February
2009

NEWS FROM CVARC

President's Message
by Greg Lane, K7SDW

A big thanks to Karl Moody for last month's presentation on emergency preparedness as well as putting together the Emergency Books for CVARC members. I hope each of you got your "individual book" and if not we still have a limited supply left, but you need to attend to get our book.

This month we should have all new CVARC badges for members as well. You can get your Name/Call Sign badge by attending the meeting. If a new member joins the club will make up a badge for the member. The idea is to place a name/call sign/ and face at our general meetings as on the air repeater conversations sometimes don't lead to the "eye-ball" contact.

The Wednesday 7pm to 8pm Bozo discussion nets have been working out and have started some interest in talking up digital as well as other topics. I am sure other topics like split frequency operation when working DX stations on SSB and/or CW might be of interest as well. A lot of suggested software tips on the programs to use for digital as well as hardware were also covered. So, if you have an hour to spare, joint in on the fun and bring up issues that you may not have had a chance to solve on your own.

President's Message, continued on page 2

Inside this issue

February Club Meeting
"SBARC Hamfest"

Marvin Johnston, KE6HTS, has been licensed since 1994 and received his extra class license in 2000. He was a member of the first US ARDF (Amateur Radio Direction Finding) Team at the World Championships in 1998 through 2002, and a member of the International Jury at the 2004 and 2006 World ARDF Championships.

He is currently a board member of the Santa Barbara Amateur Radio Club, an Assistant Section Manager for the SB section, and the chair for the 2009 SB Section Hamfest.

He will be speaking about the 2009 Santa Barbara Section Hamfest (whose theme is Emergency Preparedness). He will speak about what SBARC is doing, how it is different from the way Hamfests have been done in the past (and why), plans for growth, and recruiting help. Hopefully, this will be the first of a continuing stream of Santa Barbara Section Hamfests!

We are planning on a minimum of 1500 participants, 100 vendors (inside and outside), and a variety of demonstrations. One thing I'd like to see is if we can beat the 1987 ARRL VE session record of 319 people held at the 1987 Dayton Hamvention.

As always, the CVARC club meeting is held on the third Thursday of the month at the East County Sheriff Station located at:

2101 East Olsen Road
Thousand Oaks, CA 91360

This facility is just off of the 23 freeway between Thousand Oaks and Simi Valley. We look forward to seeing you there

President's Message, continued from front page…

I believe the "brag session" each month helps each of us to get to know each other as well as finding out what may be of interest to work on between meetings. Here are some activities that the Board is suggesting: Elmer/mentorship program, Field Day committees, T-Hunt Picnic, and other workshops.

Keep those good ideas coming and be a part of the hobby as the more you participate the more you will learn as well as having fun!

73 de Greg, K7SDW.

Conejo Valley Amateur Radio Club 2009 Event Calendar

February 8	FCC License Exam
February 9	First Technician License Class Begins
February 19	CVARC Club Meeting
February 28	TRW Swap Meet
March 8	CROP Walk
March 13 - 15	Coyote 2 Moons
March 19	CVARC Club Meeting
March 28	TRW Swap Meet
March 30	First Technician License Class Ends
April 5	Westlake Village Street Fair
April 13	2nd Technician License Class Begins
April 16	CVARC Club Meeting
April 19	FCC License Exam
April 25	Arbor Day
April 25	TRW Swap Meet
May 9	Cruisin' the Conejo Bike Ride
May 16	Sea-to-Summit Bike Ride
May 14 - 16	Dayton Hamvention
May 21	CVARC Club Meeting
May 30	TRW Swap Meet
June 1	2nd Technician License Class Ends
June 14	FCC License Exam
June 16	Third Technician License Class Begins
June 18	CVARC Club Meeting
June 27 - 28	Field Day
June 27	TRW Swap Meet
July 3	Moorpark Fireworks
July 16	CVARC Club Meeting
July 25	TRW Swap Meet
August 4	Third Technician Class Ends
August 9	FCC License Exam
August 18	Fourth Technician License Class Begins
August 12	SB Section Hamfest, Santa Barbara
August 20	CVARC Club Meeting
August __ (tentative)	CVARC Summer Picnic
August 29	TRW Swap Meet
September 17	CVARC Club Meeting
September 26	TRW Swap Meet
No Official Date (Yet)	ARRL SW Division Convention
October 6	Technician License Class Complete
October 11	FCC License Exam
October 15	CVARC Club Meeting
October 16 - 18	Boy Scouts Jamboree on the Air (JOTA)
October 20	Fifth Technician License Class Begins
October 31	TRW Swap Meet
November 14	Malibu Endurance Ride
November 19	CVARC Club Meeting
November 28	TRW Swap Meet
December 5 (tentative)	CVARC Holiday Party
December 8	Fifth Technician Class Completes
December 13	FCC License Exam
December 26	TRW Swap Meet

Please submit suggestions for additional dates to af6cd@arrl.net

Dinner with the Club Speaker
Sue Hanson, N6OIZ

Hungry? Looking for good food and good company? Our speaker for February, Marvin Johnson will be joining all those interested for dinner before the meeting. Plan to meet between 5:30 and 5:45 at China One Buffet. It is located at 55 Rolling Oaks Drive. Exit Moorpark, go south, left onto Rolling Oaks, then a quick left into the parking lot.

Dinner is Buffet style. Prices are Adults $11.99 Seniors $10.99 and Children 7.99.

If you have any questions please call or email Sue at robhanson@juno.com or (805) 376-9350. Looking forward to seeing everyone there!!

Field Day Planning Reminder
Rob Hanson, W6RH

It is time to start thinking about Field Day 2009.

For those new to CVARC and Amateur Radio, Field Day is an event in June when operators across the country leave the comfort of their home for a weekend of emergency preparedness and radio fun. The event is designed to test operators' skills in setting up and operating radio communication equipment in situations where electrical power is unavailable. The idea is to simulate the conditions that can occur during an earthquake or other emergencies, including man-made disasters. The event is sponsored by ARRL --the national association for Amateur Radio. The first Field Day took place in 1933.

This is a great first event for new Hams, or for those that might be interested in becoming a Ham. It is a lot of fun, and a chance to meet new people, visit old friends, have some good food and work a little radio too.

This year we will focus on education and involvement of the community in our event. To do this we will need the help of many members. Rather than load a few individuals with a huge workload, we hope to have most CVARC members involved in planning, setup, operating, and teardown of the event. Please let me know what you can do to help. We will need many technical, social, food, and educational volunteers, as well as physical labor for setup and removal of our tent and antennas. Step up and don't wait for someone else to come forward.

If you would like to be a band Captain, let me know the band, and proposed antenna. This year all stations MUST be coordinated in advance.

73
Rob, W6RH
rob@w6rh.com

DX Expedition News

The long awaited DX-Pedition to Desecheo (near Puerto Rico) will be QRV beginning on 12 February 2009.

They plan to be on many bands from 160 to 6 Meters.

Please refer to: http://www.kp5.us/ for details.

bt73Pete, N6ZE

How the "Bozo" Repeater Got Its Name

Greg Lane, K7SDW

The way I heard that Bozo got named is as follows:

The frequency pair was the same for a San Diego repeater as for the new Thousand Oaks repeater. Since ERP levels were high enough, the Thousand Oaks repeater's signal reached the San Diego area. To mitigate interference, a PL tone was assigned to Thousand Oaks.

One day a San Diego ham had programed his radio "apparently" with the T.O. PL and when he call his local buddy the T.O. repeater came up with the delayed "send back". The send back is a delay of the outgoing signal so you would hear the last few seconds of your voice transmission.

The local San Diego ham asked his buddy what that was all about and the reply was "Oh, that's that dumb Bozo repeater in Thousand Oaks, you need to reprogram your PL tone to ours." Dave of course had the tape and took the name to "heart" so he registered the pair as the Bozo repeater. I hope I got most of this right, but Dave, N6JMI, would have to fill in the right details, but this is how I remember the story being told.

73 de Greg

CVARC VE Session Report
February 9, 2009

VE Report by Greg Lane, K7SDW

First of all I would like to thank the following VE's for showing up (Especially George Tamayo who drove down from Bullhead City!) And as always a big thanks to Hugh and Ken for opening up the community room.

George Tamahyo, WD6EJO
Hugh Bosma, AE6YC
Andrew Ludlum, KI6NON
Charlie Geiger, AF6NJ

John Mendez, AE6YA
Neil Waybright, AF6CD
Ken Larson, KJ6RZ

If you bump into any of these at the CVARC meeting, give them your congrats!

We had a total of 5 new Technicians
Douglas Capitano
Saadia Ballard
Greg Lovell
Austin Scott
Jonathan Mirabile

One upgrade to General
Charles Schrum, KI6UIA

Two upgrades to Extra
Ira Lichtman, KI6TPX
Lawrence Kelly, KF6VHD

Welcome to the wonder hobby of Amateur Radio.

The next session is scheduled for 8:30 a.m. Sunday, April 19, 2009 at the East Valley station.

73 de Greg

Emergency Communications
NVIS Antennas
Charles Campbell K4AFN

Emergency Communications provide some unique challenges for Amateur Radio Operators. A lot of the fun in Amateur Radio is communicating with hams in distant lands, earning various awards involving long range communications and participating in contests. In emergency communications, the challenge is communications with stations that are physically in a range where assistance can be obtained during an emergency. This is generally less than 1500 miles. In order to obtain assistance during an emergency, we need to be able to communicate well within that 1000 to 1500 mile radius. Terrain conditions normally will prevent communications using VHF/UHF simplex. If our repeaters are down, we will need HF to get over the mountains.

In order to understand how we can accomplish our goal of communicating with nearby stations we need to understand just a little about how radio waves are propagated. The first thing we want to consider is the difference between "ground waves" and "sky waves". In HF, ground waves are something like communications on the upper bands (i.e. VHF&UHF) where signals travel from station to station more or less by line of sight. In HF it is sky wave signals where the fun starts. The radio waves travel away from our antenna up to the ionosphere where they are reflected back to earth at some distant location. Sometimes, the radio waves are reflected back to earth and "bounce" back to the sky again, and again. Thus your signal may actually travel very long distances even around the world. This is sometimes called skip.

Electromagnetic waves (radio waves) leave the antenna in a direction that is more or less perpendicular to the radiating element and equally in all directions. This would happen in a perfect world but of course the world and antennas are neither perfect. Any physical object lying in the path of the signal (the earth, buildings, metal objects, etc.) can re-direct or reshape the radiated energy. That is a science in itself.

Here we will focus on more basic principles.

Most popular Amateur radio antennas fall into one of two categories: Vertical or Horizontal polarization.

Vertical Polarization: Mobile antennas (such as our VHF/UHF mag-mounts) are vertically polarized. An HF vertical antenna is also vertically polarized. In that the radiating element points directly up and the radiated energy radiates away from the radiating element at essentially a 90 degree angle, most of the energy leaving a vertical antenna is directed towards the horizon. In the case of a VHF or UHF antenna, these signals travel a distance limited by the power of the transmitter, the design of the antenna, and the geography.

Signals that reach the ionosphere tend to pass directly through and very little energy can be reflected back to earth for reliable communications. Any signals radiated to space simply just keep going out to the moon, stars and beyond. Things

are a little different when HF signals are directed away from a vertically polarized antenna. Your signals travel away from the antenna and due to the curvature of the earth, the frequency of the signal and the height and degree of ionization of the atmosphere, will often be reflected back to earth at some point a great distance away from the transmitter and in all directions. HF Vertical antennas are excellent for working distant (DX) stations.

Vertical antennas seem to work best if the radiator is mounted at ground level or directly on an effective counterpoise (the counterpoise is the other half of the antenna) such as the roof of your car. In vertically polarized antennas, very little of the signal energy is directed straight up.

Horizontal Polarization: Most wire antennas (Dipoles and variations of dipoles such as Zep, Carolina Windom, HF Loops, G5RV, Double Bazooka etc.) are horizontally polarized. This means the radiator is oriented parallel to the earth. For long distance communications, dipole type antennas need to be installed as high as possible. This is usually 1/4 wavelength or more high. For 160 meters, this would be 120 feet above the ground! Due to the orientation of the radiator, electromagnetic waves leaving the antenna would radiate away from the radiator at 90 degrees in all directions. Some would be radiated toward the horizon however some would go straight up and some straight down toward the earth. Radiation patterns toward the horizon are somewhat directional. How much energy is radiated in any direction is very dependent on the antenna design, just how high the antenna is installed and the specific installation method (Flat-top, Inverted V etc.).

Near Vertical Incident Skywave (NVIS) antennas are universally used for emergency communications on the HF bands due to their ability to communicate at distances from 50 to 1000 miles. NVIS is more of an application than a type. When you install a horizontally polarized wire antenna less than 1/4 wave length in height, more of the energy is radiated straight up. When it reaches the ionosphere and conditions are favorable, it will be reflected down to nearby stations. It is sort of like standing in your yard with a garden hose pointed straight up. You will surely get a shower but some of the water will fall in a circle around you.

Under the right conditions, an 80 meter (or 75 meter) dipole antenna installed in flat-top or inverted V configuration at a height of 25 feet is very effective for communicating for 50 to 600 miles distance using power levels of 10 to 50 watts. This is just right for operating on emergency power. Communicating at longer distances may require more power.

Charles Campbell, K4AFN

(K4AFN's detailed plans with templates for the insulators and lots of pictures are available on the CVARC website at http://www.cvarc.org/tech.html)

Palmdale Ham Wins Antenna Case

On Friday, February 6, Los Angeles Superior Court Judge David Yaffe issued a ruling in favor of Alec Zubarau, WB6X, of Palmdale, California, in Zubarau's case against the City of Palmdale <http://www.arrl.org/news/stories/2008/12/19/10512/?nc=1>. Last year, after Zubarau received a valid building permit from the City to erect an antenna support structure, the City of Palmdale revoked Zubarau's building permit after he had erected the tower. According to Zubarau's attorney, Len Shaffer, WA6QHD, the Court's ruling invalidates the actions of the City in revoking Zubarau's permit and requires the City to allow him to replace the tower.

"Zubarau's case has drawn nationwide attention and financial support from the ARRL, Amateur Radio clubs and individual Amateur Radio operators from around the country," said ARRL Southwestern Division Vice Director Marty Woll, N6VI. "Although this ruling does not directly address the City's proposed zoning ordinance amendment, based on the Court's language, it should provide considerable support for those hams attempting to negotiate a more reasonable provision allowing antenna support structures in the Palmdale City Code."

According to Woll, the Court also found that "unsubstantiated complaints by neighbors and anecdotal reports of transmissions interfering with other electrical equipment or posing health and safety concerns" did not constitute substantial evidence. Yaffe's ruling stated that Palmdale's ordinance requiring that amateur antennas be compatible with the surrounding neighborhood with respect to visual and other im-

pacts is void, since it may not constitute the minimum practicable regulation as required under the California state statute <http://www.leginfo.ca.gov/pub/03-04/bill/asm/ab_1201-1250/ab_1228_bill_20030714_chaptered.html>. The judge further found that the City's decision to eliminate the tower violates the express requirements of California's PRB-1 equivalent statute that was enacted in 2003, but had yet to be used in a court case.

"While falling just short of invalidating Palmdale's current antenna ordinance," Woll said, "this language ought to put a damper on the City's Draconian proposed zoning ordinance amendment and its extreme limitations on Amateur Radio antennas. One hopes that the City of Palmdale will think twice in the future about using tactics -- such as the threat of large fines -- to force compliance with an order based on unsubstantiated findings."

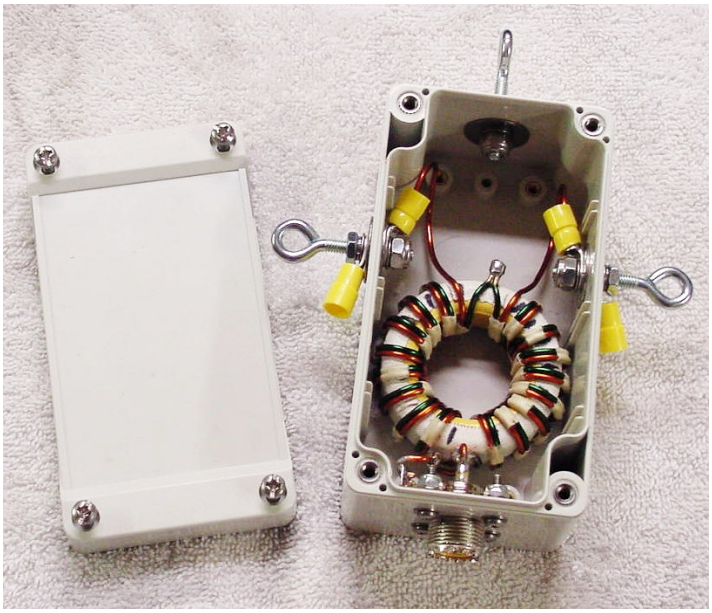
Shaffer told ARRL that the text of the Yaffe's ruling will be released after the service of notice on the City and expiration of the appeal period. He, Zubarau and Woll thanked the ARRL and the Amateur Radio community for what he called "the tremendous showing of support during this lengthy battle."

(Reprinted from the ARRL Letter, Vol 28, No. 6, February 13, 2009, Reprinted by permission)

4:1 Balun Project Update

Neil Waybright, AF6CD

Hugh Bosma, AE6YC emailed me with an update on the planned 4:1 Balun project. He has completed his engineering prototype and ordered all of the parts. He will coordinate a date and time for the kit-building “party” similar to the last several projects we have done under Hugh’s leadership. In the mean time, enjoy a photo of his engineering prototype. I know I am looking forward to building mine and having an off-center fed (OCF) dipole at Field Day this year.



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

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

New Renewal
Single Membership - $25 ____
Multi-year ___years @ $20 = ____
New Ham, New Member - $10 ____
Single Membership, Full-Time Student $10 ____
Family Membership - $30 ____
ARRL Membership Renewal (include 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? _____
Obtain a HAM License? _____

Ventura County ACS/ARES Times & Frequencies

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

Area	Time	Mode	Frequency	Shift	PL	Repeater/Notes
Area 1	7:00-7:30 pm	Voice	147.930	-	127.3	AD6SV
Area 2	7:00-7:30 pm	Voice	146.850	-	94.8	K6AER/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	146.985	-	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 7:00pm.

Visitors are welcome and have the opportunity to operate the station. Please contact Gino Spinelli, KI6DJV at (805) 529-6101 if you would like to attend.

ACS members should remember that their ACS card is issued for only two years. When your card is due to expire, please call Jackie at the Office of Emergency Services in Ventura, (805) 654-2551, to renew it.

For questions concerning ACS/ARES, please call the Area 2 Emergency Coordinator, Ken Larson, KJ6RZ at (805) 495-9435 or go to the ACS/ARES section of the CVARC website at http://www.cvarc.org.

2008 CVARC Officers

President	Greg Lane	K7SDW	(805) 498-0454	k7sdw@verizon.net
Vice President	Phil Bartlett	K6UJO	(805) 499-6935	peb@peb.net
Secretary	Mary Ho	KI6COG	(805) 494-9241	abele7213@mypacks.net
Treasurer	Dave Morton	AA6DM	(805) 495-3920	aa6dm@arrl.net
Public Relations	Brad Ormsby	WA6GLE	(818) 991-1130	bormsby@sbcglobal.net
Technical	Bruce Elbert	K6ZB	(805) 529-2541	k6zb@arrl.net
Operations	Rob Hanson	W6RH	(805)376-9350	w6rh@verizon.net
Newsletter Editor	Neil Waybright	AF6CD	(805) 517-2962	af6cd@arrl.net
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Member at Large	Hugh Bosma	AE6YC	(805) 498-1987	hrbcrb@aol.com
Member at Large	Mike D'Amore	N6MDA	(805) 496-1073	mike.damore@roadrunner.com

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:

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

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 Web Site at http://www.cvarc.org. In addition to visiting the Web site, 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.

"News from 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.

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 emailed to the Treasurer.

Current annual rates are: Regular Membership: $25. Family Membership: $30. Special discounts are available for; New members just licensed: $10. Full-time Students: $10. Regular members renewing for multiple years: $20/year.