



P.O. Box 6421 Auburn, CA 95604

January 2015

<http://w6ek.org> [info@w6ek.org](mailto:info@w6ek.org)

**At The Key of SFARC:**

**PRESIDENT**

Tyghe Richardson, KD6MLH  
tyghe@tjrauctions.com

**VICE PRESIDENT**

Bob Brodovsky, K6UDA  
k6uda@att.net

**SECRETARY**

Bruce Anderson, K6BAA  
anderson51@wavecable.com

**TREASURER**

Richard Kuepper, WA6RWS  
rkuepper@surewest.net

**DIRECTORS**

Birton Gilbert, N6UG  
Robert Bell, W6RBL  
Jim Jupin, WA8MPA

**FIELD DAY CHAIRMAN**

Mark Graybill, W8BIT

**REPORTERS**

Satellites: Greg, KO6TH  
History: Gary, KQ6RT  
Misc Radio: Fred, K6DGW  
Sunshine: Richard, WA6RWS  
rkuepper@surewest.net

**REPEATERS**

145.430 (-0.6 MHz/PL 162.2)  
440.575 (+5.0 MHz/PL 162.2)  
223.860 (-1.6 MHz/PL 110.9)

**CLUB NET**

Thursdays, 7:30PM, W6EK/R  
145.430

**CLUB MEETINGS**

Second Friday of the month,  
7:30PM at the Auburn City Hall,  
1215 Lincoln Way, Auburn CA

**CLUB BREAKFAST**

Last Sat of the month at Mel's Diner  
1730 Grass Valley Hwy, Auburn 7:30AM

**NET CONTROL OPS**

Dave Jenkins, WB6RBE  
Norm Medland, W6AFR  
Bob Brodovsky, K6UDA  
Al Martin, NI2U

**NEWSLETTER EDITOR**

Barbara Anderson, W6EVA  
916.624.1343  
anderson51@wavecable.com

**WEBMASTER & ARRL PIO:**

Carl A Schultz, WF6J

**Calendar of Events**



**Happy New Year**



**January 9<sup>th</sup>:  
Club Meeting**

**January 31<sup>st</sup>:  
Club Breakfast**

**March 14<sup>th</sup>:  
SFARC Swap Meet**

**Inside this issue:**



- ***From the Mic***
- ***David Hund N6SHD SK***
- ***Photos from Christmas party***
- ***Miscellaneous Radio – The Cabrillo Contest Log***



**We encourage members to receive Sierra Signals via email to save the Club the cost of reproduction and mailing**

Sierra Signals is published monthly by the Sierra Foothills Amateur Radio Club for the information of its members and friends, and is distributed via E-mail and USPS mail. Opinions expressed are those of the authors. Newsletter exchanges with other clubs via E-mail are welcomed. Contact the editor to be placed on the E-mailing list. The contents of Sierra Signals are copyrighted by the Sierra Foothills Amateur Radio Club, and all rights are reserved. That said, we will gladly permit republications for non-profit uses of all text material. Photos require the consent of all persons pictured in them, and some of our material is copyrighted by others and published by permission. You'll need to contact them for permission.



## From the Mic

*By Tyghe Richardson – KD6MLH, President*

**L**ast year has been an interesting one to say the least. We as a club and as a community have had good times and bad. In our wonderful group of hams we have lost friends and family. We have been fortunate to spend treasured moments with those now silent keys. Like most in the club I am ready to put this year in the log book and look forward to what 2015 has to offer.

It is important to remember that we had some very exciting events in 2014; the first club contest, the picnic, radio support events, Field Day 2014, the white elephant sale, election night, the Christmas party, and a lot of exciting breakfasts and meetings in between. Field day was one of the most attended and exciting events of the year, we placed better than expected and enjoyed a weekend with good friends. I am looking forward to next year. To the hams that participated in these events thank you, without you they just would not be that much fun!

As I look at the 2015 calendar we have added a new event, the ham swap. This new event will need volunteers to make it prosperous. The swap is on 3/14/2015 if you cannot volunteer, I hope that you will come buy or sell at the swap; don't forget to tell a friend! For more information on the swap meet contact VP Bob Brodovsky K6UDA.

As I am sure most of you know, all but 2 committee chair positions are open for 2015. Like last year I will be filling the Chair and Vis-Chair positions as soon as possible. If you would like to head up and event, and I know you do, give me a call or email and we will get you all set up. I think the best way to honor our silent keys is to perpetuate the hobby that they loved and these events do just that. I am happy to say that this group of hams share stories about silent keys and often remember the ones that have long since gone SK.

If you have not paid your dues for 2015, Richard Kuepper WA6RWS will be happy to receive them.

I look forward to seeing all of you at the January meeting. See you on the 9th!





Dave served on the USS Buck 1948 - 1952

## David Hund N6SHD SK

Dave passed away on December 13<sup>th</sup>, 2014, on his way home from the club Christmas party. He was a member of SFARC since the nineties, and he served in many officer positions and as a board member.

Dave loved field day and he could be found in his camper or out helping putting up antennas. He was active in the VFW and the Fleet Reserve. He also was an avid bowler with most games in the high 200's.

Dave was one of the nicest guys I have ever known and I will miss him. RIP Dave.

Richard WA6RWS



**METRO ELECTRONICS**  
ELECTRONIC DISTRIBUTORS  
MEMBER OF GENIE GROUP

7:30 AM to 5:00 PM Monday - Friday  
9:00 AM to 3:00 PM Saturday

1831 J Street  
Sacramento, CA 95811  
info@metro-electronics.com

(916) 442-1512  
Fax: (916) 442-1586  
www.metro-electronics.com



DENNIS H. GREGORY  
Instructor/Technician

**MISSION CONTROL**

**Computer Repairs and Support**  
Reasonable rates, free consultation  
Placer County Business License #92311

Phone: 530-305-0180  
Auburn, CA

Email: WU6X@hotmail.com  
www.yourmissioncontrol.com





## MISCELLANEOUS RADIO

### The Cabrillo Contest Log

Some time ago, when I was still editing *Sierra Signals*, I included a short column each month about contesting in ham radio. I did this with the possibly nefarious goal of adding to the ranks of those who enjoy RadioSport. It ran for two years, the contest calendar is a repeating thing, and two trips through it seemed like enough. At a meeting I actually managed to get to, I asked the question, “How many here participate in operating contests?”, to which the somewhat underwhelming response was two [2]. One was Jettie, W6RFF (SK), and the other never sent in his logs, he just did it to find new ones in DX contests. I concluded that the probability of infecting anyone in the group with the radiosport virus was somewhat less than the probability I was pregnant with twins.

That was then. Now, it appears that interest in RadioSport in the club has a tiny foothold. Several have entered smaller contests of late, and there was a turnout for CQP this year. I'm on the CQP Log Check crew, we got almost 1,000 logs, and we're way ahead of schedule in the log check department. Our target is published results and winners before Christmas. 2015 is the 50<sup>th</sup> running of “The Mother of All QSO Parties,” and you'll be hearing more about that.

At any rate, while ARRL [and CQP] will still accept pencil-and-paper logs, the future is pretty clear – very shortly the Cabrillo format will rule if it doesn't already, so we'll explore the format in the hope that everyone can submit accurate logs and get all the score you're entitled to. But first, logging in general.

A log is an absurdly simple thing ... a chronological, serial-numbered list of each QSO one makes in the contest. It must include, at a minimum, the date and UTC time, the band, the mode, the call of the station worked, and whatever exchange information you sent and received for the particular contest. For CQP, it's serial number and the state/province or California county abbreviation. There is no requirement that serial number start at 0001, or that they be sequential, but since we normally log with a computer program, that's usually how they come out. What's implied is, “Your log is what you send and receive on the air.” If that seems overly obvious, trust me, it really isn't. We'll come back to this.

The Cabrillo<sup>1</sup> format is the original work of Trey Garlough, N5KO. Now, one may question, “Why not ADIF?” It has been around longer, and works. The answer is, Trey [and ARRL] wanted a format that was both computer and human readable. We have to “massage” a number of logs in CQP before they can be processed, and we're always amazed at the inconsistencies that people can put into their logs. At least Cabrillo is a straight human-readable line, ADIF definitely is not.

**TAGS:** Cabrillo is a “tagged” format, just like HTML. There is a specification for it, you can find it at

<http://www.kkn.net/~trey/cabrillo/tags.html>

---

```
START-OF-LOG: 3.0
LOCATION: SV
CALLSIGN: K6DGW
CLUB: Northern California Contest Club
CONTEST: CQ-WW-CW
CATEGORY-OPERATOR: SINGLE-OP
CATEGORY-ASSISTED: ASSISTED
CATEGORY-BAND: ALL
CATEGORY-MODE: CW
CATEGORY-POWER: HIGH
CATEGORY-STATION: FIXED
CATEGORY-TRANSMITTER: ONE
CLAIMED-SCORE: 77368
OPERATORS: K6DGW
NAME: Fred Jensen
ADDRESS: 670 Old Airport Rd
ADDRESS-CITY: Auburn
ADDRESS-STATE-PROVINCE: CA
ADDRESS-POSTALCODE: 95603
ADDRESS-COUNTRY: USA
CREATED-BY: NIMM Logger v14.9.0
```

---

The recipe for Cabrillo tags is:

TAGNAME[-TAGMODIFIER]:tag-value

where the [] indicates optional, although most Ver. 3.0 tags do have modifiers. The TAGNAME-TAGMODIFIER: cannot contain spaces and the colon denotes the end of the tag name and beginning of the tag value. In nearly all cases, “tag-value” is specified as a choice between a number of alternatives. Exceptions are the SOAPBOX:, CLUB:, OPERATORS: NAME:, and ADDRESS[-xx]: tags which accept text strings.

**HEADER:** The log starts with a header section that identifies the station,

1 Trey lives in Aptos. Original name was “ARRL Format Version 2,” however CQ magazine balked at any name with “ARRL” in it. Juan Rodriguez Cabrillo was the first to explore the coast of CA, and his name is all over up and down the coast. Trey needed a non-ARRL name, so he picked it.



location, entry class and sub-classes, operator(s) and contact information. The SOAPBOX: tag in the header lets you include your experiences in the contest, and you can have as many of them as you wish. The order of header tags doesn't matter, each one describes a particular attribute or property of your entry, and they are independent ... well for most contests. Except for the SOAPBOX: and ADDRESS: tags, header tags, if needed, normally appear once. The ADDRESS: tag can occur up to 4 times to accommodate international and APO/FPO addresses.

The header for my CQ Worldwide DX CW contest log is at the left. The header always begins with a START-OF-LOG: tag, the value of which denotes the Cabrillo specification version. It was created by my N1MM logger program.

The CATEGORY: tags are critical because they will determine your entry class. Many logging programs will create a Cabrillo file for you, however you should always open the log in a text editor such as Notepad and verify that the header information is correct. This version of N1MM defaults SINGLE-OP to ASSISTED. In this case I was using the telnet cluster and it was right, but that's not what you would normally expect as a single operator.

Not all contests have a CONTEST: tag-value listed in the Cabrillo specification, and the sponsors of those contests will specify what value to use in their rules. The Cal QSO Party is CA-QSO-PARTY. LOCATION: SV denotes that I operated from the Sacramento Valley ARRL Section. This is required for all ARRL and CQ contests except CQ VHF. Other contest groups require different values in this tag.

**QSO LINES:** Each QSO that you make in the contest is reported on a single line identified by, not surprisingly, a QSO: tag.

```

CREATED-BY: N1MM Logger v14.9.0
QSO: 28069 CW 2014-11-29 0001 K6DGW          599 3      JH8SLS          599 25
QSO: 28066 CW 2014-11-29 0003 K6DGW          599 3      JR4PPA          599 25
QSO: 28064 CW 2014-11-29 0004 K6DGW          599 3      JA7ZFN          599 25
QSO: 28061 CW 2014-11-29 0006 K6DGW          599 3      JN1NOP          599 25
QSO: 28059 CW 2014-11-29 0009 K6DGW          599 3      JE1LFX          599 25
QSO: 28057 CW 2014-11-29 0011 K6DGW          599 3      JG1AVO          599 25
QSO: 28057 CW 2014-11-29 0012 K6DGW          599 3      ZL2B            599 32
QSO: 28054 CW 2014-11-29 0013 K6DGW          599 3      JA6LCJ          599 25
QSO: 28051 CW 2014-11-29 0015 K6DGW          599 3      JH4MGU          599 25
QSO: 28074 CW 2014-11-29 0020 K6DGW          599 3      BD3OM           599 24
QSO: 28069 CW 2014-11-29 0023 K6DGW          599 3      RT0C            599 19
QSO: 28068 CW 2014-11-29 0024 K6DGW          599 3      JE5JHZ          599 25

```

This is the first dozen QSO's in my log. Each line begins with a QSO: tag, followed by at least one space. The next five fields are Frequency, Mode, Date, UTC, and my call, in that order, separated by at least one space.<sup>2</sup> These five fields are the same for all contests. In CQ WW, the exchange is RS[T] and CQ zone number. The first "599 3" is the report I gave him and my CQ zone. The next field is his call, followed by the report I copied from him and his zone.

The Cabrillo specification includes QSO line templates for a number of major contests, and the logging programs follow those templates ... more or less. "What if my logger doesn't put things in the same columns as the template?" I hear from the back of the room, and there is a little variance among loggers. The answer is, "It doesn't matter." Order of the information items in the line does matter, but Unix geeks will tell you that the QSO lines are "whitespace-delimited" – at least one space. For whitespace, one space character is the same as 2, 5, or 25. Theoretically, you could end each field with 1 space, and so long as they are in the correct order, your log is OK.

If you do that however, the information fields won't line up in columns because call signs vary in length, and one of the goals of Cabrillo was to create a log easily readable by humans, which brings us to, "What if my contest doesn't have a QSO template in the specification?" Not to worry, for all the major loggers at least, if the logger supports a contest, it will create a whitespace-delimited Cabrillo file with the data fields attractively lined

<sup>2</sup> Frequency must denote at least the band. If your radio is interfaced to your logger, the radio will usually report an exact frequency. If it isn't interfaced, the logger will use 28000 or 7000 or 21000, **provided you tell it when you change bands** ☺

up in columns.

CQ WW has an almost absurdly simple exchange. RS[T] is always 59[9], and the zone is predictable from the call sign prefix. Indeed, N1MM and others always fill that in. Beware however, they do so by reading a "Country" file using the call sign prefix. This file changes regularly [it's distributed via the I'net of course], and most countries have more than one block of prefixes. The F's belong to France, but so do the TM's which are often used by expeditions to places not remotely close to the "real" France in zone 14. The moral of all this is, "Just because the logger thinks the guy is in zone 28, it's up to the human to get it right."

```

CREATED-BY: N1MM Logger v14.9.0
QSO: 28070 CW 2014-11-01 2104 K6DGW      0001 U 53 SV K5IID      0003 A 56 NTX
QSO: 28069 CW 2014-11-01 2105 K6DGW      0002 U 53 SV KE0Z      0003 Q 69 SD
QSO: 28066 CW 2014-11-01 2107 K6DGW      0003 U 53 SV W1MA      0011 U 58 EMA
QSO: 28063 CW 2014-11-01 2109 K6DGW      0004 U 53 SV K1WB      0010 B 56 CT
QSO: 28062 CW 2014-11-01 2110 K6DGW      0005 U 53 SV NN1SS     0009 U 63 NH
QSO: 28058 CW 2014-11-01 2111 K6DGW      0006 U 53 SV WA1S      0009 A 79 GA
QSO: 28057 CW 2014-11-01 2112 K6DGW      0007 U 53 SV K3WU      0007 A 71 EPA

```

Not all exchanges are so simple. Here are the first few QSO's from my ARRL Sweepstakes log this year. The first 5 fields are the same. The next fields are my serial number, my precedence, my check, and my ARRL section. Then his call, his serial number, his precedence, his check and his ARRL section. It is really important that what you send on the air is correctly reflected in your log, as well as what you receive. The header of one CQP log this year indicated he operated from SBER, and when I made a reverse log for him, everyone he worked copied SBER. Unfortunately, he hadn't completed the contest initiation process in his logger, he didn't check his log before submitting it, his log said he sent SCLA, and everyone he worked got dinged by the software. We fixed it, but it's extra work for the sponsor.

The Sweepstakes exchange resembles a radiogram header line. Precedence is one character which denotes entry class – A=100W or less, Q=5W or less, B= over100W, S=School, U=Unlimited. The check, word count for a radiogram, is the last two digits of the year you were first licensed, although in truth, the only requirement is that it be the same throughout the contest. W6YX [Stanford University] sends 14. W1MX [MIT] sends 09 as in 1909. The exchange ends with the ARRL section abbreviation.

But, even though it's a more complex exchange and QSO line, it's still human readable. What's more, it can easily be imported into a spreadsheet if the sponsor needs to do some bulk fixing before scoring the log.

**ORDER OF TAGS:** All Cabrillo logs end with an END-OF-LOG: tag. Theoretically, that and the START-OF-LOG: tag are the only two that must appear at the end and beginning of a Cabrillo file respectively. The remainder can be scattered anywhere you wish, after all, that's what tagged files are for. Well ... that sentence began with "Theoretically." I strongly advise that you maintain the START – HEADER – QSO's – END order. Aside from making it readable, your log is going to be read by robot software, most of it home-grown by the sponsors. They test it with well-formed Cabrillo files which is what you want yours to look like.

**LOG SUBMITTAL:** Sponsors used to accept logs on floppy disks ... first 5 1/4" then 3 1/2". Pretty hard to find any of those around these days and they've been supplanted by email. To submit your Cabrillo log file via email:

1. Name your log <call>.LOG [e.g. K6DGW.LOG but best to use your own call]
2. Look up the email address in the sponsor's rules for the contest
3. Compose an email to that address with your call [only] as the subject and nothing in the body
4. Attach your renamed Cabrillo file
5. Click on SEND

You'll generally get an email back confirming receipt but don't hold your breath, small contests are usually manual and it can take a few days.

In the past several years, many sponsors have also been providing submittal directly on their web sites. This has the advantage that they can ask you questions to verify your entry category, and give you immediate direct

feedback if there is something wrong with your log or format.<sup>3</sup> Answer the questions, provide your email address, then open your log in a plain-text editor such as Notepad. Select the entire log, from the START-OF-LOG: to END-OF-LOG, copy it to the clipboard, paste it into the spot provided on the page, and click SUBMIT [or whatever]. Their robot will run a sanity check on it, give you feedback, and you'll usually have an email confirmation waiting by the time you're done.

Prior to the contest, read the rules carefully, know what the exchange you'll send is and what you'll be receiving, and mark your calendar with the submittal deadline. It hurts to plan your operation, work hard and make a good score, and then discover you missed the deadline. Deadlines used to be a month or even months out from the contest end. Nowadays, they're closing in ... NAQP's are due 7 days after the contest.

And finally, most larger contest sponsors will not accept a paper printout of a Cabrillo file. We got 3 of those for CQP this year, one is fairly large and there is no way we can process the log.

I hope everyone had a great holiday season, Happy New Year, and maybe we'll spend February's issue on contest operating.

73,

Fred K6DGW



---

<sup>3</sup> We got three CQP logs this year that were actually last years logs. ☺



SIERRA FOOTHILLS AMATEUR RADIO CLUB  
P.O. Box 6421, Auburn, CA 95604

2015 MEMBERSHIP APPLICATION

Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_ e-mail: \_\_\_\_\_  
Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Associate Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_ email: \_\_\_\_\_  
Phone: \_\_\_\_\_ Cellphone: \_\_\_\_\_ Application is: (Circle) New Renewal

**Dues / Donations:**

Membership: yearly*	\$ 22.00	Name Badge:	\$ 7.00	Yes (special name)_____
Associate: yearly*	\$ 7.00	Repeater Donation:	\$ _____	
Auto Patch Donation:	\$ _____	Newsletter Booster:	\$ _____	
Misc. Donation:	\$ _____	Christmas Donation:	\$ _____	ARRL member? (circle) Yes No
<b>TOTAL:</b>		<b>\$ _____</b>	<b>Please add \$1 if paying via PayPal</b>	

\*Prorated dues for NEW Members/Associates Only

July	\$ 20/6	October	\$ 14/3 + following year
August	\$ 18/5	November	\$ 12/2+ following year
September	\$ 16/4	December	\$ 10/1 + following year

OFFICE USE ONLY:

DO NOT WRITE BELOW THIS LINE

Date: \_\_\_\_\_ Treasurer: \_\_\_\_\_ Secretary: \_\_\_\_\_ Roster: \_\_\_\_\_

Payment: \_\_\_\_\_ Check Number: \_\_\_\_\_ Cash: \_\_\_\_\_ PayPal: \_\_\_\_\_