

Inside this Issue

President’s Message 1
 Trivia Corner..... 1
 March Speaker 2
 Special Interest Groups.....2
 Join Us for Dinner..... 2
 Nebie Net 3
 Crow Fries (humor) 3
 Radio Jake’s Corner (technical).... 3
 CVARC’s New QSL Card 4
 April Visalia DX Convention..... 4
 QRP – A Challenge..... 4-5
 QRP in Action.....5-6
 Exam and Study Guide Sites..... 7
 Tax Deductible Donations 7
 Application to Join CVARC.....8
 Ventura County ACS/ARES.....9
 CVARC Officers.....9

The CVARC club meeting is held at 7:30 PM on the third Thursday of the month at:

The East County Sheriff Station
 2101 East Olsen Road
 Thousand Oaks, CA 91360

The East County Sherriff Station facility is just off the 23 freeway from the Olsen Road off-ramp, north, between Thousand Oaks and Simi Valley.

Trivia Corner
<p>How many versions of Morse Code exist? Three: the American (first used by telegraphers and American railroads); the Continental (German railroads); and, the current ITU standard, International as used by hams today.</p>

President’s Message

Rob Hanson, W6RH

If it ain’t broke, make it better.

In 2009, the *Wall Street Journal* had an article on how [Tinkering is Making a Comeback Amid the Economic Crisis](#). They said "The American tradition of tinkering -- the spark for inventions from the telephone to the Apple computer -- is making a comeback, boosted by renewed interest in hands-on work amid the economic crisis and falling prices of high-tech tools and materials."

Make Magazine <http://makezine.com/> focuses on do it yourself (DIY) and/or DIWO (Do It With Others) projects involving computers, electronics, robotics, metalworking, woodworking and other disciplines. Decades ago, amateur radio operators were on the forefront of scores of technological innovations, including television, digital communications, solid-state design and cellular networks. The hobby's roots trace back to radio pioneers such as Marconi and FM-inventor Edwin Armstrong.

Much has changed over the years in society and ham radio. Many amateurs have gotten away from these "do-it-yourself" roots but those types are still out there! If you still have a bit of "amateur" in you, I encourage you to branch-out and check out the Maker groups. I think there can and should be a lot of crossing over and sharing of talents between some ham radio folks and these groups. These are the types of people that need to be welcomed with open arms into the hobby. The ARRL is endorsing this concept with the DIY video CVARC members helped create. Antennas are something we can still build. The cost is small and the benefits of an effective antenna are great. Just ask Mike, N6TEA.

I hope you will join us to hear the words of wisdom and experience Ken Larson will share with the club at our meeting.

And then go make something.

March 15, 2012 CVARC Meeting Speaker

On March 15th at 7:30 P.M. at the Ventura County East Sheriff's Station on Olsen Road in Thousand Oaks, the Conejo Valley Amateur Radio Club (CVARC) will have a guest speaker to discuss amateur radio antennas.

The topic "Easy-up Amateur Radio Antennas" will be presented by Ken Larson, KJ6RZ. The presentation will include a discussion on HF through UHF dipole and vertical antennas. Additional information will be presented on stealth antennas, easy construction techniques, radiation patterns, antenna gain, and other performance issues. A question and answer session will be conducted. Active participation by other club members about their experiences will be encouraged.

Our speaker, Ken Larson was first licensed in 1958 as K8MEV. He has spent over 10 years in various ACS/ARES leadership positions, and is a CVARC past president and former newsletter editor. He has written many articles on antennas and is a highly valued resource and contributor to many in the Amateur Radio Community as well as to CVARC and ACS/ARES. As a retired digital design - systems engineer, Ken's primary interests are in the development of homebrew amateur radio equipment and systems.

Submitted by Zak Cohen, N6PK

Special Interest Groups

We are forming up what we call "Special Interest Groups" (SIGs) that concentrate more deeply on particular sub-hobbies of Ham Radio. We invite

you to join up and teach, learn or just hang out and chat with hams with like interests.

Here are some of the topics we've got interest in:

- CW Stuff (operating, collecting, etc.)
- Antennas
- Emergency Communications
- Homebrew/Construction
- Amateur Television (ATV)
- Collecting
- Digital Communications (PSK, packet, etc.)
- Contesting
- QRP (low-power ops)
- FM/Repeaters/D-Star
- New Hams Intro
- Volunteer Hams

Other group ideas are welcome. To sign-up please contact Eric Peterson, WB6PYK, via email at wb6pyk@arrl.net

Join Us for Dinner Diane Wainwood, KJ6JEJ

Please come join your radio friends and our guest speaker at **Brent's Deli**, for a delicious pre-St. Paddy's Day deli dinner everything from soup and salad combos to corned beef and Reuben's. Check out their menu at www.brentsdeli.com. It looks delicious, and they've offered us a free dessert tray for booking our group! See you on **March 15, 5:30 pm**. Brent's is located at 2799 Townsgate Rd., Westlake Village. Take the Westlake Blvd. exit from the 101 Freeway, go south (towards the ocean), then make a left on Townsgate Road. The restaurant phone number is 805-557-1882, and the reservation is under Conejo Valley Amateur Radio Club. My cell phone is 805-630-7994.

Newbie Net

Diane Wainwood, KJ6JEJ

The CVARC Newbie Net provides an opportunity for new and recently licensed or re-licensed hams to get "on-the-air" practice and gain confidence in operating their new radios. We have a usual check-in of about 12 hams, both newbies and Elmers. While I've been net control operator since the beginning of this experiment in November, the initial hope was that net control would rotate among the newbies so we all get a turn at initiating contacts. I've certainly learned a lot and gained confidence. So...we're looking for a few good newbies who are willing to venture out into net control. I have a little one-paragraph script, and there are some excellent on-line sources for protocols to run a net. Contact me by phone, E-mail, at the club meeting, or on-the-air on Sunday evenings from 7:00-7:30 on the Bozo Repeater! I cannot run the net in April :(so I really hope some of you will whip up some "courage." Lots of hams are standing by to help you out! Many thanks to Elmer Brad, W6VO, who stepped in and ran the net February 19.

More Fries with That Crow? ...or As The Crow Fries...

I own variety of radios and peripheries... a "very necessary" assortment of base stations, mobile units and portables.

For over ten years, I've made space for the boxes of my bigger purchases in my garage, largely due the manufacturers request that, "in the unlikely event that you might have to return your radio to the factory for repairs, it is most prudent that you submit it in its original packaging."

I'm way overdue on ordering up my garage because I'm resisting making the hard decisions

about what to keep, what to throw out, what to give to charity and what to set aside for a garage sale... HEAVY DECISIONS for me!!!

Are my radio boxes there because I am HAM radio operator intent on providing for the safe transit of my equipment... OR am I a natural born Pack Rat, doomed to a life of clutter... a life of "boxes from Hades" containing all the surplus connectors, cabling and fasteners for every project I've ever done!!

So, my choice is between Rat or HAM... Hhhuummm!! Am I too Sheepish to make the decision at all? Will I eat Crow after all's said and done?

Crow... Schmow!! I'm no Sheep!!!

Send the Rat a packin'... A HAM I Am!!

Keep smilin', Tim K6POI

Radio Jake's Corner

Three free raffle tickets this month

There were no winners for the free raffle ticket in February for the simple reason no one bothered to reply to the questions. The questions were, "What is the formula for calculating the length of a Half-Wave antenna, also known as a dipole? What is the length of an antenna resonant at a frequency of 28400.0 MHz" The length of a Half-Wave antenna (dipole) is determined by the formula $L = 468/f$, where L is the length in feet and f is the frequency in megahertz. The length of an antenna resonant at 28.4 MHz would be about 16 ½ feet long. This is an easy antenna to build that does not

take up much space. Ten meters is a great band for working world wide DX with relatively low power. To drum up participation in March, the first three to correctly answer the questions will receive a free raffle ticket. Did you ever wonder about the relationship between frequency and wavelength? (Continued from previous page)

We have an amateur band allocation from 3.5 – 4.0 MHz. What is the wavelength (amateur band) of a signal at 3.750 MHz and at 4.0 MHz? Reply to RadioJake1@aol.com.

CVARC Now Has a QSL card

See it at QRZ.com by typing in "AA6CV" in the upper left hand corner of the web site. They were printed by GG Graphics

<http://www.gggraphicsstore.com/>. He gave the club a good price and did a very good job. In fact he printed and shipped the cards prior to receipt of payment. If you are thinking about getting new QSL's you might look at his web site as his prices are very reasonable and he has a fast turnaround time. WB6L

April DX Convention Visalia

The 63rd Annual International DX Convention sponsored by the Southern California DX Club will be held at [The Holiday Inn Hotel & Conference Center Visalia](http://www.holidayinn.com) April 20, 21, and 22, 2012. The International DX Convention is the world's foremost DX convention. If you are a DX'er or interested in any aspect of ham radio, you need to be at Visalia. If anyone wants to ride along and share the gasoline expense, please let me know. I will be attending Saturday only, leaving around 5 AM & returning before 9 PM. Information at <http://www.dxconvention.org/> WB6L

QRP - A fun, challenging way to do ham radio by Eric Peterson WB6PYK

"QRP?" ... "QRP" - It used to be a standard Q-code dialog that asked "Shall I reduce power" and answered "Yes, I shall reduce power". And although that's still a valid query and response, lately there's another meaning. The question "QRP?" may just as easily be asking "Do you QRP?" QRP operation is getting more and more popular.

Although low power operation used to be seen as a disadvantage, with the (historical) novice class licensees limited to a "mere" 75 watts on the HF bands; QRP operation nowadays means transmitter powers of 5 watts or less (with "QRPp" power levels being 1w or less).

The 'quality' of a QRP contact is typically measured in units of "Miles per Watt", with typical values ranging from 1,000 to 100,000 (yes - that last one may be a 10,000 mile contact with 0.1 watt). Hams have received Worked All States with QRP and QRPp power levels, so these M/W values are not extraordinary. And no - you don't have to use CW - there are many modes available including SSB and digital modes.

Not forgetting that this is the CVARC "Year of the Antenna": QRP capability is often defined by the quality of one's antenna, we don't have the power levels to blast through a poorly built antenna (this doesn't mean you need a large or expensive antenna, just one that is matching, resonant and at a reasonable height).

The advantages of QRP operation are many:

* Small size - these rigs have been fit into 35mm film canisters, Altoids tins; even tuna cans.

* Easily built - transistor counts of fewer than 10 are very common for a QRP rig; one can build one and have it on the air in just a few hours.

* Low power consumption - powered by a simple 9v battery or a few AA batteries, it makes for lightweight portable operation.

* Inexpensive - usually QRP rigs don't have all the 'bells and whistles' of 'normal' rigs, making them considerably less expensive to own and operate.

* Challenging - with less power, it's a bit more effort to get that QSO, but it's also quite gratifying to get that contact.

* Educational - although a transceiver with hundreds of parts may be tough to reverse-engineer, the small-scale of QRP rigs make them quite understandable.

* It's the Law - Yep - FCC Part 97 says that we must use "the minimum power necessary to carry out the desired communications". Don't waste that excess power by barbecuing the atmosphere!

OK, how do I get started?

There are a several commercially made rigs available for QRP (and yes, you can even dial back the power setting of most rigs) - common rigs are the Yaesu FT-817ND, the Elecraft K-series and a handful of others. In addition – for those of us that like the smell of rosin -- a good number of radios are available in kit form, including those from MFJ, Small Wonder Labs, and Norcal QRP Club and Wilderness Radio. You can even find a number of circuits on the web and in QST magazine (the ARRL QST index is your friend!) And yes, you can even homebrew a rig!

QRP is a fun, inexpensive way to operate, and allows you to take your rig to lots of locations that

may not otherwise operate from. "QRP?" ... "QRP!".

QRP in Action

Submitted by Greg Lane, K7SDW

(Published by permission of Bob Sulanke)

From: Bob Sulanke <bob.sulanke@gmail.com>

To: k7sdw@arrl.net

Sent: Saturday, February 11, 2012 4:32 PM

Subject: recent qso

Hi Greg.

FB on ur pwr. Five days ago I wrk Joel WB6INA (no e-address known) with my same set up.

My rig was homebrewed -- more on that later. I like to call cq at 14.604. I was running 5 watts into folded dipole, fed with window line. For the fifth time, with our qso, I used a homebrewed recorded keyer for calling the "cq". The keyer uses a PICAXE. For the sixth time with our qso, I used a HBrew Link Coupled Tuner using a T200-2 toroid. Our qso confirmed that both the auto keyer and LCT wrk.

I hv 2 fully home brewed rigs -- one fer 40m es one fer 20m. They are essentially the same except for filters and antennas. When convenient I like to make two of each home brew project so that I can judge them by comparison. So far I hv over 260 qsos and over 39 states between these rigs. see the post script and the attached file for pic of rigs. The case yields lots of room fer mods, etc. Both are portable ready.

I may be totally addicted to using HB whenever possible -- (My other rigs/test equip (hi) are IC718 es K2).

tnx agn Hope to wrk u agn
73 Bob KE7GKM

P.S. " A fully home-brewed rig and its first unscheduled qso" (This note was written for my club news letter (ISRA) to encourage others to do Home Brewing -- most likely w/o luck. It describes my HB station.)

As a teenager in the 50's I was attracted to ham radio much more for its DIY construction aspects than for the communication or theory aspects. Pictures of OMs or bushy tailed teens with head phones and keys did little to excite me. Give me solder. In about 1957, the poor choice of an Elmer and a weak potential for passing the code test put off my being a ham until four years ago. Always, in the recesses of my mind there remained a desire to build a station completely from individual components as hams did back-in-the-day.

My recently completed 40 meter 5 watt home brewed station consists of a receiver and a transmitter, separately powered, with the TX being a low QRP TX followed by an RF amp. Currently hand switches are used to change the power and the antenna connections.

I strongly recommend the HB receiver. It is the direct conversion VRX-1, available as a "bag of parts" kit from the Four-States-QRP club for about \$25. See Note [1]. Its sensitivity is measured to be better than the 1 micro volt level. Its XFO consists of a crystal, coil, and a variable cap and has a tuning range of about 4 Khz. The receiver, as well as most of this station, was built on pieces of copper clad board with components soldered to small pads or in some other ugly style at 150% the dimensions of the kit. [4 toroids, 3 bipolar transistors, 1 mosfet, 1 ic for audio]

A modest QRP transmitter serves as the exciter at about 1/4 watt. Mine was derived from the TX section of the Hendrick QRP transceiver kit DCxxB. See [2]. It uses a crystal-cap XFO (a crystal-cap-coil, soon) for its local oscillator. In today's ham environment, being able to put ones station near

an integer multiple of a kilo Hertz seems desirable, thus the crystal needs to be bent. My ICOM 718 or frequency counter is used to set the TX and RX frequencies, which have a 600HZ offset. My straight key feeds a double pole relay with one line to the TX and the other to the side tone, which

is produced by an HB practice code oscillator. [3 toroids, 3 bipolar transistors, 1 mosfet]

The modest TX drives an RF amp with some filtering redundancy. The amp is the 2010 ARRL's Homebrew Challenge lowest-cost winner which can produce 50 watts from a 5 watt input. See [3]. The amp is a push-pull design costing about \$30 and using switching MOSFETs as the amplifiers. Indeed, it was the June QST article on this amp, along with the VRX-1, that was the impetus to complete my HB station. Presently the efficiency needs work as the output pwr is less than 25% of the pwr supply. [4 toroids, 2 bipolar transistors, 2 mosfets]

In mid-July the station obtained its first unscheduled QSO with Frank, WB7NZI, Western WA, 7.038MHz, 579 vs. 579. The amp fed 5 Watts to my HB antenna tuner and dipole. My strategy was to call CQ (or listen) on the QRP frequencies or the friendly FISTS frequency, namely, 7030, 7040, and 7038, respectively. It wrkd.

Note 1. Designed by NT7S,
<http://www.wa0itp.com/vrx1.html>

Note 2. Designed by KD1JV,
<http://www.qrpkits.com/files/DCxxB.pdf>

Note 3. Designed by W6JL, QST June 2010, pages 30-33.

I hv unsked qsos on my HB rigs with NT7S and W6JL and Wes Hayward

[Ed – see the CVARC Yahoo Discussion Group site for pictures, too.]

Amateur Radio Exam and Study Guide Websites

<http://www.qrz.com>

On the right column under “Ham Study”, go to “Practice Tests”

<http://www.eham.net>

On the left column under “Resources”, go to “Ham Exams”

<http://www.KBOMGA.net>

Log in is required

<http://www.radioexam.org>

Practice Exams

Tax Deductible Donations to CVARC

CVARC is an IRS-certified 501(c)3 charitable organization and donations are deductible pursuant to the IRS rules. If you have working radio equipment and ancillary equipment that you can and wish to donate to the club, please contact one of the board members and we will be happy to talk to you about the process. Many companies will either grant or match employee’s gifts to non-profit organizations like CVARC.



CVARC is recognized by the ARRL as a Special Service Club (SSC). To be a part of the ARRL’s Special Service Club program, the club must regularly show that it is actively involved in certain areas, including:

We cannot accept certain donations, and have to place some restrictions around them (no hazardous materials, nothing we could not sell, etc.). If you are interested, look me up, or any other board member at one of the meetings or contact us via E-Mail (our addresses are on page 9 of this newsletter). Please determine if your company is among these and contact a board member so we may help fund and grow CVARC. We cannot accept certain donations, and have to place some restrictions around them (no hazardous materials, nothing we could not sell, etc.). If you are interested, look me, or any other board member up at one of the meetings, or contact us via email (our addresses are on page 7 of the newsletter).

- New Ham Development and Training
- Public Relations
- Emergency Communications
- Technical Advancement
- Operating Activities

Send information/application to:
Conejo Valley Amateur Radio Club
P.O. Box 2093
Thousand Oaks, CA 91358-2093

Name: _____
Call Sign: _____
Class: _____
Address: _____
City, State, ZIP: _____
Telephone: (____) _____ - _____
E-Mail: _____
ARRL Member expiration date (on QST label): _____
ACS#: _____ ARES# _____
Date: _____ Update Roster Only? _____
Family Membership: Names/Calls _____

You will automatically receive the newsletter via E-Mail. If you wish
To receive a paper copy by mail, check here: _____

New or Renewal: _____
Single Membership \$25 _____
Multi-year _____ years @ \$20/year = _____
New Ham (licensed in last 12 months) \$10 _____
Single Membership & full-time student \$10 _____
ARRL Membership Renewal (incl. ARRL form) \$ _____
Ad Space (2x3) One Year member \$35 _____
Ad Space (2x3) One Year non-member \$75 _____
Total enclosed \$: _____
Cash _____ Check Number _____
Interested in:
License Upgrades: _____ Joining ARES/ACS: _____
Disaster Action Team: _____ Earning a ham license _____

Ventura County ACS/ARES Times and Frequencies

Area 2 ACS/ARES members are encouraged to check in every Tuesday night at 7:00 p.m. on the Area 2 check-in nets.



Area	Time	Mode	Frequency	Shift	PL	Repeater/Notes
Area 1	7:00-7:30 pm	Voice	146.805	-	100.0	AD6SV
Area 2	7:00-7:30 pm	Voice	146.850	-	94.8	N6EVC/Grissom
Area 2	7:10-7:30 pm	Voice	224.700	-	156.7	K6HB
Area 2	7:10-7:30 pm	Voice	449.440	-	131.8	W6AMG/Amgen
Area 2	(Simplex)	Voice	146.445	None	None	Simplex
Area 2	(Backup Repeater)	Voice	147.885	-	127.3	N6JMI "Bozo"
Area 3	7:15-7:30 pm	Voice	147.915	-	127.3	WB6ZTQ
Area 4	7:15-7:30 pm	Voice	146.970	-	127.3	WB6YQN
Area 5	7:00-7:30 pm	Voice	145.400	-	None	N6FL
Area 6/7	7:00-7:30 pm	Voice	147.975	-	127.3	N6VUY
Area 8	7:00-7:30 pm	Voice	145.460	-	127.3	South Mtn.
County	7:30-8:00 pm	Voice	146.880	-	127.3	WA6ZTT
County	6:45-7:00 pm	Voice	52.980	-	82.5	K6SMR
County	7:30-8:00 pm	Voice	224.020	-	127.3	WB6ZTR
County	Before 6:30 pm	Packet	145.650	None	None	Hospital Net
County	(ACS Simplex)	Voice	147.570	None	None	Simplex

Net Control operations for the weekly ACS/ARES Area 2 check-in are run from the ACS/ARES communications center at East County Sheriff Station (on Olsen Road) every Tuesday starting at 7:00 p.m.

Visitors are welcome and have the opportunity to operate the station. Please contact Gino Spinelli, K16DJV, at (805) 529-6101 if you would like to attend.

For questions concerning ACS/ARES, please call the Area 2 Emergency Coordinator, Jerry Goldman, KC6JSO at (805) 405-8213 or go to the ACS/ARES section of the CVARC website at <http://www.cvarc.org>.

ACS members should remember that their ACS card is issued for only two years. When your card is due to expire, please call Jerry B. Goldman, KC6JSO, at (805) 405-8213. Jerry works with OES on a regular basis and will track your renewal to ensure that you receive your new badge in the shortest possible time. You will need to complete a Volunteer Update form for your renewal. Jerry will email this form to you 45 days prior to your ACS card expiration date. Please make sure that Jerry has your correct E-mail address at all times.

2012 CVARC Officers

President.....	Rob Hanson	W6RH	(805) 376-9350.....	rob@w6rh.com
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Treasurer	Ken Segedie	WD9DPK	(818) 706-2507.....	ken806@earthlink.net
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Member at Large	Andy Ludlum	K16NON	(818) 370-3402.....	ki6non@arrl.net
Member at Large.....	Mike D'Amore.....	N6MDA	(805) 496-1073.....	mike.damore@roadrunner.com



Conejo Valley Amateur Radio Club
PO Box 2093
Thousand Oaks, CA 91358-2093

Address Correction Requested



– FIRST – CLASS – MAIL –



CVARC Online

For up-to-date information and back issues of newsletters, please visit the CVARC website at <http://www.cvarc.org>. In addition to visiting the website, you may like to join the CVARC Yahoo Group at <http://groups.yahoo.com/group/CVARCDiscussion/>.

The Conejo Valley Amateur Radio Club is an ARRL affiliated Special Service Club. Meetings are held on the third Thursday of every month, except December. The meeting location is the Community Room at The East County Sheriff Station, 2101 E. Olsen Road, Thousand Oaks. Meetings start at 7:30pm with a pre-meeting social and technical assistance session from 6:30 to 7:30pm. Meetings are open to the public, and members are encouraged to bring their friends.

“QUA CVARC” is published monthly (on the Monday preceding the CVARC club meeting) by the Conejo Valley Amateur Radio Club, AA6CV, PO Box 2093, Thousand Oaks, CA 91358-2093. It is mailed free of charge to all members.

Opinions expressed in articles in this newsletter are those of the authors and do not necessarily represent the views of the club, its Board, or its members.

CVARC Membership Rates

Visitors are always welcome at our monthly meetings, and we do not pressure newcomers to join. If, however, you would like to support the club and its activities by becoming a member then we will be very pleased.

The simplest way to join (or to renew) is to write us a check bearing your address, and give or send it to our Treasurer. Make the check payable to “CVARC” and please put your call sign and/or email address, if you have one, on the memo line of your check. Name, call sign, or address changes may be e-mailed to the Treasurer. Current annual rates are: Regular Membership Family Membership \$30. Special discounts are available for new members (licensed in the last 12 months) \$10. Full-time Students: \$10. Regular members renewing for multiple years: \$20/year. Family members renewing for multiple years \$25/year.