



WEST VALLEY AMATEUR RADIO CLUB, INC.

P.O. BOX 1573, SUN CITY, AZ. 85372

SHORT SKIP

SHORT SKIP is a periodical published monthly (every 2 months in summer) by WVARC. Deadline for items is 2nd Saturday of the month. Mail to PO BOX or call Editor Tom Peterson (days) 602-233-3068 - (evenings) 623-872-3013.

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OCTOBER 2000

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Short Skip Editor Tom Peterson KK7KW: wvarcshortskip@earthlink.net

CLUB CALENDAR

MONDAY	OCT 2	MEETING, ST CLEMENT SOCIAL HALL, SC, 7 PM
SATURDAY	OCT 7	LICENSE EXAMS, De VRY INSTITUTE, PHX, 8 TO 10 AM
SATURDAY	OCT 14	CLUB BREAKFAST, TIVOLI GARDENS, SC, 8 AM
WEDNESDAY	NOV 8	PALO VERDE SIREN TEST
FRIDAY	NOV 17	LADY'S NIGHT OUT, PALMBROOK COUNTRY CLUB
WEDNESDAYS		2m HAM NEWSLINE NET, 147.30 MHz, 6:45 PM
THURSDAYS		BRUNCH, COCO'S, 98th Ave. & Bell Rd., 10:00 AM
DAILY		CALL-IN NET, 147.30 MHz, 9 AM

MEMBERSHIP IN WEST VALLEY ARC is open to anyone with an interest in Amateur Radio. One \$10 annual fee includes all family hams at same address; only one Short Skip mailed to each address.

PROGRAM FOR OCTOBER 2 MEETING:

The meeting will begin at 7:00pm at St. Clement of Rome church located at 15800 N. Del Webb Blvd. About three quarters of a mile south of Bell Rd.

Jeff Johnson, KJ7LO will present.... Everything you wanted to know about QRP

A NOTE FROM RAY SUMNER, NW7R

Dear WVARC gang -

Thanks so much for the wonderful farewell party you gave me at the September meeting. Special thanks to Shirley Barr and the team serving those delicious refreshments, the tons of well-wishes, the many pictures of times spent together.

I will cherish the memories. Ruth and I will have the latchstring out if you are ever in our neighborhood in Connecticut.

Best wishes to you all. Ray NW7R

CLUB NOTES

FCC License Expirations: KB7AUP, Bob Weeks - 10/00
 N7PTG, Vern Lampert - 10/00
 KE0EU, Don Burk - 10/00
 W7MCP, Fred L Jones - 11/00
 WA9HBT, John Kornbeck - 12/00
 AA7HF, Wally Klandrud - 12/00
 W8QVG, Ron Wamsley - 1/01
 K7BQ, Cliff Fay - 1/01

New licenses and license upgrades:

Carina Cost, KD7KDN - Technician
Edwin Gross, KF8CG - Amateur Extra
Richard Moore, N7IYT - General
Dick Stout, KE7RD - Amateur Extra

NEW EMAIL ADDRESS FOR THE SHORTSKIP

The new email address for submitting items to the Short Skip Newsletter is: wvarcshortskip@earthlink.net.

PUBLIC SERVICE NOTES

The Palo Verde Siren Test will be held Wednesday November 8. Coffee & Donuts will be served about 8:30 am and testing will begin at about 10:00 am. A barbecue will follow the testing. If you can help contact: John Kornbeck. 623-566-2018. Please be sure to bring a water bottle and let John know your shirt size (sm - med - lrg - xlr).

Club badges (black on yellow, AZ-shaped) are \$5. See Lou Bennett, K7LOU to order.

HAM RADIO LICENSE EXAMS at DeVRY October 7. Register 8 to 10am; no tests will start after 10. Bring photo ID, original and copy of appropriate licenses or CSCEs. Form NCVEC 605 is available at Registration. Fee is \$6.65; please have correct change. For this fee you are entitled to one test in all desired Elements; a second charge is made for a repeat test in any Element.

The VE Team will not accept FCC Forms 610 and 605. Applicants will be given Form NCVEC 605 to fill out at the sessions. Applicant's social security number or FCC license identification number must be supplied.

The new license structure is in effect. Sections 97.501 and 97.503 of the FCC regulations specifies the following examination element standards and operator qualifications:

Element 1: 5 words per minute; Element 2: Tech class – 35 questions 26 minimum correct; Element 3: General class 35 questions 26 minimum correct; Element 4: Extra class 50 questions 37 minimum correct.

Requirements for an operator license are Elements 1,2,3,4 for Extra; for General class, Elements 1,2,3; Technician class Element 2.

On August 5, 23 candidates were examined. 23 candidates were examined. New licenses or license upgrades earned: Extra 4, General 8, and Technician 9. Percent of candidates who took and passed exam elements: Element 2 (Tech) 90%; Element 3 (General) 83%; Element 4 (Extra) 100%. No one took Element 1(5 wpm code) examination. VEs on hand:

Edward Beyer, WU7A
Jack Richards, WA9TV

Harold Van Dyke, KD2PH

Rich Piggott, WB2LKU, Session Manager, Liaison

Stan Kieffer, N7QB

Yoshi Sano, K7YS

Charles Wallace, W1OSV

David Morrell, N7TWT

Ray Sumner, NW7R

Dwight Yard, KB7KON

NEW CODE EXAM MATERIALS COMING SPRING 2001:

The ARRL VEC will replace all ARRL/VEC-supplied Morse exam materials next Spring. The new materials will use a Farnsworth character speed in the 13-15 WPM range (actual speed to be determined), at a tone of 720 Hz, and have only a fill-in-the-blank quiz document for use. Standard 5 WPM tests with 5 WPM character speed may be requested from the ARRL/VEC for special cases, where warranted. Every examinee has two chances to successfully pass a code test—either by answering 7 of 10 questions correctly, or by getting a 25 character-count solid copy. Any accommodative procedures to assist the disabled are applicable, as described on the back of NCVEC Form 605.

NOTICE TO WVARC MEMBERS

Technician class starts October 6, 2000.

Nine classes from 7PM to 9PM each Friday at the Sun City Posse. If you know of any one who wants a ham license, please have them call Dan Pierson W6NTX at 623-546-2131.

FOR SALE:

6 meter FMJ unit -a year old with power supply, mag mount antenna and book. \$150.00

Contact: June Snyder - KCOXZ - 623-972-3342

Kenwood tl922 Eimac 3-500Zs 2KW ssb, 1KW CW AND RTTY Class AB2 Grounded Grid Amp.
160meters -10 Meters. \$500.00 firm

Henry 2K4 2000 Watt PEP input Linear covering 80 - 10 meters
2- 500Z Eimac grounded grid triodes 600.00 firm

Tentec Corsair 11, RF power putput 85-100 Watts. Tentec model power supply, Tentec antenna tuner, tentec microphone, (package deal) \$350.00 firm

Contact: Bill Wanamaker - 584-3097 - scw will@ aol.com

Kenwood all band transceiver with CW and AM filter, mobile mount and manuals. \$250

Kenwood PS2 20 Amp DC power supply (matches the 430) \$75

Contact: Don Kavanagh - W4DYJ - 623-546-2223

Icom 751A Transceiver with P/S \$750.00

Icom AT-500 Automatic Antenna Tunner with 4 antenna inputs \$200.00

Contact: Joe Nowakowski - W7FPG - 623-584-6117

Collins R390A receiver. Excellent appearance and working condition, with manual, top & bottom covers, wt 85 lbs. Best Offer

Contact: Al Gross - W8PAL - 623-972-4380 - afternoons

Emergency Generator - Homelite 3 KW gas generator 120v/240v output 8 HP Briggs & Stratton, manual pull start, mounted on roll around deck for ease of moving. Used sparingly and in excellent condition. \$350.00 firm...

Contact: Bud Holmes - WJ7Q - 623-975-1773

OH NO! NOT ANOTHER LAMP BURNED OUT!

HIGH TECH ALTERNATIVE ...READ ON

Ok, your power meter uses grain of wheat lamps and the @\$% “!” lamp burned out again! I can’t find a replacement ...What do I do now?

Why not upgrade your panel incandescent lamps to the high tech world of “LEDs”. Today you have a myriad of choices from size, color and brightness, Today, I will walk you through the process of installing a LED.

For a good back light I recommend the #142892 Hi Brite white LED. It is rated at 3v, 20ma, 230mcd. about \$4.50, a 1/2 watt resistor [see text for value], and some small heat shrink tubing 1/8 diameter.

Where do I start? Here is the recipe:

1. See “Rolf” at Electronic City [aka Tri-Tec 602-371-0860 [not intended as a commercial]
There may be other sources for the LEDs but I shop there for special components. Buy the stuff you need. Mention my name and see him laugh!
2. Remember your Ham exam? ohms law? Well here you finally get to use this... No! not hard new math just follow me:
3. $R=E/I$ We know the old lamp was most likely at 12v. We know the LED uses 3v so we need a resistor 1/2 watt to handle 9-10 volts at 20ma. Remember, in a series circuit the current is the same and the voltage drops vary, adding up to the supply voltage. Plugging in the numbers we get... $R= 10v/.020$ [20ma=.020] DIVIDE.... ANSWER= 500 ohms now the closest standard 1/2 watt resistor is 510 ohms. also your voltage may vary from 12-14 volts [that’s why I used 10 volts] so 510 ohms is fine. When you add the 3 volts across the LED and the 10 volts across the resistor you get the total or supply voltage. My power supply puts out 13 volts. If you are using a different lamp voltage just redo the math with your numbers and get the closest resistor at or above the calculated value.

DEFINITION OF “CAREFULLY” Not hurried meticulous work

4. Ok, You purchased the parts, you carefully opened your meter or whatever, you carefully removed/unsoldered the burned out lamp. Measure the voltage at the location of the lamp to ensure it’s 12v DC.
5. Insert short pieces of shrink tubing over wires. Keep tubing away when soldering and slide the shrink tubing over the bare and soldered connections to protect everything from shorting out!
6. Prepare the LED. I strongly suggest you use colored wire. Red for + and black for - . The long lead on the LED is plus/positive. Solder carefully a length of red wire to it. then do the same with the black and negative side.
7. Solder the resistor to the positive spot where you removed the old lamp. insert into the circuit board or attach with a small piece of wire. [installations vary]
8. Solder the black wire from the LED to the negative spot where the lamp was. Then solder the red wire to the other side of the resistor. You now have a complete circuit. Carefully power up the meter to ensure the LED lights. If yes, let’s continue...If no, recheck your work.
9. Slide all the heat shrink to protect any uninsulated wire and to cover the LED leads. You may not need to shrink the tubing, but if you do use the heat from your soldering iron to quickly shrink the ends of the tubing to keep it from shifting.
10. This is the tricky part in positioning the LED for proper and comfortable illumination. slide the face of the LED around the meter bezel until you find a good spot. to secure the LED I use a drop from a hot glue gun behind the LED. Be careful and patient. When cold, secure, and you are happy with the outcome close up the unit and put it into service.
11. Congratulations, you will now never have to replace a burned out lamp, and no heat will damage your unit. You will notice the light is a bluish white very different than the old lamp but it is a good light. If you want you can use a different color but for my needs white is the way to go.

Marty, KA7GKN [the arm chair troubleshooter] schematic diagram:

