



August 2016

QUA CVARC

A Newsletter for the Conejo Valley Amateur Radio Club

President's Message

Andy Ludlum-K6AGL

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2017 will be the Year of Next Generation Technology! As this year has been the Year of the Project, the club's board has decided to emphasize new amateur radio technology in CVARC's monthly programs and projects next year. You can see the [topics](#) our Speaker's Committee is working on at CVARC.ORG.

In discussing the 2017 theme, I began thinking about the future of amateur radio. I read about a dozen articles from all points of view and came up with a number of takeaways that seem to have general agreement.

- > Computers and digital signal processing already play a big role in newer amateur radio transceivers – even in entry-level HF transceivers.
- > Thanks to low-cost processors, Software Defined Radio (SDR) technology has rapidly evolved as the performance of analog to digital converters and programmable logic devices have improved.
- > Because SDR is much more versatile and adaptable, radios and computers will continue to merge.

QUA [CVARC](#) Newsletter Editor

Norm Campbell-AB6ET
radioab6et@verizon.net

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Club Meeting and Pre-Meeting Dinner Information, Thursday August 18

The regular club meeting is Thursday, August 18 (always the third Thursday) at the East County Sheriff's Station Community Room at 7:30 p.m. Talk-in coordination is on the Bozo repeater, 147.885 (- 127.3).

The guest speaker and topic is **Emergency Preparedness for Hams and By Hams**: Karl Moody, AE6TO.

Join fellow club members and the guest speaker at the pre-meeting dinner at Yolanda's Mexican Café in Simi Valley on Los Angeles Avenue. See notice for more information.

President's Message, continued from Page 1

- > We are moving towards true digital modulation instead of analog. As some point everything will be digital and software driven.
- > Due to the many different standards and proprietary aspects it may take some time for digital modulation to take over on VHF/UHF.
- > A digital voice mode will eventually replace SSB on the HF bands.
- > CW will make a comeback as SDR becomes widespread.
- > But most CW will be computerized and manually keyed CW will become a niche.
- > The real power of SDR is most of a transceiver is built by a programmer with software instead of electronic components that quickly become obsolete.
- > SDR technology could lead to the development of transmitters that generate multiple signals that are remote controllable from a personal computer.

Other authors argued that hams, at a certain point, deliberately chose to ignore the future and instead returned to the past. They point to the network of repeaters we built that greatly extended our range with just a handheld or even a mobile radio. We had created ways to pass data at speeds comparable to the landline methods of the time. Hams developed satellites and new methods of space communication. But then we stopped innovating at the

same pace. Critics contend industry leaders turned the focus on "emergency communications" resulting in hundreds of thousands of hams who have no interest whatsoever in electronics or learning more about radio communications.

Meanwhile in the non-amateur world the future marched ahead without us. Cellular technology exploded allowing high speed data transmission over the air. Commercial radio and television changed dramatically with voluntary and mandatory digital standards. Our military began using satellites and mesh networking for voice and data communications. And we've come to believe we're "roughing it" when we don't find the RF transmitted data that keeps our mobile devices connected to the internet.

Some fear ham radio is in danger of becoming overly dependent on computers and it will become difficult to distinguish amateur radio from the internet.

But I think it is important for clubs like CVARC to maintain a "big tent" approach. One of the big attractions of the hobby is that there's something in it to interest everyone. I think it is important for the club to explore and support these new technologies while still enjoying the innovations of the past that got us where we are today.

73,

Andy-K6AGL

Member's Survey Results

The results of the Field Day survey have been compiled. The general consensus was that this was a successful event and there were very few problems to correct next year. The computer network worked well but there was a hang up or two. There was some concern that the porta-potty was redundant. An unidentified member wants to be on the BBQ sauce committee. Take a look for yourself. <https://surveymonkey.com/results/SM-JMJ62GBT/>

Can you program your radio without a computer? Have you tried it or practiced it? Do you have a written list of your frequencies?

Pre-Meeting Dinner, Join Us for Dinner at Yolanda's Mexican Café in Simi Valley

Join your fellow CVARC Hams and guests this month for the pre-club meeting dinner at 5 pm at Yolanda's Mexican Café, 590 East Los Angeles Avenue Simi Valley, between Madera Road and First Street on East Los Angeles Avenue. Phone: 805-306-9933. We have a reservation made under CVARC/Michelle. Hope to see you all there!

Thursday, August 18, 2016—Club Meeting and Guest Speaker, Emergency Preparedness for Hams and By Hams: Karl Moody, AE6TO

We all know ham radio has saved lives during emergencies and may be our only available form of communication "when all else fails." Yet some homeowners associations and cities don't understand the value of amateur radio during emergencies. Karl believes a lot of the problem is due to lack of information. The solution? He believes we should become emergency specialists as leaders in our communities who train our neighbors how to prepare for disasters.

We'll also have a Field Day Recap from Ben Herrera-W6JWZ, Field Day Coordinator.

Members Have Done

The regular CVARC club meeting in July began with the pre-meeting gathering with club members and the guest speaker for dinner at Bandits BBQ in Thousand Oaks. At least a dozen and half members joined Bryce Chanes for an exceptional meal at Bandits, one of the club's favorite places. Then the group moved on to the East County Sheriff's Station to join other members for the regular meeting which began at the usual time of 7:30 pm.

President Andy-K6AGL called the club to order and led the Pledge of Allegiance. He introduced new members, guests, and recently licensed or upgraded hams.

Andy continued the discussion by mentioning the theme the Board of Directors approved for the club direction in 2017 which is technology and the next generation of ham radio. He talked about the topics and guest speakers for future club meetings while introducing the members of the Speakers Committee who are constantly on the lookout for guest speakers and club meeting subjects.

In addition, he called our attention to the Holiday Party and the coordination being conducted by the Party Planners Committee. More will be known about raffles, prizes, and tickets very soon.

The plan for a mid-September picnic/radio event was mentioned as well as a star party being held at the Paramount Ranch within a week or two.

Andy concluded regular club business with a brief review of Field Day which he called a "proud moment" in the history of the Conejo Valley Amateur Radio Club.

Vice President Tim-K6POI introduced our guest speaker for the evening, Bryce Chanes-KR0CKT, for a discussion of high power and model rocketry.

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Bryce Chanes-KR0CKT



Bryce is an engineering student in his final year at Embry-Riddle Aeronautical University and is working as an intern this summer on rocket engines at Aerojet Rocketdyne. He discussed his model rocketry projects as a member of the Embry-Riddle clubs: Eagle Space Flight Team and the Eagle Amateur Radio Club. Some of their activities can be found on YouTube using those names to search.

Bryce noted that his rockets are so big and fly so high that they would be lost without ham radio and APRS to track them. The rockets are reusable and expensive so he is glad to recover them for flight again. He brought one of the APRS modules that is used in the rockets to show us along with pictures of his rocket launches.



Besides rockets, Bryce said his clubs are also working on a "Cube Sat," a 10 square centimeter experimental satellite, that will be added to the payload of a regularly scheduled commercial rocket launch in January 2017.

Bryce's obvious enthusiasm for his hobbies and avocations was readily apparent. He will no doubt do well in the challenges he faces, and we will probably see his name in the times to come as a leader in space and rocket science.

His call sign sums up his direction and future, KRØCKT.

The meeting concluded with the raffle and many happy winners going home with useful new items. Refreshments of coffee and cookies were provided by Eric-WB6PYK and Mark-KK6IKX.

APRS Transmitter

Paramount Ranch Star Party

Hi All... de K6POI...

I spent a very enjoyable evening recently at the Paramount Ranch in the hills of Agoura.

The Ventura County Astronomical Society... I didn't know there was such an organization either... sponsored the event which attracted nearly 650 telescope operators, scholars on the science of the Universe, society members, a cadre of organizers and Park Rangers,

Moms, Dads, Kids, other general public and us three Amateur Radio Satellite hunters representing the CVARC... Bryce Chanes, KRØCKT, Zak Cohen, N6PK, and me, K6POI.

Pix #1 shows our radio base, complete with CVARC banner and the recent proclamation issued by the Ventura County Board of Supervisors designating June as "Amateur Radio Month".



Zak-N6PK, Tim-K6POI, Bryce-KRØCKT

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Even before the big lenses were set in place for their evening's focus on Saturn and Jupiter, Bryce had answered two separate transmissions from the International Space Station.

I wasn't fast enough to record his Packet QSO with the ISS, but I did slow Bryce down enough to get a statement from him.

Click on this [link to hear Bryce](#) summarize his day at the ranch. You may need to use Chrome, Quick Time, or MS Internet Explorer to open the file.



As a matter of fact, he is a Rocket Scientist

Members Are Doing

Sunday nights, Newbie Net, 7 p.m., Bozo Repeater 147.885 (-127.3), all are welcome especially newer hams. Want to be net control? The procedure will be provided. Contact Todd-KD6RCM, kd6rcm@arrl.net.

VHF Simplex Rag Chew, monthly or more frequently as desired, Sundays after Newbie Net, 146.550, open for all.

Tuesday nights, ARES/RACES net, 7 p.m., Bozo Repeater.

Wednesday nights, HF Roundtable, 7 p.m., 21.333 ±, USB, all are welcome.

Second Thursday, Board of Directors meeting, 7:30 p.m., Westlake Village City Hall, any member welcome.

Third Thursday, regular CVARC club meeting, 7:30 p.m., East County Sheriff's Station, dinner first somewhere at 5 p.m.

Send me a note if you know a recurring activity that should be listed here. -Ed.

Members Are Planning (Calendar)

<u>Date</u>	<u>Event</u>	<u>Links</u>	<u>Contact Person</u>
August 11	CVARC Board Meeting, 7:30 pm, WLV City Hall		
August 13-14	50 Mhz VHF Fall Sprint Contest 2300z-0300z		
August 14	VE License Testing, ECSS, 8:30 am		
August 18	CVARC General Meeting, 7:30 pm, ECSS		
August 20 -21	10 Ghz & Up-Round 1 http://www.arrl.org/10-ghz-up		
August 20 - 21	Camarillo Air Show, Ted Lansing-ki6ptx	ausprecher@gmail.com	
September 10-11	Ventura Marathon-multi-distance bike ride,	Stewart kg6bov@arrl.net	
Sept 10-12	September VHF Contest http://www.arrl.org/september-vhf		
Sept 10-18	Special Event Station: Route 66 on the Air San Bernardino, frequencies 28.466, 14.266, 7.266, 3.866 http://www.w6jbt.org		
Sep 19	144 Mhz VHF Fall Sprint Contest , 7 pm-11 pm		
Oct 1	San Diego Hamfest Lakeside,CA. 7 – 3pm http://www.sdhamfest.org		
Oct 9	VE License Testing, ECSS, 8:30 am		
Oct 14	Pacific Division Convention (Pacificon) San Ramon,CA http://www.pacificpon.org		
Oct 29	CQ Worldwide DX Contest, SSB		
Dec 1	CVARC Holiday Party, more details soon. No regular club meeting.		

Go to the <http://www.cvarc.org> calendar tab for additional events, links, contact persons, locations and times.

CVARC Pre-Meeting Dinners

August 18: Join Us for Dinner at Yolanda's Mexican Café. Join your fellow CVARC Hams and guests this month for the pre-club meeting dinner at 5 pm at Yolanda's Mexican Café, 590 East Los Angeles Avenue Simi Valley, between Madera Rd and First St on E Los Angeles Ave, phone: 805-306-9933. We have a reservation made under CVARC/Michelle. Hope to see you all there!

September 15: Join Us for Dinner at Geppino's Sicilian Kitchen. Join your fellow CVARC Hams and guests this month for the pre-club meeting dinner at 5 pm at Geppino's Sicilian Kitchen,484 East Los Angeles Avenue, Moorpark, at the corner of East Los Angeles Avenue and Spring Road, phone: 805-529-2292. We have a reservation made under CVARC/Michelle. Hope to see you all there!

Holiday Party—Save the Date—Thursday, December 1, 2016

The Holiday Planning Committee is finalizing the details for the CVARC Holiday Party. The location is probably the same as last year, the Best Western Posada Royale located on Madera Road near Tierra Rejada Road in Simi Valley. The time and menu are being secured. Ticket price will be announced.

This year there will be a grand prize raffle as well as other on-the-spot raffles. Raffle sales and attendance tickets will be announced at club meetings, in the newsletter, and on the CVARC discussion group as they become available.

Everyone attending last year had great time. Plan on being there again this year! As in the past, there will be no regular club meeting in December.

Field Day Wrap Up!

Ben Herrera-W6JWZ, Field Day Coordinator

Hello all,

Sorry for the delay... work has been getting in the way of all my fun and extra-curricular activities. With the extraordinary amount of violence toward public servants lately... we all have been working a ton... but I digress.

Field Day 2016 was great. Here is a brief look at our stats for Field Day 2016.

From the GOTA Log/ Visitors/ and participants... 82 folks meandered in and about for festivities.

We nabbed just about every bonus afforded to us. The GOTA bonus was not applicable due to the number of contacts for each GOTA user was too low.

Score Summary: (taken from the web form)

	CW	/	Digital	/	Phone	/	Total
Total QSOs	418		144		389		<u>951</u>
Total Points	836		288		389		1513

Claimed Score = 3,026 (calculated automatically by the ARRL website)

The plans and logistical tweaks have already started for next year! Hopefully more stations, more antennas, more contacts!!! More, more, more!!!!

Raw data as submitted to ARRL:

- > Call Used: AA6CV GOTA Station Call: KK6FUT ARRL/RAC Section: SB Class: 18A
- > Participants: 82 Club/Group Name: Conejo Valley Amateur Radio Club (CVARC)
- > Power Source(s): Generator, Battery, Solar
- > Power Multiplier: 2X
- > Bonus Points:
- > 100% Emergency power 1,800
- > Media Publicity 100
- > Public Location 100
- > Public Information Table 100
- > Formal message to ARRL SM/SEC 100
- > W1AW Field Day Message 100
- > Natural power QSOs completed 100
- > Site Visit by invited served agency official 100
- > Youth participation 100
- > Youth operators=22
- > Youth participants=22
- > GOTA Bonus 0
- > Submitted via the Web 50
- > Educational activity 100
- > Social media 100
- > Safety officer 100

> Total Bonus Points 2,950

> Score Summary:

> CW/ Digital/ Phone/ Total

> Total QSOs 418 /144/ 389

> Total Points 836 /288/ 389/ =1513

Claimed Score = 3,026

Band/Mode QSO Breakdown:

> CW/ Digital/ Phone

> QSOs Pwr(W) QSOs Pwr(W) QSOs Pwr(W)

> 160m

> 80m: 96-100 /49-100

> 40m: 138-100/ 16-100/ 85-100

> 20m: 158-100/ 88-100/ 139-100

> 15m: 24-100 /38-100/ 55-100

> 10m: 2-100/ 2-100/ 19-100

> 6m: 25-5

> 2m

> 1.25 :1-50

> Other

> Satellite

> GOTA 16-100

> TOTAL 418 /144/ 389

Ben Kuo-KK6FUT Named ARRL Santa Barbara Section Technical Specialist

We are fortunate to have in our club Ben-KK6FUT who has been actively involved in club activities such as designing and building projects, presenting lectures, radio restoration, and electronic experimentation. He is also very involved in community activities such as Boy Scouts.

Now he has been recognized and appointed as an ARRL Santa Barbara Section Technical Specialist by Section Manager Jim Fortney-K6IYK as announced in the following bulletin.

Ben has been a regular contributor to the QUA CVARC newsletter describing projects and activities. His stories and articles are available at the CVARC website.



Ben-KK6FUT

Fortney, James T - K6IYK [K6IYK @ARRL.ORG](mailto:K6IYK@ARRL.ORG)

Wed Jul 27 19:15:26 EDT 2016

I am pleased to announce the appointment of Benjamin Kuo — KK6FUT to the position of ARRL Santa Barbara Technical Specialist. Please help me in welcoming Ben to the Success through Teamwork team.

Ben has an extensive technical background and actively serves as a mentor to young people. His participation will help make the Section a success.

As with all my new Appointments, I have asked Ben to provide information on his background. He provided the following:

My background:

- Amateur Extra license
- Prior professional background in embedded software design; BS in Electrical Engineering
- Regular author and contributor to QRP Quarterly
 - “The Simple SI5351 Beacon on 10 Meters” QRP Quarterly, March 2016
 - “OCF on a Stick: A Multi-Band Portable Antenna” QRP Quarterly, January 2016
 - “Tips for New Homebrewers (From a New Homebrewer)” October 2015
 - “The Arduinopeater: A Simplex Voice Repeater in and Altoids Tin” July 2015
 - “Let’s Build Something, Part II” with N6QW, April 2015
 - “Let’s Build Something, Part I” with N6QW, January 2015
 - “CW Sender” Series, Spring 2014 through January 2015
 - “The \$20 Arduino SWR Analyzer”, with N6QW, Fall 2014
- Co-author of the “Let’s Build Something” progressive transceiver project, with N6QW—very widely built project originally published in QRP Quarterly.
- Previously sat on non-Ham related standard committees, chairing a number of industry standards for T11.5 NCITS, serving as Chairman and technical lead
- Published technical author in non-ham radio areas.

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Technical areas of expertise and interest (widely interested across all ham areas!):

- Antenna design and analysis, including computer modeling
- Homebrew receiver/transmitter/transceiver design
- Embedded software development with Arduino and Raspberry Pi
- Repair/restoration of vintage and not-so-vintage equipment
- Digital mode interfacing and software (PSK31, JT65, APRS, packet, etc.)
- Mesh networking (AREDN, etc.) 2.4Ghz and beyond
- etc.!

Willing and able to present in industry and to other amateurs.

Ben
KK6FUT

It will also be instructional for you to review Ben’s QRZ page.

<http://qrz.com/db/kk6fut>

Ben is listed on the Section Appointment Roster at: <http://arrlsb.org/pages/roster.htm> and can be contacted at his email address of KK6FUT@gmail.com

I continue to look for Section Amateurs who are interested in helping us build a vibrant and active Section. We have a significant need for individuals in all areas and I am especially looking for managers and leaders, not all of our hobby demands technical skills.

73, - JimF K6IYK

James T. Fortney, K6IYK
Section Manager, ARRL Santa Barbara Section
K6IYK@ARRL.ORG

“It is not the class of license the Amateur holds, but the class of the Amateur that holds the license.”

Newbie Net Schedule

Sunday nights, 7 p.m., Bozo Repeater 147.885 (-127.3), all are welcome especially newer hams. Want to be net control? The procedure will be provided. Contact Todd-KD6RCM, kd6rcm@arrl.net.

<u>Date</u>	<u>Name/Call Sign</u>
8/14-	Stu, AG6AG
8/21-	Bob, W6CJX
8/28-	Arie, WA6RIE

Thanks all,
Todd-KD6RCM

Upcoming CVARC Speakers and Topics

Thursday, August 18, 2016 – Emergency Preparedness for Hams and By Hams: Karl Moody, AE6TO. We all know ham radio has saved lives during emergencies and may be our only available form of communication “when all else fails.” Yet some homeowners associations and cities don’t understand the value of amateur radio during emergencies. Karl believes a lot of the problem is due to lack of information. The solution? He believes we should become emergency specialists as leaders in our communities who train our neighbors how to prepare for disasters. We’ll also have a Field Day Recap from Ben Herrera, W6JWZ.

Thursday, September 15, 2016- QRP: Terry Graves, K7FE talks about QRP operation. The QRP Q signal was created to mean, "Shall I reduce power?" but has since been adopted by the enthusiasts who transmit at reduced power while attempting to maximize their effective range. In this CVARC “Year of the Project,” QRP operation stands out as a home-brewer's dream as it is certainly possible for nearly anyone with the ability to obtain a ham license to build QRP-ready projects such as a 5W transmitter.

Thursday, October 20, 2016 – Repeaters: Paul Strauss, WD6EBY is a Rabbit Radio Network member and owner of repeaters in the Camarillo area as well as a mesh network. He’ll be talking about repeater operation, setting up repeaters and how you can get the most out of a repeater system.

Thursday, November 17, 2016 – Remote Operation: Mark Weiss, K6FG is a retired LA Superior Court judge and a ham for over 60 years. His primary ham radio interest is DXing. Mark will demonstrate the setup and operation of remote ham radio over the internet. Imagine being able to check into one of our local nets while on board a cruise ship in the Indian Ocean! Mark successfully did that using shipboard internet. He’ll talk about how you can set up your home rig for remote operation.

December, 2016 – CVARC Holiday Party

Thursday, January 19, 2017 - How to Read the ARRL Propagation Charts: Adrian Jarrett, K6KY. It’s OK to admit it. Propagation charts can be mind-boggling for many of us. Adrian shows us how to read propagation charts and then how to use that information to make more contacts.

Thursday, February 16, 2017 – ATV: Slow and Fast Scan Television

Thursday, March 16, 2017 – RFI

Thursday, April 20, 2017 – Microphones

Thursday, May 18, 2017 – Digital UHF/VHF Modes, DMR, D-Star, P-25, Fusion

Thursday, June 15, 2017 – What is a Panadaptor?

Thursday, July 20, 2017 – New Radio Demo Night

Thursday, August 17, 2017 – Emergency Radio Communications in Ventura County

Thursday, September 21, 2017 – Software Defined Radio and Remote Operation Demo

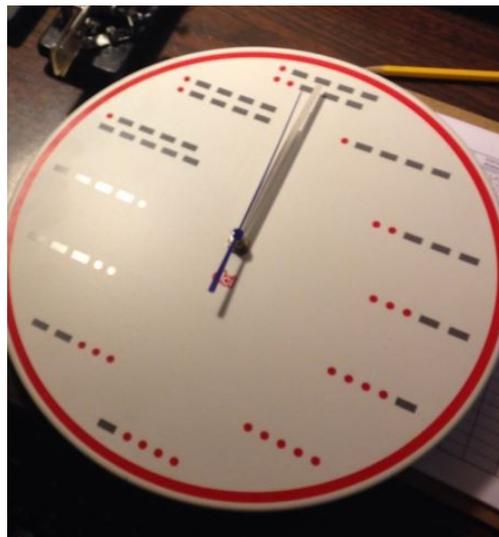
Thursday, October 19, 2017 – Satellites and Moon Bounce

Thursday, November 16, 2017 – Latest Antenna Research and Design

The Speakers Committee (Brad Ormsby, W6VO, David Arata, KA9WMI, Tim Wheeler, K6POI and Andy Ludlum, K6AGL) is always interested in your program ideas. If you have thoughts on who might be a good speaker for a club meeting, please let any of us know.

Free to Good Home

Tom-W0UFC has offered the CW clock shown to a good home. Talk to him about it and make arrangements. W0UFC@ARRL.NET



View International Space Station

Are you interested in seeing the International Space Station (ISS) fly by? Take this link to [Heavens-Above](#), configure some general location information, and look at what is offered there to see.

In addition to following the ISS, you can find Iridium flares, other satellites, and solar system information.

Most of us are close enough to 34 degrees latitude, -118 degrees longitude, about 250 meters altitude, and -8 UTC time zone. That will get you started.

General Information about the Conejo Valley Amateur Radio Club, CVARC

CVARC is a Special Service Club (SSC)

The Conejo Valley Amateur Radio Club is an ARRL affiliated Special Service Club. To be recognized by the ARRL as a Special Service Club, the club must regularly show that it is actively involved in certain areas, including: New Ham Development and Training, Public Relations, Emergency Communications, Technical Advancement, and Operating Activities.

Meetings and Location

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 7:30 p.m. with a pre-meeting social and technical assistance session beforehand or as announced. Meetings are open to the public, and members are encouraged to bring friends.

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 pleased to have you join.

CVARC Membership Rates

The simplest way to join (or to renew) is to give a check bearing your name and address to the Treasurer in person or by mail. Make the check payable to "CVARC" and please put your call sign and email address on the memo line.

Current annual rates are changing during the next year. The following rates apply but will change: Regular Membership \$25. 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. Email info@cvarc.org for pro-rated dues figures for renewals between June and April, 2017.

An application to join is found on the club website.

Name, call sign, or address changes may be e-mailed to the Treasurer.

QUA CVARC

"QUA CVARC" is the club newsletter published monthly, not later than the Monday preceding the CVARC club meeting, by the Conejo Valley Amateur Radio Club, AA6CV, PO Box 2093, Thousand Oaks, CA 91358-2093.

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.

Tax Deductible Donations to CVARC

CVARC is an IRS-certified 501(c)3 charitable organization and donations are deductible pursuant to IRS rules. If you have working radio equipment or 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 to help fund and grow CVARC.

We cannot accept certain donations, and have to place some restrictions on them such as, no hazardous materials, nothing we could not sell, etc. If you are interested in donating, contact any board member at a meeting or via email.

Many companies will either grant or match employee's gifts to non-profit organizations like CVARC. Please determine if your company is among these and contact a board member for more details.

CVARC Officers

For the current list of CVARC officers together with their contact information, please visit the club's web-site at <http://www.cvarc.org>. You may view past newsletters on the website.