



### President's Blog

## Sunshine Committee



Hello everyone:

I hope this little slice of love finds you all safe and healthy. We think about you often. Know that you are all in our prayers and thoughts.

Sincerely, Burgie, KE6MSF

Well, even if we didn't meet during May, your president was busy visiting his group of Doctors. I spent a couple of hours on my back while a nice doctor tried to make me beautiful. Yes, you're right, it was the impossible dream, but she got as close as possible. Then it was off to the foot Doctor. It seems that after I tripped over Sinkner, my lab, about a year ago, I messed up my big toe, and the nail was growing in sideways. The Doctor offered two choices, come in every 3 months and have them trim it or take off the nail for good. So off came the nail and on went the funny shoe. If they had given me two of those shoes it would have been one half of a clown outfit. Then off to the skin Doctor where I got a bad case of brain freeze while she froze this bump and that bump and told me to wear a hat.

Audrey and I have been doing writer coaching at Richmond High this year, and even though English was not my favorite class, I found it rewarding. You spend two hours a week for about thirteen weeks during the year. The students bring their writing assignments and you help them write it. There is some instruction at the beginning of the year and a leader of each school site helps you to prepare each week. The students really respond as soon as they understand that you are there to help and not grade them. If you can spare a couple of hours a month, they sure could use more coaches. They work in El Cerrito High, Richmond High, and next year, they will be doing Kennedy High. It takes about 150 coaches per school. We made it past Mothers' Day and Memorial Day, and summer is on the way. The next thing will be the picnic at the end of summer. We are still looking for people to check in on the nets. We are about ready to restart the Wednesday



June 14



June 15

Kids get out of school: keep an eye out for them when driving.



June 21

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2014 CONTRA COSTA COMMUNICATIONS CLUB, INC. DAILY AND WEEKLY NETS

| DAYS   | NET CONTROLLER  | REPEATER/NET NAME/TIME                         |
|--|---|--|
| MONDAY<br>TUESDAY<br>WEDNESDAY<br>THURSDAY<br>FRIDAY | MICHAEL K6CUG<br>BOB AB4AL<br>BOB W6WTJ ALT: STAN KB6SEI<br>GARY KG6RJA | 145.110 OVER-THE-HILL 7:10 AM                  |
| WEEKLY - TUESDAY<br>QRM                              | ROBBY N6MNL<br>BOB AB4AL<br>JEFF KL6RHF<br>MICHAEL K6CUG<br>RICH KO6FR  | 224.300 CLUB 220 NET 7:30 PM                   |
| WEEKLY - WEDNESDAY                                   | JEFF KJ6RHF   | 145.110 OPEN NET 8:00 PM                       |
| WEEKLY - THURSDAY                                    | MEMBERS ROTATE  | 145.110 WEST CONTRA COSTA CTY RACES<br>6:45 PM |
| WEEKLY - THURSDAY                                    | ROBBY N6MNL<br>FRED W6BBQ<br>JEFF KJ6RHF<br>BOB AB4AL<br>MICHAEL K6CUG  | 145.110 CLUB NET 7:30 PM                       |
| WEEKLY - THURSDAY                                    | OPEN NET  | 145.110 TECHNICAL NET 8:00 PM                  |

**Club Officers For 2014**

President: Fred Nieman W6BBQ (2014) 0  
 V. Pres: Don Hamma KE6ZFP (2016) 2  
 Secretary: Burgie Jones KE6MSF (2016) 2  
 Treasurer: V. Thompson KE6FSU (2015) 2  
 Trustee: Fred Nieman W6BBQ (2021)  
 Director: Robby Robinson N6MNL (2015) 1  
 Director: Mike Nicholson K6CUG (2014) 1  
 Director: Robert Seymour KI6KOU (2016) 2

RACES Contra Costa County Mike McMillan K6MCM  
 510-223-3052

*Repeater Controller's*

Call to report any problems or concerns

Robby. N6MNL  
 Fred W6BBQ  
 Bob AB4AL  
 Jeff KJ6RHF  
 Roger KE6SZG

Committee Chairperson

Membership:

Audrey Nieman, KD6MVH

Technical Committee:

( Chair) Robert Gregory AB4AL  
 Paul Henson KF6FMX  
 Fred Nieman, W6BBQ  
 Alen Alsing KJ6JIS  
 Jeff Miller KJ6RHF

Packet:

Robby Robinson N6MNL

NARCC:

Fred Nieman W6BBQ

Picnic:

Fred Nieman, W6BBQ

Christmas:

Barbara Robinson KD6OKJ

Newsletter:

Victoria Thompson KE6FSU 510-326-2361

night net for new hams. Jeff, KJ6RHF, will be the host but I am sure he would like to have some Elmers join in.

See ya at the meeting June 8<sup>th</sup>.  
Fred W6BBQ

## Technical Update & Recommendation

On Saturday, May 31, there was a work party regarding the repeater. Robby N6MNL: Bob AB4AL: Fred W6BBQ: Roger KE6SZG attended.

The following is an update and a recommendation from Bob AB4AL, Technical Chairman.

As you have seen our 440 Duplexer (cavities) are in a box all torn apart. If critical parts aren't missing, with luck, they might be put together and tuned.

In just about every case the procedure for doing this, and the most accurate, is to use a spectrum analyzer. A spectrum analyzer looks like an oscilloscope but is far from being one. It is a device that displays frequency across the screen whereas an oscilloscope displays time. Also the spectrum analyzer has built into it a receiver and a signal generator. The type of spectrum analyzer used must be capable of operating in the frequency range we need.

The less accurate method of tuning the cans is to use a service monitor to generate the signal to pass through the transmit side, then the receive side and tuning for the desired points of signal pass for each side, that is transmit and receive.

The interconnect coax between the cans are critical in their length to compensate for the velocity factor of the coax being used. If this is ignored and we simply interconnect the cans without regard to this, then the insertion loss will be greater than if we compensated our cable length for velocity factor.

What is velocity factor you might ask? It is the percentage of the speed of light

(186,282 miles/second) that a radio wave at a given frequency travels through the coax. Aren't you glad you asked?

We aren't going to buy a spectrum analyzer, they are thousands of dollars!

If we can't make our duplexer "kit" operate correctly, then you can consider buying another unit that is built and tuned for our frequency. Used commercial duplexers can run perhaps \$300.00 and are tuned by the seller for the frequencies you specify. There are also compact new duplexers made in China that can be bought on eBay for around \$80.00. Here is a video that compares the two.

[Duplexers evaluated](http://www.youtube.com/watch?v=uNf4u-9KgK0) If the link does not work here is the address. <http://www.youtube.com/watch?v=uNf4u-9KgK0>

Our site has a new high gain 440 antenna and is fairly high in altitude, so we need to reject adjacent frequencies on the receive side, not just our transmit frequency. Also, our transmitted signal needs to be very tight in its spectral purity. All transmitters generate spurious signals at harmonics above and below the intended frequency of operation. PAVPAWS (Air force early warning defense radar) operates in the 440 spectrum so we can't afford to allow harmonics to be broadcast, thus the duplexer must be precisely tuned and offer rejection of harmonics. If you looked at the video, the commercial duplexer vice the Chinese Andauer duplexer, the commercial duplexer offers much greater rejection to adjacent frequencies.

My recommendation is that we attempt to reassemble the duplexer we have and using a service monitor tune it as best we can to determine if it will even operate. If it operates, then we can consider having it professionally tuned with a spectrum analyzer.

If anyone has any questions, please contact me at [ab4al@att.net](mailto:ab4al@att.net). We are going from row boat speed to Warp One.

Bob AB4AL

## Treasures Report for MAY

| INCOME                    |                  | EXPENCES     |          |
|---------------------------|------------------|--------------|----------|
| Membership                | \$ 25.00         | Insurance:   |          |
| Donation to Memorial fund | <u>\$ 100.00</u> | Equipment    | \$233.00 |
|                           |                  | Liability    | \$300.00 |
| Total                     | \$ 125.00        | CA Corp. Fee | \$ 20.00 |
|                           |                  | Total        | \$553.00 |

### Memorial Fund

Thank to Jeff, KJ6RHF for his \$100 contribution in memory of Dar, K6USW.

This brings the fund to a total of \$ 2,239.00

### VE TEST Sessions

EBARC, ORCA, and ARCA sponsor joint ARRL VEC Amateur Radio Test Sessions quarterly (see location and dates below). Info at 510-918-4627 or 510-741-8227.

Media Room (Oakland Fire Dept.)  
1605 Martin Luther King Jr. Way (at 16th St.)  
Oakland, CA 94612

All VE Sessions are held on Sundays at 9am local time on the following dates for 2014:

July 27th,  
October 26th

### Pizza Night



Ron KE6RS & Jim AC5QI



Audrey KF6MVH Victoria KE6FSU



Bob W6WTJ & wife

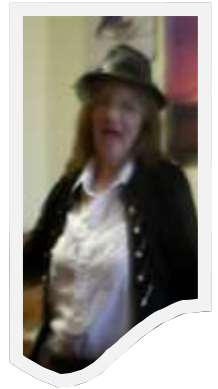
J  
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C  
5



Enjoy the  
company  
of friends



Barbara



Meredith  
(AB4AL's XYL)

### VISIT



Robert KI6KOU and Martha KI6KOV



Bob AB4AL & Bob W6WTJ

### Relax a little

### Talk a bit







*THE COMMUNICATOR*  
*June 2014*

**Contra  
Costa  
Communications  
Club Inc.**

Repeater ID: WA6KQB 145.110, 224.300, 444.275 PL 82.5  
Simplex 146.505  
Packet "Node" CC4CC 145.05 Packet "Mail Box" TBD  
Home Page: <http://www.wa6kqb.org>  
Club Address: CCCC, Inc. P.O. Box 20661,  
El Sobrante, CA 94820-0661

A NON-PROFIT CLUB DEDICATED TO SERVICE

Contra Costa Communications Club, Inc.  
P.O. Box 20661  
El Sobrante, CA 94820-0661

POSTMASTER: ADDRESS CORRECTION REQUESTED

**Next Regular Club Meeting: June 8, 2014**

Denny's on the corner of San Pablo Ave. and Potrero Ave in El Cerrito, CA 94530

**Breakfast at 7:15 a.m. Club meeting at 8:00 a.m. Board meeting at 8:45**