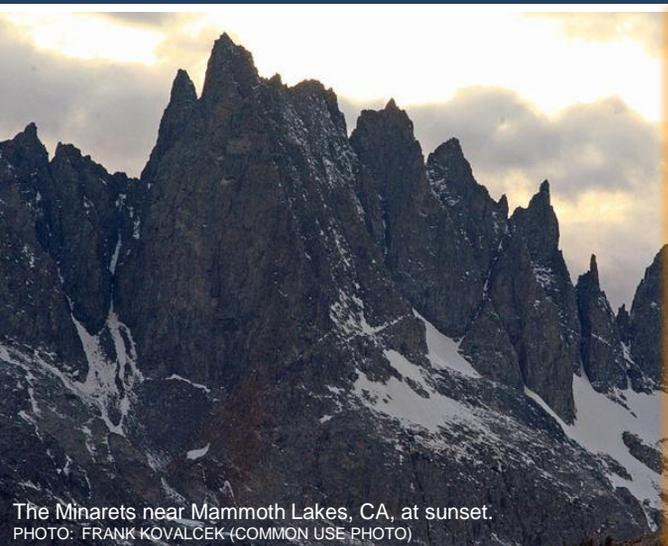




QRO

THE MONTHLY NEWSLETTER OF THE PALOS VERDES AMATEUR RADIO CLUB

JUNE 2013



The Minarets near Mammoth Lakes, CA, at sunset.
PHOTO: FRANK KOVALCEK (COMMON USE PHOTO)

“Summits on the Air”

Don Minkoff, NK6A

When: PVARC Monthly Meeting
7:30 pm, Wednesday,
June 19, 2013
Visitors Welcome

Where: Fred Hesse Park
29301 Hawthorne Blvd.
Rancho Palos Verdes

Mountain-Top Ham Radio: A Fast-Growing Interest Area

Don Minkoff, NK6A, will show that there is life beyond ham shacks by taking ham radio outdoors:

Visit new places and improve your health. Activating a SOTA summit is an excuse to get out of the shack and breathe clean air and appreciate mountains (as well as major hills).

“Summits on the Air (SOTA) is an award program for radio amateurs and shortwave listeners that encourages portable operation in mountainous areas. SOTA has been carefully designed to make participation possible for everyone - this is not just for mountaineers!” (From SOTA’s website at: www.sota.org.uk)

What also distinguishes mountain-top ham radio is travelling light: generators and large antennas can’t be taken to many mountaintops.

Join us on June 19 at Hesse Park to learn more about this fast-growing amateur radio interest area. ■



Summits On The Air

More Related To Our June 19th Meeting Program...

How many mountains and hilltops are registered in ham radio's "Summits On The Air" program? Potentially a lot—28,726 summits are now registered in the U.S. of nearly 54,600 currently worldwide, with more to come.

California alone has 3,716 registered summits in the program (see left table). The Palos Verdes Peninsula's 1,440-foot San Pedro Hill is included with "Southern Coastal Ranges" in SOTA's database. ■

SOTA-Defined Zone	Registered Summits
W6 (California total)	3,716
Sierra Nevada (portion)	49
Transverse Ranges (L.A., Ventura, San Bernardino Counties)	244
Northern Ranges	27
Desert Ranges	20
Coastal Ranges	74
White Mountains	14
Southern Sierra	572
Northwestern Ranges	393
Northern Sierra	367
Northeastern Ranges	289
Inyo Mountains	21
Southern Desert	435
Northern Coastal Ranges	437
Northern Desert	376
Southern Coastal Ranges (incl. Palos Verdes Peninsula)	381
Transverse Ranges (Central Valley)	17

Zone	Registered Summits
United States	28,726
W0-Colorado, Dakotas	1,791
W0-Missouri	57
W1	1,102
W2	716
W3	223
W4-Carolinas	508
W4-Georgia	136
W4-Tennessee	284
W4-Virginia	542
W5-Arkansas	124
W5-Mississippi	1
W5-Oklahoma	182
W5-Texas	447
W6-California	3,716
W7-Arizona	2,483
W7-Idaho	2,460
W7-Montana	2,563
W7-Nevada	2,567
W7-New Mexico	1,063
W7-Oregon	1,990
W7-Utah	1,577
W7-Washington	2,663
W7-Wyoming	1,188
W8-West Virginia	343

Some U.S. areas, such as W9, do not yet have a SOTA association.

Technology To Improve Our Life Often Complicates It

By Diana Feinberg, AI6DF
PVARC President

As amateur radio operators, you almost certainly have observed one of life's greatest ironies: new technology intended to solve our problems often creates new problems.

The latest twist for me was a new set of anti-spam filters applied to @arrl.net email forwarding addresses. When some of my emails to PVARC members began bouncing recently I could only laugh and recall a highly-memorable "Chip Talk" radio segment on KNX-1070 radio in 2003.

"Chip Talk" was the work of long-time Seattle radio personality Dave Ross, whose daily four-minute commentaries often humorously chronicled unintended consequences from technological advances.

Fast forward to 2013: First, Dave Ross would have had no shortage of humorous material for commenting on the electronic eavesdropping in the news lately. Secondly, perhaps you also experienced failed emails to hams having @arrl.net forwarding addresses. Fortunately, this latter problem has just been corrected.

I was finding my emails to @arrl.net addresses containing the word "cheap" or "refill" in either the subject line or body text would bounce 15 minutes later with the stern warning, "Delivery not authorized, message refused." That's anti-spam technology at work, ostensibly improving our lives. In light of the controversy over electronic surveillance I didn't test the word "Viagra®" in emails to arrl.net addresses. But I'm sure that drug name ranks with "cheap" and "refill" in the pantheon of spam.

So what was Dave Ross' shocking but funny experience in 2003 with electronic filtering? He reported a school district IT manager in central Missouri claimed newly-installed blocking software banned school access to "Chip Talk" commentaries on the daveross.com website. After an extensive back and forth, they found the cause: a long-time Dave Ross website advertiser was Seattle-area burger chain Dick's Drive-In Restaurants. You can now see where this is pointing. Dick's is Puget Sound's version of Southern California's In-N-Out Burger chain—both only use fresh ingredients and have similar menus.

Yes, fresh technologies can complicate our lives if applied without thoughtfulness. I am glad the ARRL was able to modify their email forwarding recipe. ■

Sorry, we were unable to deliver your message to the following address.

<ai6df@arrl.net>:

Remote host said: 554 5.7.1 Delivery not authorized, message refused -- . (reason: Regex: BombRe 'PB 20: for cheap' bombRe: 'cheap') [BODY]

t@vznit170182>

Date: Mon, 10 Jun 2013 13:39:39 -0500 (CDT)

From: "AI6DF@verizon.net" <ai6df@verizon.net>

To: ai6df@arrl.net

Subject: Refill of cartridge

Your message cannot be delivered to the following recipients:

Recipient address: ai6df@arrl.net

Reason: SMTP transmission failure has occurred

Diagnostic code: smtp;554 5.7.1 Delivery not

authorized, message refused -- . (reason: Regex: BombRe 'PB 20: for Refill' bombRe: 'Refill')

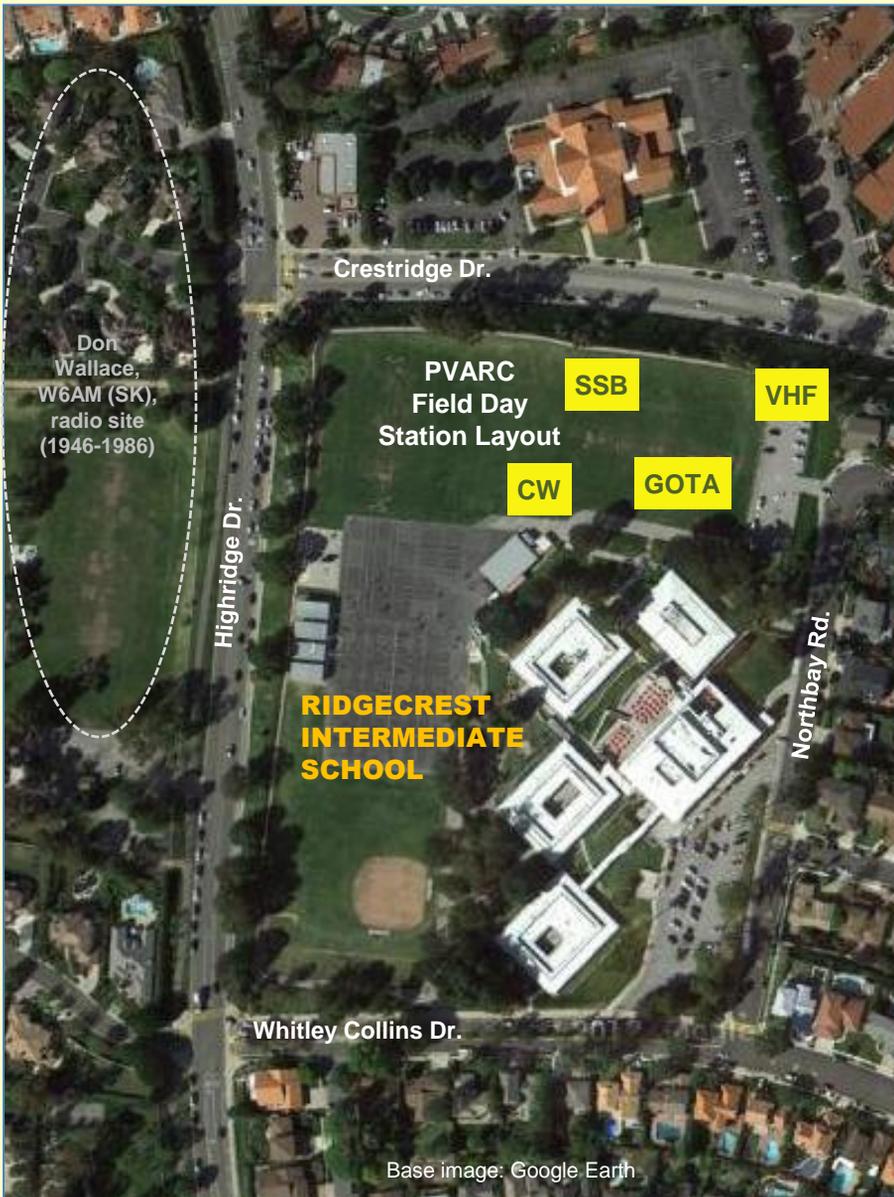
If emails to @arrl.net addresses bounce, look for the offending word near "bombRe". These examples were replicated using other arrl.net addresses and several different email host services. Thankfully, this indiscriminate blocking appears to have just been fixed.



We Hope To See You At PVARC's 2013 Field Day Site

ARRL Field Day is one of the most popular operating activities for amateur radio clubs in North America. All PVARC members are welcome to operate, help assemble our stations, observe, or simply visit our Field Day site at Ridgecrest Intermediate School, 28915 Northbay Road, Rancho Palos Verdes. Field Day on-air operating hours are from 11:00 am Saturday, June 22, to 11:00 am Sunday, June 23.

Station set-ups begin at 7:30 am Saturday and include assembling several Yagi beam antennas. One of these antennas will be mounted on our trailer tower.



If you are a new ham (regardless of license class), a Technician class licensee, or have not been active on the HF bands we encourage you to operate at our Get on the Air (GOTA) station. The GOTA setup will be operational from 11:00 am to 6:00 pm Saturday only and operate under the AI6DF call sign (per ARRL rules stipulating a separate call for GOTA stations).

We hope to see you at Field Day and be sure to sign in. ■

For safety reasons...

If you are involved with station set-up or take-down, please wear a **hard hat, protective eyewear, and gloves**. Closed-toe shoes are highly recommended.

We ask all operators and visitors during night hours to carry a flashlight and an HT radio tuned to the K6PV repeater (447.120 MHz, -, PL 100.0). K6PV will be used for communicating within PVARC's Field Day site. Carrying an HT radio monitoring K6PV during daytime hours at our Field Day site is also encouraged.

Replacing Display Bulbs in Amateur Radio Equipment

By Jerry Kendrick, NG6R

After you've been in our wonderful hobby long enough, you'll likely encounter the following situation: You squint to read the dial on your radio's backlit liquid crystal display (LCD) and notice that it's no longer lit—the light bulb has burned out. And, as today's electronic technician labor rate is nearing \$150/hour (often with a two-hour minimum), you're not about to turn over your radio for professional repair—certainly not to replace a light bulb! So, you might opt to just live with it.

OR, you can replace the lamp(s) yourself with only a moderate level of hands-on technical experience. This article chronicles the necessary steps to repair this all-too-common failure mode. The article is sprinkled with lots of photos so key steps are clearly illustrated. The procedure involved, itemized here for a Kenwood TM-321A 220 MHz transceiver, is very similar from rig to rig. The general approach is always the same. Remember that the LCD screen display is always at the front of the radio and the bulbs are just behind the LCD screen. Or, if a meter is illuminated, the lamp(s) may be just in front of the meter movement.

The "big picture" is to proceed so as to gain access to the display, removing the fewest number of screws necessary and with the fewest number of disconnections. Take lots of photos as you go along, which will help you retrace your tracks as you put the radio back together. It really isn't a daunting procedure. And you'll be

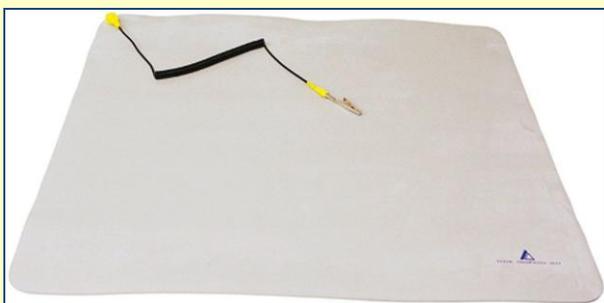


happy with your success every time you turn on your radio and see it glow in the dark.

Once you've dug far enough into the radio to actually see the failed bulb(s), you have a choice to make. Most likely the radio still has its original lamps, which were incandescent and can be from 6V to 12VDC. The really small ones (like the 3mm ones encountered here) are called "grain of wheat" bulbs, for obvious reasons. These aren't very common at electronics supply stores, but can be located on-line. Also, incandescent lamps have a shorter lifetime than light-emitting diodes (LEDs). For these reasons in this example, we selected a pair of LED lamps to substitute for the burned out incandescent bulbs. Details are provided later in the article about the requisite voltage-dropping resistor needed for each LED.

Many (all?) modern transceivers are loaded with integrated circuits (ICs) that are much more sensitive to electrostatic discharge than simpler components such as resistors, capacitors and transistors. So, it's a really good idea to always work on these radios using a static discharge mat. They're actually quite inexpensive (mat and wrist strap for about \$25 from Amazon.com—a worthwhile investment). All handling of this radio on the work bench used this mat and a wrist strap, with mat and strap grounded to the work bench's 120V AC electrical ground.

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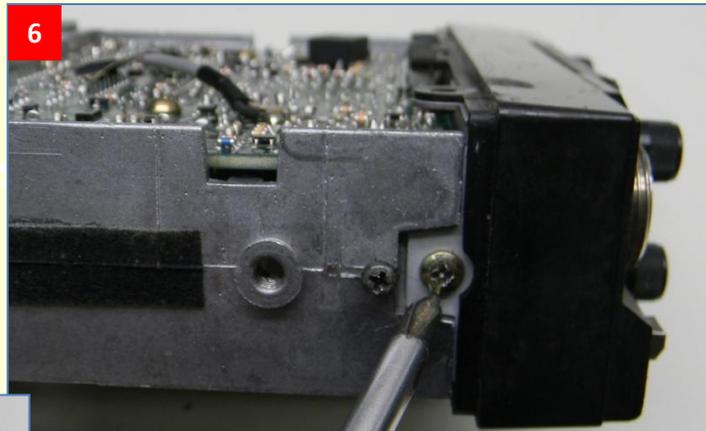
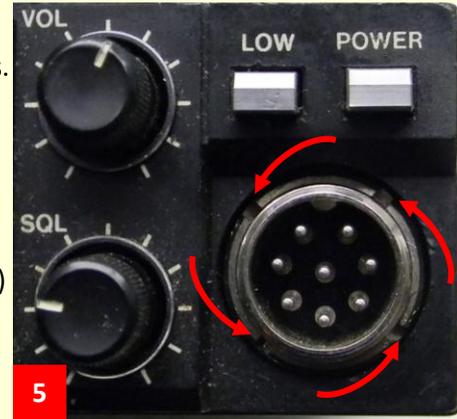
A static discharge mat and grounding wrist strap are recommended for microelectronic equipment work.

Replacing Display Bulbs in Amateur Radio Equipment

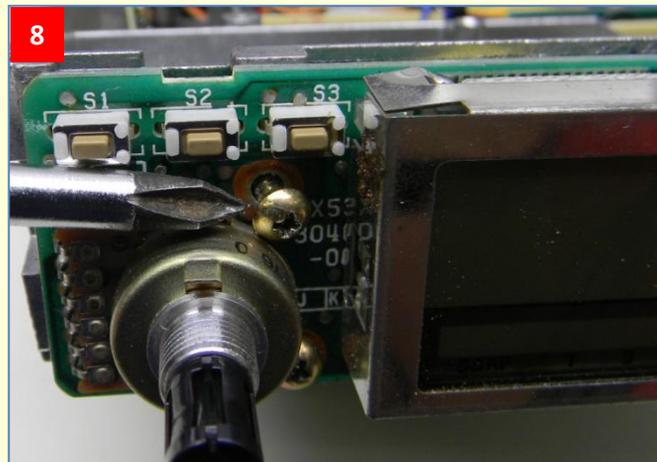
► *Continued from previous page*

Instructions for accessing the radio lamps—Kenwood TM-321 [or TM-221 (2m); TM-421 (70cm)]; other makes and models have similar instructions:

1. Remove the 4 screws in both the top and bottom covers.
2. Loosen just slightly the 4 side screws and remove top and bottom covers.
3. Unplug the speaker (attached to the top cover) from the printed circuit board (PCB) and set both covers aside.
4. Pull the frequency selection knob from the front panel. Volume and squelch knobs don't have to be removed. (On some radio models, they do.)
5. Remove the nut holding the microphone connector. At first glance, it looks like a special tool might be required. But, a very gentle counter-clockwise tapping torque using a hammer and the blade of a small screwdriver should break it free.
6. Remove the screw on either side of the radio that holds the front display section attached to the main body of the radio.
7. Gently pry the plastic display structure (that includes the glass front piece) away from the radio and the display electronics. It is stubborn, so be firm . . . but gentle.



ALL PHOTOS BY JERRY KENDRICK, NG6R



8. With that plastic cover gone, remove the three screws that hold the display electronics PC board onto the mechanical structure behind it—two on the left side (shown here) and one on the right.

Continued on next page ►

Replacing Display Bulbs in Amateur Radio Equipment

► *Continued from previous page*

9. Unplug the two-wire cable from the radio body.

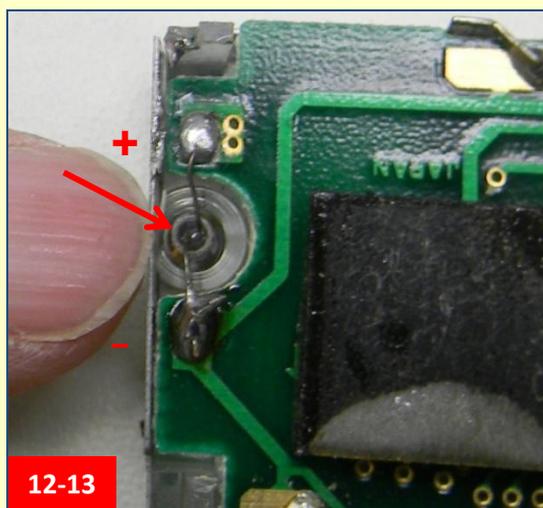
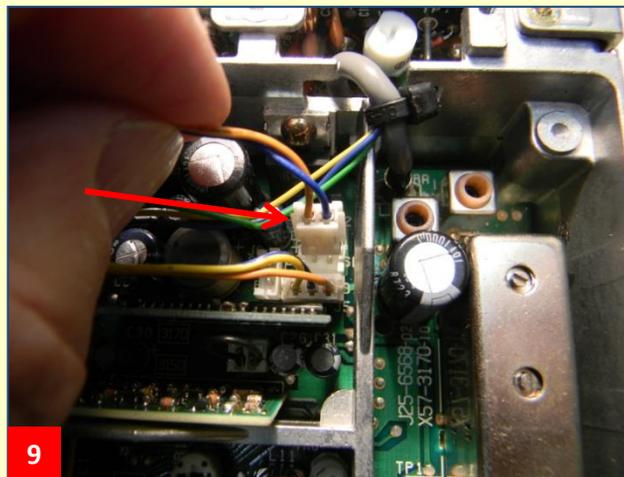
10. Pry off the front display section so that it is now completely separate from the radio body. In addition to the two-wire cable mentioned above, there is an 18-pin in-line connector that provides the main electrical interface between the radio and display. That has to be gently pried away from the radio body to isolate/separate/remove this display section. Set the radio body aside to work only on the display section.

11. Gently put a little side pressure on the four clear plastic standoff tabs that penetrate the lower PC board and lift up and separate the “floating” LCD display section. (Be careful not to stress the flexible ribbon cable, which is all that connects the two PC boards.) One of the clear plastic tabs is visible on the left at the author’s index finger.

12. At last, the lamps are now visible! The author is pointing to one of two lamps that are situated on either side of the LCD display. The bulb is 0.115” in diameter or slightly smaller in diameter than 3mm.

13. In order to proceed (and without a schematic), it is important to know the DC voltage that exists across the lamp. With the “floating” PCB section so exposed, but with the 18-pin connector and the 2-wire connector re-engaged, the radio is powered up (briefly) and the voltage across the lamp is measured. It measured 8.0 VDC and the positive polarity is up in the photo.

14. The lamps are now cut away from their two-wire connections and removed from their 3mm diameter cavities. The replacement LEDs are NTE30120, 3mm, blue (actually called “super purple”). Various colors are available, including orange, yellow, red and green. The ones selected have a luminosity intensity of 75 millicandelas (mcd), a forward voltage drop of 3.3V and a maximum forward current of 20mA. (75 mcd is sort of “middle of the road” for brightness—really bright: several hundred mcd; dim: 5-10 mcd.) We bought these at a local electronics supply store for less than \$1 each. *Continued on next page* ►



ALL PHOTOS BY JERRY KENDRICK, NG6R

Replacing Display Bulbs in Amateur Radio Equipment

► Continued from previous page

15. The LEDs emit light only when forward biased, so they must be oriented correctly relative to DC voltage polarity. The cathode (connected to negative voltage for forward bias) is indicated by a small flat area at the base of the diode next to the lead. That flat spot is visible facing up in the photo of the LED, shown next to one of the burned-out incandescent lamps.



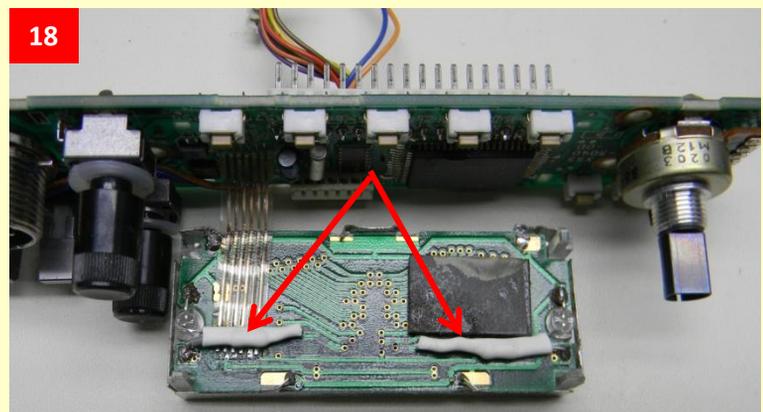
16. Since these LEDs cannot tolerate current greater than 20mA, a dropping resistor must be selected and placed in series to limit the current. The lamp supply is 8V and the LED drops 3.3V at its operating point; so, the resistor must drop approximately 4.7V ($8V - 3.3V$) with a current no greater than 20mA. Using Ohm's law, a resistance of $4.7V / 0.020A = 235$ Ohms is calculated. The chosen resistor of 270 Ohms provides a current margin of about 13% ($4.7V / 270 \text{ Ohms} = 17.4mA$). The LED and 270 Ohm series resistor ($<1/4 \text{ W}$) are shown prior to applying heat shrink tubing.

ALL PHOTOS BY JERRY KENDRICK, NG6R

17. Note in the photo that the LED appears milky in color. Its surface has been dulled with fine sandpaper to diffuse the light. Otherwise, the LED light is focused out the rounded top, which is not desirable in our application, as this radio display is backlit by light emanating from the LED sides.



18. Heat shrink tubing is applied to the two resistor/LED combinations (white in the photo). The LEDs are inserted into the two now-vacant 3mm cavities and soldered into place. A low wattage soldering iron is highly recommended as the components are very small. Take care that each resistor is positioned so as not to interfere with any fixed PCB components when the "floating" LCD PC board is secured into place.



19. The lamp replacement task is now complete. The above steps are reversed and the radio is re-assembled. Although the specifics in this article were for a particular radio model, the general principles can be deduced from studying these procedures. Difference for your radio should be minor. Good luck with your lamp replacement project and feel free to contact me if I can be of help. 73, Jerry, NG6R ■

Rolling Hills Estates 10K/5K Needs More Amateur Operators

Several more ham operators are needed for this year's Rolling Hills Estates "Hills Are Alive" 10K/5K run on Saturday, 10 August. If you'd like to help with the radio communications for this event, please contact Walt Ordway, K1DFO, at waltordway@juno.com

This run starts and finishes at Ernie Howlett Park, just off Hawthorne Blvd. Unlike other 10K/5K events, this one is run mostly on horse trails in the City of Rolling Hills Estates and also goes through the South Coast Botanical Gardens. The 10K race starts at approximately 8:00 AM and the 5K at 8:10 AM. The entire event will be completed by around 9:30 AM. ■

PVARC VE Team Licenses New Amateur Operators

The PVARC's latest Volunteer Examiner session on May 18 resulted in 10 new Technician licenses, four General licenses, and one grandfathered-upgrade from Technician Plus to General.

Serving as the VE team were; Matthew Cruse, N6MDC; Diana Feinberg, AI6DF; Jerry Kendrick, NG6R; and Bill Leighton, KG6WVF. Dave Scholler, KG6BPH, served as session coordinator.

PVARC's next VE session at Hesse Park will be Saturday, August 3, following the upcoming round of license classes taught by Walt Ordway, K1DFO. ■

Check In to PVARC Tuesday Nets, Check Out the K6PV Century Award

PVARC's Tuesday night nets at 7:30 pm on the K6PV repeater are open for all members (and guests) to check in. Our net check-in list was recently updated to provide each net control operator with a consistent list. Each net control operator will also add a mystery question within their net. There's no obligation to participate with the question, however.

Please also use K6PV for amassing additional contacts to qualify for our K6PV Century Club Award—just achieve at least 100 points (3 points for each contact with a PVARC member). ■

◆ PVARC's financial report is available upon request to any member.

Palos Verdes Amateur Radio Club

An American Radio Relay League Affiliated-Club

Board of Directors:

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Vice President	Clay Davis, AB9A
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Secretary	Malin Dollinger, KJ6HUB
Directors:	Ray Day, N6HE
	Joe Pace, NZ6L

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Asst. to Editor	Paige Omoto, KI6MAH
Webmaster	John Freeman, WW6WW
Club Librarian	Bryant Winchell, W2RGG
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VE Coordinator	Dave Scholler, KG6BPH
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Mailing Address:

Palos Verdes Amateur Radio Club
PO Box 2316
Palos Verdes Peninsula, CA 90274-8316

Monthly Meetings:

Third Wednesday (except August and December) at 7:30 pm at Fred Hesse Park, 29301 Hawthorne Blvd., Rancho Palos Verdes, CA. Visitors always welcome.

Repeaters (Open, though often listed as "Closed"):

Club: K6PV, 447.120 MHz (-), PL 100.0, CTCSS
"PV-West": K6IUM, 449.980 MHz (-), PL 173.8, CTCSS

To order a Club badge:

Karen Freeman, KG6BNN, 310-541-6971

To order a Club jacket or patch:

Dave Scholler, KG6BPH, 310-373-8166

QRO is published monthly by the Palos Verdes Amateur Radio Club, ©2013 all rights reserved.

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Front page photos—

Top: The South Bay's "June Gloom" climate affects the Pt. Vicente Lighthouse too. PHOTO: DIANA FEINBERG, AI6DF

Left Center: The Minarets near Mammoth Lake are among the California summits registered in the SOTA program.

PHOTO: FRANK KOVALCHEK

ARRL Southwestern Division Conventions Are Coming Up

2013 Southwestern Division Convention Update

The Santa Barbara Amateur Radio Club has announced the 2013 ARRL Southwestern Division Convention will now be held at the Santa Ynez Valley Marriott Convention Center in Buellton, on the weekend after Labor Day, September 6, 7, and 8. Buellton, located next to Solvang, is in a popular tourist area.

The ARRL Southwestern Division covers the ARRL's Los Angeles, Orange, San Diego, and Santa Barbara sections.

Additional information on the 2013 Southwestern Division Convention will be made available soon, including room rate information for the Santa Ynez Valley Marriott. This convention was recently relocated from a site in Ventura.

2014 and 2015 Conventions

The 2014 ARRL Southwestern Division Convention will be held in San Diego during the Fall months next year at a location to be announced.

And finally--the 2015 Southwestern Division Convention, HAMCON, returns to the Los Angeles area. It was at the Torrance Marriott in September 2011. A committee of delegates from various Los Angeles and Orange County amateur radios clubs, including the PVARC, is already working on the 2015 convention and expects to announce its venue next month. ■

Distracted Driver Laws Allow Ham Radio, but for How Long?

California's "Distracted Driving" laws continue to evolve. California law currently does not explicitly rule out--nor explicitly allow--using amateur radio equipment while driving a vehicle. A distinction frequently cited by ham operators was that simplex radios are not like full-duplex handheld phones.

But new research released in the past week by the American Automobile Association claimed that in-car hands-free and handheld devices are equally risky. The AAA study fitted drivers with special caps that measured their eye-movement, brain waves, and reaction times (among other things). Please be careful when operating mobile amateur radio equipment. ■

WELCOME NEW MEMBERS OF THE PALOS VERDES AMATEUR RADIO CLUB IN 2013

Tom Bell, KJ6YCM

Mary Ann Bell, N6ZHR

Norm Thorn, K6UU

Denise Thorn, KF6VTN

Kees Steeneken, KJ6YUT

Ron Anderson, KK6AAZ

Laura Behenna, KK6BFI

Anthony Bressickello, W6GEZ

Jerry Kendrick, NG6R

Peter Martinez, KK6CLI

Robert Kollar, KI6YMD

Tony Kordich, KK6DYL

Cindy Matsuda, KJ6NWO

Can You Be An Elmer To a New Ham (Even in A Small Way)?

We say again: Our club has assembled a list of PVARC members who offered to assist new hams or longer-timers on any amateur radio issue.

Many newer members may need assistance with programming radios (HT or mobile). We would like a list of members having the software and cable needed for programming various radio models.

We'll make the list available to club members who ask for assistance. How about adding your name to our list of those who can help other members with radio programming or another aspect of amateur radio?

Contact our VP, Clay AB9A at: ab9a@arrl.net ■

Palos Verdes Amateur Radio Club 2013 Calendar

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

April						
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28	29	30				

July						
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October						
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August						
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November						
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March						
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31						

June						
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30						

September						
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29	30					

December						
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



Club Activity



Club Public Service

2013 Major Contest Dates

■ ARRL ■ CQ Magazine and Other

- Jan. 5-6: ARRL RTTY Roundup
 Jan. 19-21: ARRL January VHF Sweepstakes
 Jan. 26-27: CQ Worldwide 160-Meter (CW)
 Feb. 9-10: CQ Worldwide RTTY WPX
 Feb. 16-17: ARRL DX (CW)
 Feb. 23: North American RTTY QSO Party
 Feb. 23-24: CQ Worldwide 160-Meter (SSB)
 Mar. 2-3: ARRL DX (SSB)
 Mar. 30-31: CQ Worldwide SSB WPX
 May 25-26: CQ Worldwide CW WPX
 Jun. 8-9: ARRL June VHF Contest
 Jun. 22-23: ARRL Field Day 
 Jul. 13-14: IARU HF Championship
 Jul. 20-21: CQ Worldwide VHF
 Aug. 3-4: ARRL UHF Contest
 Sept. 14-16: ARRL September VHF Contest
 Sept. 28-29: CQ Worldwide RTTY DX
 Oct. 5-6: California QSO Party
 Oct. 26-27: CQ Worldwide SSB DX
 Nov. 2-3: ARRL Sweepstakes (CW)
 Nov. 16-17: ARRL Sweepstakes (SSB)
 Nov. 23-24: CQ Worldwide CW DX
 Dec. 6-8: ARRL 160-Meter Contest
 Dec. 14-15: ARRL 10-Meter Contest

PVARC Nets

Every **Tuesday** at 7:30 pm on K6PV, 447.120 MHz (-), PL 100.0, all club members and guests are invited to check in and share information.

PVARC Meetings

7:30 pm on **3rd Wednesday** of every month, except August and December, at Fred Hesse Park, 29301 Hawthorne Blvd., Rancho Palos Verdes. Guests always welcome. A no-host dinner is held at 5:30 pm before club meetings at the Red Onion Restaurant, 736 Silver Spur Road, Rolling Hills Estates.

August 18: Annual family picnic at Pt. Vicente Lighthouse in conjunction with International Lighthouse & Lightship Weekend.

December 11: Holiday dinner (location to be announced).

PVARC Public Service Events

- August 10:** Rolling Hills Estates "Hills Are Alive" 5K/10K
Sept. 2: L.A. Harbor "Conquer the Bridge" Race
Sept. 21: RAT Beach Bike Tour
Oct. 13: Mary's Promenade 5K/10K
Nov. 16: Palos Verdes Half Marathon & 5K

PVARC's Islands on the Air Annual DXpedition

Feb. 20-24: Two Harbors, Catalina Island. (We'll be back in 2014—bad weather canceled our boat transportation this year.)



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

**NEW MEMBER &
 MEMBERSHIP RENEWAL FORM**

NEW: _____ RENEWAL: _____ MEMBERSHIP DATE: _____

Last Name: _____ First Name: _____ Spouse: _____

Street Address: _____

City: _____ Zip: _____

Phone: Home _____ [] Work _____ [] Cell _____ []
 (please indicate [x] which number(s) [limited to two] you would like included in the PVARC roster)

Email address: _____

(Unless otherwise noted emails will be sent to the applying member only)

License Call: _____ License Class: _____ ARRL Member _____ Birth Mo./Day: _____

Other Amateur Radio Groups You Belong To _____

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

Name _____ Call _____ Class _____ ARRL _____ Birth Mo./Day: _____

Name _____ Call _____ Class _____ ARRL _____ Birth Mo./Day: _____

Name _____ Call _____ Class _____ ARRL _____ Birth Mo./Day: _____

Individual membership (\$15.00) \$ _____

Household and/or Family membership (\$17.00) \$ _____

Donation to the John Alexander Fund \$ _____

Donation to the Repeater Fund \$ _____

Other Donation to PVARC \$ _____

Cash: _____ or Check #: _____ Date _____ TOTAL \$ _____

Please make checks payable to: Palos Verdes Amateur Radio Club; Dues based on January 1st to December 31st year.
 All New and Renewal Member applications must be signed below.

In applying for or renewing my membership in the Palos Verdes Amateur Radio Club, I agree to abide by the Club's constitution and by-laws (available on-line at: <http://www.palosverdes.com/pvarc/constitution.htm> or upon request.

Signature: _____ Date: _____

Family Member Signature: _____ Date: _____



Whether for emergency communication, communicating around the world, or learning a bit about electronics, there's nothing else like amateur radio (also known as "ham radio"). Amateur radio operators have long provided the communication "when all else fails" during disasters. Please tell your friends and relatives that with a short course, they can join the over 700,000 men, women, and children in the United States from all walks of life who are licensed to operate ham radios.

Two Free Amateur Radio Courses

FCC "Technician" course (entry level)

FCC "General" course (2nd level)

Each course is 2 sessions

The next sessions are on 20 July & 27 July 2013

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

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

FCC tests will be 10:00 AM to Noon on 3 August 2013

The Palos Verdes Amateur Radio Club will make a brief presentation at 9:30 AM at the start of the 20 July Technician class on how to get further involved with amateur radio.

The location is Fred 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 (sold at cost)

- Gordon West book with all the FCC test questions,

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

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

For courses sponsored by the Palos Verdes Amateur Radio Club, students thru grade 12 who pass their examination at a PVARC VE session will, upon application to the Club, be eligible for reimbursement up to a maximum of \$50 to cover the cost of materials and the examination fee.

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

(Fine Print Department: The following event is not sponsored by the PVARC. This ad is shown solely for the convenience of our members and does not imply any endorsement or assumption of liability by the Palos Verdes Amateur Radio Club).

***My Pin Money Travel, LLC Announces
It's Second Amateur Radio Cruise
MPMT'S HAM RADIO CRUISE 3
On the Carnival Magic January 19, 2014 for 7 Days***

**The perfect gift for the "hard to buy for" person.
Great vacation with family and friends**

Planned activities onboard include seminars conducted during days at sea, working Maritime Mobile on two ship installed HF stations with DX for all licensed amateurs and all the fun of a Carnival Cruise! Special arrangements have been made with Carnival Cruise Lines for two HF operating stations and antennas.

Cruise from Galveston, Tx. To Belize, plus
Rotan and Cozumel returning to Galveston.



Only 48 cabins reserved. Book quickly - don't miss the great prices & extras!*
All prices are double occupancy and include government taxes and fees from:**

Deposit of \$250 per person due at booking in order to assign your stateroom.

TRAVEL INSURANCE IS OPTIONAL, BUT HIGHLY RECOMMENDED.

It can be purchased when you book your stateroom and is generally around \$100 per person.

Cruise through Debbie Rumfield, N5DSR with My Pin Money Travel, LLC (MPMT) who can be reached at mypinmoneytravel@yahoo.com or by telephone at 832-656-0731.

This event is organized by Lance Rumfield, WD5X, in an effort to offer amateurs the ability to enjoy the rare opportunity of operating at sea while participating in a terrific vacation.

*Each stateroom will also receive amenities (\$25 on-board credit, bottle of wine and, 2 tote bags) for participating in this group event. Shore excursions are also available for purchase.

**Carnival reserves the right to add a fuel surcharge of \$9 per person per day if oil goes to \$70/barrel

**NOTE: U.S. Customs recommend all cruise passengers
possess a valid U.S. passport in order to board the ship!!!!!!**

Captions to photographs and other illustrations in this month's **QRO**.

*Certain software programs that convert the text of PDF files into spoken words reportedly have difficulty converting short stand-alone text items such as photo captions and text boxes. The following combines or explains all short text items in this month's **QRO** into a larger body of text to facilitate conversion into speech.*

Page 1: Top photo: The Pt. Vicente Lighthouse is shown on a "June Gloom" day. Left center photo: The Minarets peaks near Mammoth Lakes, CA, are shown at sunset. Photo by Frank Kovalchek (common use photo)

Page 2: Top photo: snow covered peaks from the Summits on the Air website. In the center are two tables of figures show the numbers of mountain and hill summits registered with the Summits on the Air program.

Page 3: Bottom: Two illustrations of emails that were rejected by the ARRL forwarding system are shown.

Page 4: The 2013 ARRL Field Day logo is shown at top left. A Google Earth aerial view of the PVARC's Field Day site at Ridgecrest Intermediate School is shown.

Page 5: Top right photo shows the Kenwood mobile radio cited in the article about replacing burned out display bulbs. The two photos at the bottom of the page have the caption, "A static discharge mat and grounding wrist strap are recommended for microelectronic equipment work."

Page 6: Photographs illustrate steps 5, 6, 7, and 8 of the display bulb replacement process. All photos by Jerry Kendrick, NG6R.

Page 7: Photographs illustrate steps 9, 11, 12, and 13 of the display bulb replacement process. All photos by Jerry Kendrick, NG6R.

Page 8: Photographs illustrate steps 15, 16, 17, and 18 of the display bulb replacement process. All photos by Jerry Kendrick, NG6R.

Page 10: The table at upper right lists new members of the PVARC.

Page 11: The entire page is the PVARC calendar of events for 2013.

Page 12: The entire page shows PVARC membership application.

Page 13: The photo at top left shows a Kenwood handheld radio; the remainder of the page is the announcement of PVARC's next ham radio license classes.

Page 14: The entire page is an announcement about a ham radio cruise in the Caribbean during January 2014.