-840 series of F.M. radio transceivers (Figure 1) have been recently turning up on the surplus market. Cheaply priced (yet ruggedly built), these radios can be easily programmed for amateur radio / public service scanner use. I found out just how rugged they were when I accidentally dropped my newly purchased swap meet bargain TK-840 and watched (in horror) as it bounced a number of times onto the concrete. The only noticeable damage was a slight dent in the upper right corner of the unit. When powered on, the radio performed as if nothing unusual had occurred. Kenwood has advertised these radios as being built to military specifications for dust, vibration and shock and I now believe it!

Depending on the model (or more accurately stated, the FCC ID #), the radios are capable of operation through a range of UHF frequencies.



Figure 2

To determine the frequency range of the radio, look at the FCC ID number (Figure 2) on the back of the radio (in very small print). Typical numbers would be:

- FCC ID: ALHTK-840-1; ...(450 – 480 MHz)
- FCC ID: ALHTK-840-2; ...(488 – 520 MHz)
- FCC ID: ALHTK-840-3 ...(403 –430 MHz)

- 
- The ALHTK-840-1 is the most sought after because it is readily converted/programmed into Amateur service. It was advertised with an operational frequency range of 450 to 488 MHz but should accept programming down into the Amateur 440 MHz band.
- The ALHTK-840-2 won't program for Amateur service but can be used as a simple public service scanner. With an advertised frequency range of 488 to 520 MHz, I found it capable of listening as far down as 482 MHz (with some reduction in sensitivity). Since I could find nothing of interest to listen to above 520 MHz, I couldn't verify the upper limits of my particular radio.
- The ALHTK-840-3 is listed as 403 to 430 MHz making it yet another candidate for scanner service.

I elected to turn my TK-840-2 into a simple conventional scanner radio with the transmitter disabled on all programmed channels. Kenwood made this radio for both conventional and trunking systems, which (sort of) explains the bottom buttons labeled "SYS" (System) and "GRP" (Group). From a conventional programming viewpoint, a "System" can contain up to 250 "Groups". The radio is capable of accepting programming for up to 32 "Systems". To put this into perspective, I tend to think of "System" as a Memory Bank and the "Group" as the programmed Channel or Channels inside the memory bank. Unfortunately, when the radio is set to scan, it looks at Group 1 (Channel 1) of System 1 (Memory Bank 1) and then moves to Group 1 (Channel 1) of System 2 (Memory Bank 2) as it works its way through all (programmed) 32 Systems (or Memory Banks). It has been mentioned (on the internet) that if the Scan is started on Channel 2 of Bank 1 then the radio will scan all channels 2 of each of the 32 memory banks (I have not yet verified this).

Anyway you cut it, this becomes confusing, so I elected to populate only the channel 1 position of each memory bank, which gives me a hassle-free 32 memories. As an aside, the programming interface is through the mike input. Figure 3 illustrates how I assigned the programmable front panel buttons.

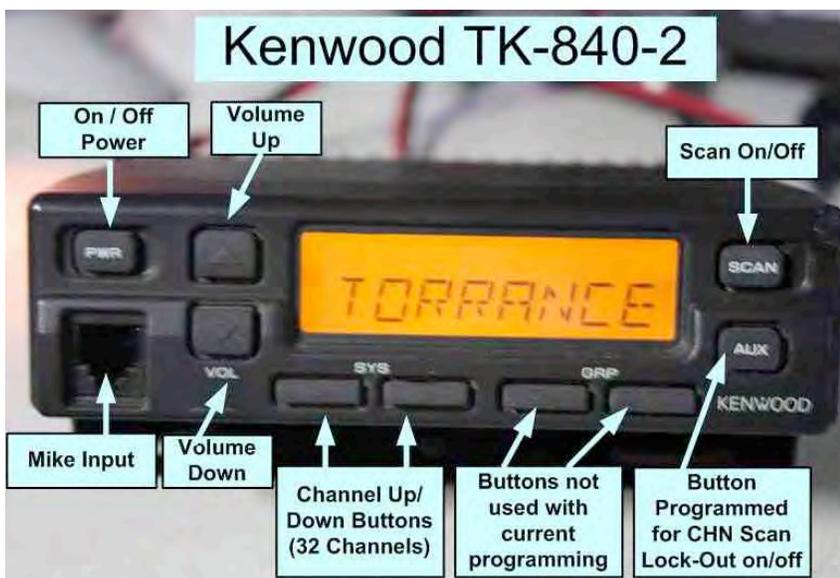


Figure 3

programming interface is through the mike input. Figure 3 illustrates how I assigned the programmable front panel buttons.

- The radios can be programmed with Kenwood's KPG-25D software. A programming interface cable for the Kenwood TK Series KPG-4 radios can be readily found on e-bay for around \$15. Some cables are capable of 2 in 1 programming, sporting dual connectors (one for the TK-840 and one for the TH-F6!).

-

- **Some fast facts on the TK-840 series:**

- ❖ Capable of 250 Channels
- ❖ Requires older 66 – 266 MHz Dos computer for programming
- ❖ Transmitter Output 25 Watts
- ❖ Alphanumeric display of 8 Characters
- ❖ Conventional or Trunking Operation
- ❖ Frequency step 12.5 KHz
- ❖ Programmable CTCSS Encode/Decode
- ❖ Programmable Digital Encode/Decode
- ❖ Programmable Dead Beat Disable (Radio can be disabled if lost or stolen)
- ❖ Control head can be rotated so that internal speaker faces up/down
- ❖ Transmitter section can be disabled via programming (Receive only)
- ❖ Unusual Scanning issue (rather complex – best limited to 32 channels for easy operation – channel programming beyond 32 makes scanning complex/confusing).

The TK-840-2 has no external (i.e. user adjustable) squelch control. The trend for many commercial radios is to set squelch threshold at the factory or authorized 2-way dealer. Because "tone coded" squelch (i.e. "PL" or CTCSS) and digital coded squelch schemes have become more popular, carrier operated squelch adjustment was removed from the operator's control. Even with the limited front panel controls, this radio is reasonably intuitive and easy to use by most anyone. Channel selection is accomplished by pressing the "SYS" buttons, while Volume adjustment is accomplished by pressing the "VOL" buttons. Programmed memory channels cannot be corrupted or changed via the front panel buttons. There is one caveat and that is the way I programmed the front panel "AUX" button. When a channel is selected and the "AUX" button is pressed, a small sideways triangle is displayed in front of the Alpha-tag display. The triangle indicates that this function has "Locked-Out" the selected channel from the scan list (although it can still be manually selected for monitoring). With the same channel selected, pressing the "AUX" button again removes the triangle and places the channel back into the scan list.



Figure 4 - 5-1/2 inch width

Since the TK-840-2 does not program into the 70-cm. ham band, I choose to convert the radio into a scanner receiver (all transmitter channels disabled). The following table lists the public service frequencies that this version was capable of listening to in my area.



Table 1  
(from file LASO-32C)

| Bank/CHN # | ALPHA-TAG | Rx Freq  | Rx Decode | Comments               |
|------------|-----------|----------|-----------|------------------------|
| 1          | PV ESTAT  | 506.3750 | D205      | PV Estates PD          |
| 2          | LOMITA    | 484.0375 |           | Lomita Sheriff         |
| 3          | LENNOX    | 483.4375 |           | Lennox Sheriff         |
| 4          | LTAC-2    | 482.8875 |           | Sheriff local Tac2     |
| 5          | ATAC-1    | 483.0875 |           | Sheriff Area Tac1      |
| 6          | ATAC-2    | 483.1625 |           | Sheriff Area Tac2      |
| 7          | ATAC-3    | 483.0125 |           | Sheriff Area Tac3      |
| 8          | ATAC-4    | 484.1125 |           | Sheriff Area Tac4      |
| 9          | CTAC-1    | 482.8125 |           | Sheriff Cnty Tac1      |
| 10         | CTAC-2    | 482.8375 |           | Sheriff Cnty Tac2      |
| 11         | CTAC-3    | 483.0625 |           | Sheriff Cnty Tac3      |
| 12         | TORRANCE  | 506.1625 | 123.0     | Torrance PD            |
| 13         | TOR TAC1  | 506.2125 | 146.2     | Torrance Tac 1         |
| 14         | TOR TAC2  | 482.6000 | 91.5      | Torrance Tac 2         |
| 15         | TORR DET  | 482.5000 | 85.4      | Torrance Detectives    |
| 16         | TORR CAR  | 506.5000 | 192.8     | Torrance car to car    |
| 17         | TORRFIRE  | 506.2625 | 167.9     | Torrance Fire          |
| 18         | TORFIRE1  | 506.2875 | 179.9     | Torrance Fire          |
| 19         | TORFIRE2  | 482.4250 | 79.7      | Torrance Fire          |
| 20         | SB FIRE   | 506.0125 | 192.8     | South Bay Fire         |
| 21         | SB FIRE1  | 506.0375 | 100.0     | South Bay Fire 1       |
| 22         | CARSON    | 484.1625 |           | Carson Sheriff         |
| 23         | LTAC-5    | 483.4625 |           | Sheriff local Tac5     |
| 24         | W HOLYWD  | 483.3625 |           | West Hollywood Sheriff |
| 25         | MALIBU    | 482.9125 |           | Malibu Sheriff         |
| 26         | LTAC-1    | 483.9125 |           | Sheriff local Tac1     |
| 27         | LYNWOOD   | 483.2625 |           | Lynwood Sheriff        |
| 28         | LTAC-9    | 483.8625 |           | Sheriff local Tac9     |
| 29         | RED 8     | 484.2750 | 156.7     | Verdugo Fire           |
| 30         | RED 12    | 487.2375 | 156.7     | Verdugo Fire           |
| 31         | ARCADIA   | 507.0625 | 110.9     | Arcadia PD             |
| 32         | CLAREMNT  | 506.1500 | 131.8     | Claremont PD           |

Here is a summary of the Pros and Cons for this radio:

PROS:

- Large Illuminated 8 Character Alpha Numeric display
- Mil-Spec / commercial radio with die cast metal chassis
- Small size – fits just about anywhere
- No crystals to buy – frequency programmable with at least a 32 MHz frequency spread
- Loud Clear Receive Audio with internal speaker (~ 4 watts)
- Scan appears on display when scanning and is replaced by Channel Alpha-Tag when scan stops
- Provision for external speaker via standard 3.5 mm jack
- Includes both Encode and Decode CTCSS (PL) and DTS capability
- Cheap - prices vary from \$40 (or less) to \$100 used depending on condition & your haggling skills
- Usually found used at flea markets / ham fests / E-Bay
- Software might be found on internet
- Programming cable available on e-bay and other Internet sites.
- Programmable soft keys

CONS:

- No factory support – discontinued unit
- TK-840-2 will not cover GMRS
- Program Software no longer supported from Kenwood
- Difficult to identify frequency range if FCC Identification number is missing
- LCD Display hard to read beyond 45-degree angle
- LCD Display limited to 8 alphanumeric characters
- TX Indicator only on LCD Display (not easily noticeable) – preference is LED
- Channel Busy Indicator missing
- No signal strength indicator
- Scan scheme hard to understand
- Programs via slow (i.e. old) DOS computer via serial interface
- Radio is useless without program software / cable

Bottom Line: The TK-840-2 may not be for everyone, but if the price is right and programming capability is available, it could make an affordable, easy to use UHF public safety scanner.

!



# Two Amateur Radio Courses

## Two Sessions Each, in November

FCC "Technician" course (entrée level)  
 FCC "General" course (2<sup>nd</sup> level)

Each course is 2 sessions-- November 6 AND November 13

Technician 10:00 AM to 2:00 p.m. both Saturdays

General 2:15 PM to 5:00 p.m. both Saturdays

**FCC tests will be 10 a.m. to Noon on November 20**

Hesse Park, 29301 Hawthorne Blvd. Rancho Palos Verdes

No pre-registration required, No fee for either course -  
 But 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](mailto:walt.ordway@yahoo.com)

Not everything that counts can be counted, and not everything that can be counted counts.

The Constitution only gives people the right to pursue happiness. You have to catch it yourself.

What makes equality such a difficult business is that we only want it with our superiors.

**Need a Club Patch?  
 Or a Club Jacket?**  
 Dave Scholler, KG6BPH



**Need a Club Badge?**  
 Karen Freeman,  
 KG6BNN

