

April
2007

NEWS FROM C'VARC

President's Message Are You Ready for the Big One?

I don't know whether anyone broke the news to you yet, but we live in an active earthquake zone. There are two nuclear power plants within a windy day's range of us. Loss of absorptive watershed has increased the chances of serious flooding in the area. The H5N1 avian flu could mutate and create a pandemic of the kind hardly seen in the last century. How ready are you and your family for a major disaster? Do you know what FEMA and other agencies say to be ready for? How many days until you could expect to wait before you get competent assistance?

The Federal Emergency Management Agency (FEMA) has a convenient guide called "Are YOU Ready?" that is available on their web site <http://www.fema.gov/areyouready/> and I would heartily recommend it to you. It is not going to make you an instant guru on these topics, but you don't have to be a super-genius to be vastly better off than if you had not prepared at all. Did you know that there are a number of members of the club for whom this is a passion?

If you are a member of ARES, RACES, CERT, or similar organizations, they ask you to prepare thoroughly and methodically. If you are not convinced your family is safe and secure, you will not be willing to leave them to go help others. Having made the preparations yourself, you know you will be able to go help out secure in the knowledge that your family is okay.

I have a small larder of staples laid up in my garage. These are hardy items that don't spoil in the heat or cold and are easy to fix with a minimum of fuss. Dried beans, cans of vegetables, lots of bottled water, canned tuna and other items that keep well and ...see MESSAGE on page 2

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April Speaker: How Low Can You Go

David Curry, WD2XFJ, will be our speaker on April 19. Well known by LowFers, David will tell us about communications below 200 KHz

Shortly after receiving his novice ticket in 1971, he became interested in the 1750-meter "neglected band" while reading a short transmitter/receiver article in Popular Electronics.

In 1979, he continued experiments with 1750 Meters with a group of local hams in and around the San Fernando Valley. This group grew larger through the 1980's and constructed home brew transceivers, transverters, and Morse code stations. SSB, CW, CCW, AMTOR B, and Packet were regularly used. Contacts from the Mexican Border to San Simeon made using the band practical and enjoyable.

In 1989, David started Curry Communications as a way to augment his income and bring the low frequency art to other interested people.

He has written many magazine articles for 73 magazine and QST. The CW transceiver kit, featured in the 1996 ARRL handbook, is the only low frequency article in any of the ARRL handbooks to date.

Currently David holds a FCC part 5 license, WD2XFJ. This license allows much higher power levels, and has no antenna restrictions, making reliable L.F. two-way communications a reality.

His CW beacon "PLI/WD2XFJ", which runs a radiated power of 300mW, regularly can be heard on 183.5 KHz. This station has been heard in Oregon, Colorado, Arizona, New Mexico, as well as all parts of California.

David is working on specialized low frequency communication equipment for the Los Angeles Fire Department Urban Search and Rescue Group, and has updated LowFer gear on his web site.

Join us and learn about this exotic but experimenter-friendly band from an expert. He will talk about Equipment, LF antennas for receiving and transmitting, and will provide a handout on practical LF antenna design. A CW/beacon transmitter and a portable CW/SSB receiver will demonstrate the reception of his beacon located in Burbank.

Rob Hanson, W6RH

MESSAGE, continued from front page...

don't take much to cook. I have a spare tank for my gas grill and keep it's cook top burner in working order. I figure I could easily cook on it for more than a week. A couple of large cooking pots with tight lids keep mice and bugs out of the dry goods.

Exchanging preparedness ideas and materials is something I'd like to do with other club members. If you have any good ideas, materials, web site links, booklets, tips or leads, please share them with the rest of the club at the next meeting. Consider writing an article for the newsletter. Are you interested in presenting to the club at one of the meetings? Do you know of an outstanding speaker we should be recruiting for a talk? Please feel free to contact me on these, or any other topics.

I wish you and your friends and family a safe year. Please prepare so that you can enjoy that safety, even if an untoward event occurs....

Thanks,

Neil KG6QEL

APA Digital Communications Club Donates Assets to CVARC

The Agoura Packet Association (APA) Digital Communications Network, a Ham Radio digital communications club, has donated its equipment and financial assets to CVARC, Founded in the early 1990s, APA built and maintained an extensive "hub and spokes" packet radio system that featured user ports in Malibu, the San Fernando Valley, Thousand Oaks, Calabasas and more. The system served packet bulletin boards and acted as a "backbone" forwarding network for the high volume of packet message traffic that prevailed in those pre-internet days. Later, the APA system added APRS digipeaters and a weather station on Castro Peak that beacons information from that location.

In order to build the extensive network, APA tapped into the technical expertise of several members, while at the same time, it raised funds to acquire the needed gear. Because of the internet and e-mail, later years saw interest in packet wane. Hilltop location managers demanded that high rent be paid for each transmitter, creating a financial burden that could not be sustained.

Recently, the APA group discussed how its assets may be put back into beneficial use for the Amateur Radio community. Due largely to digital interest and expertise found at CVARC, it was decided to donate the gear that includes several nodes, a digital repeater, weather station, APRS digipeater and more to CVARC. The donation also includes more than \$4,100 in cash to the CVARC treasury, in the hope those funds could be used to re-establish a digital communications capability to serve the

area. The CVARC board received the assets at its April 12 meeting, expressing gratitude to the APA group.

APA board members making the donation decision were Steve Ralphs, KA6LAZ; Rob Hanson, W6RH; Frank Sain, KA6BPA; Rick Leyton, WB6WFH; Les Kerrigan, W6FTO and Jeff Reinhardt AA6JR.

Jeff Reinhardt, AA6JR

2007 Event Calendar

- Apr 8..... No License Exam at CVARC (Easter)
- Apr 10..... CVARC License Classes End
- Apr 15..... Delayed FCC License Exam at CVARC
- Apr 17..... CVARC License Classes Begin
- Apr 19..... CVARC Meeting
- Apr 21..... Arbor Day Demo
- Apr 27-29 Visalia International DX Convention
- Apr 28..... TRW Swapmeet
- May 12 Cruisin' the Conejo Comms
- May 17 CVARC Meeting
- May 18-20 Dayton Hamvention
- May 26 TRW Swapmeet
- Jun 5 CVARC License Classes End
- Jun 10 FCC License Exam at CVARC
- Jun 12 CVARC License Classes Begin
- Jun 21 CVARC Meeting
- Jun 23-24 ARRL Field Day
- Jun 30 TRW Swapmeet
- Jul 3..... Moorpark Fireworks Comms
- Jul 19..... CVARC Meeting
- Jul 28..... TRW Swapmeet
- Aug 7..... CVARC License Classes End
- Aug 12..... FCC License Exam at CVARC
- Aug 14..... CVARC License Classes Begin
- Aug 16..... CVARC Meeting
- Aug 25..... TRW Swapmeet
- Aug 25..... CVARC Summer Picnic
- Sep 7-9..... ARRL SW Div. Convention, Torrance
- Sep 20..... CVARC Meeting
- Sep 29..... TRW Swapmeet
- Oct 9..... CVARC License Classes Begin
- Oct 14..... FCC License Exam at CVARC
- Oct 16..... CVARC License Classes Begin
- Oct 18..... CVARC Meeting
- Oct 27..... TRW Swapmeet
- Nov 15..... CVARC Meeting
- Nov 24..... TRW Swapmeet
- Dec 4..... CVARC License Classes End
- Dec 8..... (Tentative) CVARC Holiday Party
- Dec 9..... FCC License Exam at CVARC
- Dec 29..... TRW Swapmeet

Please submit suggestions for additional dates to:
kg6qel@yahoo.com

Another Successful VE Session

April 15th marked yet another highly successful VE session with 17 people took 27 exam elements seeking to obtain their Technician class license or to upgrade to a higher class license. I was able to take and pass the Amateur Extra license test and should have a new callsign within a week or so.

Jeff and his team are there representing the club and the league every other month, running a clean, professionally organized and executed event where everything is scrupulous and above board. It is a pleasure to be associated with this fine group of people and the yeoman work that they do. I took a VE application from Jeff this time and will be looking at giving back to the ham community by becoming a volunteer examiner (VE) under the ARRL volunteer examiner coordinator (VEC).

Becoming a VE is easy and fulfilling. You must be at least a General class licensee to administer the technician exam, and an advanced or amateur extra to administer the general license exam. Only an amateur extra can administer the extra class license exam (97.509(b)i-iii).

If you are interested in becoming a VE, particularly if you are an amateur extra, please contact Jeff Reinhardt AA6JR, the club's PR chairman and organizer of our VE activities. We are always looking to add depth to our teams.

Neil Waybright, KG6QEL

Arizona Offers Amateur Radio License Plates

Arizona now offers personalized Amateur Radio license plates. Their web page is available at <http://www.azdot.gov/mvd/vehicle/mvdplate.asp#AmateurRadio> and several people sent me images of the plates. I think this is a great idea and something I would love to see here in California. I am going to write my CA representative and make the suggestion that they try something similar here. Of course, I would love to hear what you think of the idea.



Neil Waybright, KG6QEL

CVARC Technician Amateur Radio License Classes Begins April 17th

April 17th starts another CVARC Technician license class. Karl Moody, AE6TO, CVARC's education chairman, begins another of his acclaimed series of amateur radio technician license training classes on Tuesday nights. These classes run for a little under two months and complete on June 5th, the week before the next CVARC VE session on June 10th. That gives the students a good solid five days to study for the test.

Karl's classes are offered free of charge, with the only expense being \$25.00 for the "Ham Radio License Manual" that is used as the text for the course. For those students that already have access to an up-to-date copy (from a friend or relative), there is no cost at all. The classes meet at a meeting room at the Church of Jesus Christ of Latter-day Saints, 3645 Moorpark Road, Thousand Oaks, CA. This is on Moorpark Road, one block north of Olsen Road.

Graduates of Karl's classes include seven year old children, 84 year old adults, and every age in between. As the entry-level license, technician is within the grasp of virtually anyone willing to try and opens the door to the hobby. Encourage a non-ham friend or family member to make the plunge and get their license. I point out the value of it for communications in an emergency or disaster.

Neil Waybright, KG6QEL

Vacancies on the CVARC Board of Directors

Due to Steve Champion taking a position in Cambridge UK, his board position as newsletter chair is open and we are actively seeking someone to fill Steve's shoes. Additionally, his son Ben Champion will be leaving for England soon and we will need to fill his position as secretary. A third board member, Hugh Bosma resigned his position as technical chair due to an unrelated issue. That leaves three board positions open and needing to be filled ASAP.

We will be taking nominations for replacements at the April CVARC Club general meeting. We have one person who has expressed some interest in the secretary position, but we have no candidates identified yet for the Technical Chair or for the Publisher, so we are actively seeking input from the membership. Please make sure you come to the April 19th club meeting and vote on these important positions! If you have a potential candidate, please contact that person and see if they are interested and able to be an integral part of the club. If you are interested in one of these positions, please let the board members know and we will make sure a nomination is placed for you.

The CVARC by-laws are posted on the web site at <http://www.cvarc.org/by-laws.htm> and I invite you to look especially at articles V (Board of Directors) and VI (Officers)

to see what the typical expected duties and responsibilities of the officers are. If you are interested in any of these positions, contact myself, or any of the board members and we will be glad to clarify any of the normal activities of the role, etc. Our email addresses and phone numbers are printed here in the newsletter.

Neil Waybright, KG6QEL

Upcoming Club Activities and Opportunities for Volunteers

There are still several opportunities to get out and show your support for local events and organizations. Ken Larson, KJ6RZ, is coordinating efforts for the ham radio demonstration that CVARC puts on every year on Arbor Day celebration at Conejo Creek Park in Thousand Oaks. The event falls on Saturday, April 21st this year. We set up and operate a field station in the park and demonstrate HF, VHF and UHF communications to interested members of the public. We are always interested in finding more people to support this activity since it is such a good opportunity to exercise outreach to the community.

The Cruzin' the Conejo bike ride follows a few weeks later on Saturday, May 12th near Amgen, in Thousand Oaks. Mike Bass, N7WLC is coordinating this activity and he needs SAG wagon riders, warning station staff, and net control operators to help protect the safety of the thousands of riders that take part in the event. This is a great opportunity to participate in a large event, with a real and important emergency support role. Hams have played a crucial role in the past, including coordinating the rescue of a severely injured rider in a deep canyon where cell phones just didn't (and still don't) work. Most of the efforts aren't quite so difficult or exciting, but you can make a real difference to someone who broke their bike frame and are facing a multi-mile walk without quickly dispatched help. Put your skills to work for the benefit of the thousands of men, women and children who take part in this event every year.

Neil Waybright, KG6QEL

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Article removed at author's request

Review: Small Wonder Labs QRP PSK31 Transceiver Kit “PSK-20”

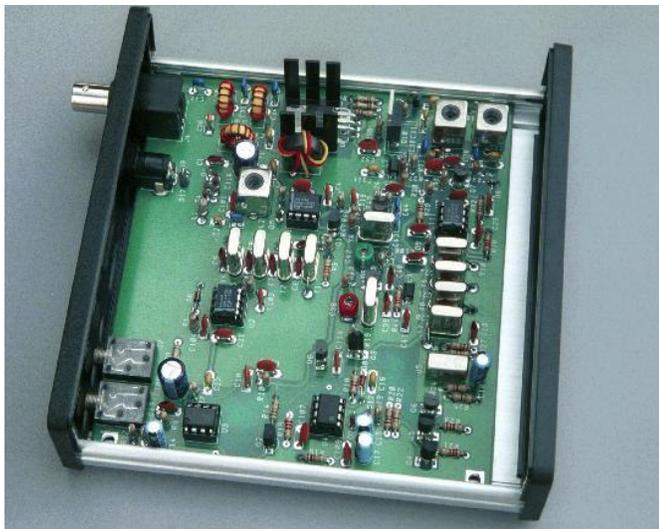


Photo: K1SWL

Well, it has taken me a long time, but I'm glad to report that I have finally found the time to assemble my Twenty Meter QRP PSK31 transceiver kit from Small Wonder Labs.

Degree of Difficulty

I would describe the kit as being of “intermediate” difficulty. I wouldn't recommend it for a *complete* beginner, but as long as you are sufficiently competent to solder wire-ended crystals without overheating them, you should be okay with this kit.

The instructions are, I think, exceptionally clear. Extensive prior experience is *not* assumed, and such advice as “be sure to space the metal can crystals off the board to avoid shorting to a trace” are explicitly stated rather than being left up to the user's imagination.

Almost all of the parts are through-hole, the exceptions being two not-too-fiddly surface-mount inductors and a small “capstan” style RF amplifier which comes pre-assembled to the board. There are three variable inductors which are pre-wound 14MHz Toko cans. The only coil winding required is for a single toroidal transformer and three small toroidal inductors in the output stage. All of these are only a few turns, and scraping off the enamel with an X-Acto knife was probably the hardest part.

The smallest lead spacing that you will encounter is 0.1” (for the “on end” resistors and diodes). It is my preference to work with a lighted magnifier, but many people would be able to assemble this kit without one. My total assembly time was less than 12 hours, spread over several sessions.

Design

The PSK-20 is a single conversion design, making extensive use of integrated circuit balanced mixers and gain blocks as well as some discrete transistor stages.

Down-conversion of the received signal from 14.07MHz to 9MHz is achieved by mixing in the signal from a 5.07MHz crystal oscillator, and IF filtering is provided by a 9MHz filter consisting of four crystals. The output of the IF filter is demodulated by mixing with the signal from a 9MHz crystal oscillator.

On the transmit side, the same 9MHz crystal oscillator is mixed with audio to generate DSB at 9MHz, which then passes through another four-crystal filter to yield SSB. The result is up-converted to 14.07MHz by mixing with the 5.07MHz oscillator signal. The driver and PA transistors are hefty, well-heatsinked, TO220 style transistors which should, I believe, prove to be reasonably robust. Output power is said to be in the region of 3 to 4 Watts PEP.

Audio in and out connect directly to a computer using standard 3.5mm-jack audio cables, which are not supplied. There is no “PTT” connection, since the transmitter is activated by the presence of audio out from the computer. When the transmitter is activated, the receiver is muted to prevent feedback within the sound card.

If you are considering buying this kit, you can download the entire instructions package (which includes a schematic and a more detailed theory of operation than that given above) from the smallwonderlabs web site.

Tune-up

Tune-up and audio level-setting proved to be very easy, there being only five variable L/Cs. I was able to have my first QSO, with a station in Vancouver British Columbia, soon after completing the kit. This was done using a Gap Titan antenna which, at 20m, is basically a center-fed vertical half-wave.

Although I did not have any problems getting the kit to work or in tuning it up, it was reassuring to see that there are extra (and extensive) instructions on the web site.

There is even a flat-fee troubleshooting service available, should you get really stuck.

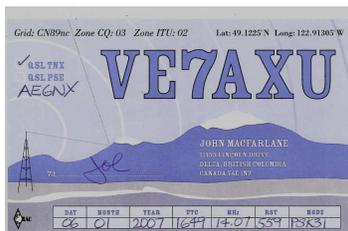
Conclusion

The cost of the kit is \$100 (including shipping). An enclosure is available for an extra \$30. The enclosure is a nice extruded aluminum box with an engraved front panel. When I saw the enclosure I was very glad that I chose to buy it, although, quite candidly, with my limited mechanical skills that choice was a “no-brainer”!

The kit seems to me to be good value for money. The package as a whole pretty much ensures success, and the resulting transceiver is a very usable rig — certainly more than just a novelty item.

10m and 30m versions of the design are also available, as well as a simpler, less expensive, 80m design.

Steve Champion, AE6NX



Ventura County ARES/RACES Times & Frequencies

Area 2 ARES/RACES 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	7:00-7:30pm	Voice	147.930	–	127.3	AD6SV
Area 2	7:00-7:30pm	Voice	146.850	–	94.8	K6AER Grissom
Area 2	7:10-7:30pm	Voice	51.940	–	82.5	WB6RHQ
Area 2	7:10-7:30pm	Voice	224.700	–	156.7	K6HB
Area 2	7:10-7:30pm	Voice	449.440	–	131.8	KE6SWS Amgen
Area 2	(Simplex)	Voice	147.555		None	Simplex
Area 2	(Backup Repeater)	Voice	147.885	–	127.3	N6JMI Bozo
Area 3	7:15-7:30pm	Voice	147.915	–	127.3	WB6ZTQ
Area 4	7:15-7:30pm	Voice	146.970	–	127.3	WB6YQN
Area 5	7:00-7:30pm	Voice	145.400	–	None	N6FL
Area 6	7:00-7:30pm	Voice	147.765	–	127.3	None
Area 7	7:00-7:30pm	Voice	146.985	–	127.3	WB6ZTX
Area 8	7:00-7:30pm	Voice	146.535		None	Simplex
County	7:30-8:00pm	Voice	146.880	–	127.3	WA6ZTT
County	6:45-7:00pm	Voice	52.980	–	82.5	K6SMR
County	7:30-8:00pm	Voice	224.020	–	127.3	WB6ZTR
County	Before 6:30pm	Packet	145.710		None	Hospital Net
County	(RACES Simplex)	Voice	147.570		None	Simplex

Net Control operations for the weekly ARES/RACES Area 2 check-in are run from the ARES/RACES 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 the Assistant Emergency Coordinator, Jerry Goldman, KC6JSO at (805) 241-9187 if you would like to attend.

RACES members should remember that their RACES 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 ARES/RACES, please call the Area 2 Emergency Coordinator, Ken Larson, KJ6RZ at (805) 495-9435 or go to the ARES/RACES section of the CVARC website at <http://www.cvarc.org>.

2007 CVARC Officers

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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
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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.

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 callsign and/or email address, if you have one, on the memo line of your check. Name, Callsign, 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.