

# Publication of the Northern California Contest Club



# Issue <u>514</u> March 2015

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Guests are always welcome at the NCCC!

Please join us.

## **NCCC Meeting**

### Monday 9th March 2015

### Location:-

Tied House Brewery 954 Villa Street, Mountain View, CA

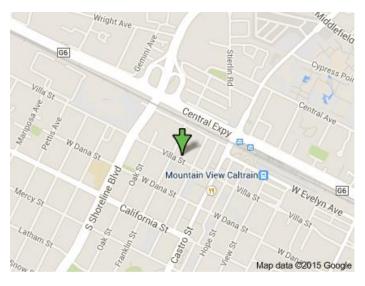
### Time:

6:00pm Schmooz, 6:30pm Dinner, 7:00pm Program

### **Program**

Annual NCCC Awards Meeting"

Come To Claim Your Own Award(s) and/or
Enjoy Seeing Others Receive Their Awards.



# President's Report

## By-laws amendment

As of this writing, we have an election in progress for a by-laws amendment that would split the office of secretary treasurer into separate secretary and treasurer positions. Unfortunately, there were a number of drafting errors, that in the opinion of the sponsor and various knowledgeable people are fatal flaws. The board is asking for everyone to vote "No" on the current petition so that a new corrected version can be presented to the membership.

Even if you are in favor of the office split, which the board is, you should vote "No" on the current amendment.

The reason for the change is to make it easier to recruit officers. The secretary treasurer job is enough work for two people. An argument was advanced that if this change is approved, we have to recruit two officers, not just one. Yes, but it should be easier to find two officers with reduced work loads.

Watch for announcements on the upcoming bylaws amendment. We are trying to get it done in time for next months elections, but the timing is really tight, so we can't guarantee that we will make it in time.

### New officers

Speaking of officers, I will be searching for a new president.



# **Officers:**

President Rick Karlquist, N6RK richard@karlquist.com Vice President / Contest Chair Byron Servies, N6NUL byron@n6nul.org Secretary/Treasurer Tom Carney K6EU k6eu@arrl.net Past President Alan Eshleman K6SRZ doctore@well.com Director Tom Hutton N3ZZ n3zz.tom@gmail.com Director: Ron Castro N6IE ronc@sonic.net Director: Don Taylor K6GHA k6gha@sbcglobal.net

# Volunteers:

New Member Mentor Al Rendon WT6K wt6k@arrl.net Charter Member **Rusty Epps** W6OAT w6oat@sbcglobal.net Joanna Dilley joanna.k6yl@gmail.com Awards Chair K6YL CQP Chair Chris Tate N6WM ctate@ewnetinc.com **CQP** Certificates John Miller K6MM k6mm@arrl.net K6ZM QSL Manager **George Daughters** K6GT k6gt@arrl.net K6CQP,N6CQP,W6CQP QSL Mgr Ed Muns W0YK w0yk@arrl.net NCCC Email reflector Admin Phil Verinsky W6PK kb-w6tqg@verinsky.com Webmaster John Miller k6mm@arrl.net K6MM JUG Editor Ian Parker W6TCP w6tcpian@gmail.com jug@nccc.cc Fred Jensen K6DGW k6dgw@arrl.net David Ashworth NC6P nc6p@yahoo.com



### **NCCC** Net

Thursday 8 PM Freq: 3.610 +/-

### **NCCC**

Monthly meetings take place on the second Monday of each month!

# **NCCC Membership Information**

If you wish to join NCCC, you must fill out an <u>application for membership</u>, which will be read and voted upon at the next monthly meeting. (<u>PDF application form</u>)

To join, you must reside within <u>club territory</u> which is defined as the maximum of:

- Northern California, anything north of the Tehachapi's up to the Oregon border, and
- A part of north-western Nevada (anything within our ARRL 175-mile radius circle centered at 10 miles North of Auburn on Highway 49).

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If you can recommend anyone, including yourself, for president, let me know. I will be contacting as many possible candidates as I can identify.

This is your chance to have an influence on the direction the club is going in. I think it is clear that we can't continue with business as usual leading to a downward spiral. However, there is no clear consensus about what to do about it. I hope I can identify a candidate with fresh ideas and good leadership abilities.

### **Awards**

I see that we don't have a lot of RSVP's for the annual awards meeting. For the people not attending, I am not sure if they represent people not getting awards, or if they don't care about awards, or are happy getting them in the mail. It calls into question how much interest there is in awards. Byron and Joanna have tried to modify the awards to be more inclusive of the small stations and/or newer operators.

### Visalia

If you can help man the NCCC table in the hallway and/or help with the hospitality suite, contact me.

## **2014/2015 Contest Dues**

If you have already paid your NCCC dues for the 2014/2015 contest year, thanks. The club appreciates your support.

If you have not paid dues, a gentle reminder due were due last July and are currently past due. Now would be a good time to pay your dues as we are approaching the March meeting where NCCC awards will be presented. Per long standing policy, awards are only given to those members who have paid dues for the current year.

Not sure if you have paid dues? Check the roster on the club WEB site.

Dues payment can be sent to the club treasurer or via Pay-Pay pp address (paypal@nccc.cc)

K6EU 1545 Elwood Dr. Los Gatos, CA 95032

Tom K6EU

# Elecraft K3 Jitter—Bob N6TV

As many of you may know, the Elecraft K3 has a terrible CW jitter problem (bad CW timing) on TX if you transmit faster than 37 WPM, unless you enable CW QRQ mode. This problem exists even if you use semi-breakin mode instead of QSK. For more background on the issue, see:

### http://lists.f5mzn.org/pipermail/support/2013-November/083384.html

Note that most operators choose not to enable CW QRQ mode, regardless of the benefit, because enabling CW QRQ mode disables RIT, Passband tuning, and Split operation.

I am fortunate to be a beta tester for the new Elecraft KSYN3A synthesizer boards for the K3, which was recently announced. This new hardware virtually eliminates the CW jitter problem, and it also improves receiver performance (see the Sherwood Engineering Receiver Performance Table at http://www.sherweng.com/table.html). You can now send decent CW at high speed and still have RIT and PB tuning available. Diversity reception is also improved, since only one synthesizer is used to drive both receivers when selecting Diversity mode.

First, for the QSK operator, an upgrade to K3 firmware 5.14 or later is strongly recommended, as this alone eliminates all of the annoying loud pops and ticks heard between dots and dashes in prior releases (some of which were loud enough to potentially cause ear damage in pileup situations). The new v5.14 firmware completely eliminates this longstanding issue. No new hardware is required. QSK operation is at long last a very pleasant mode on an Elecraft K3. Be sure to select NEW QSK mode by using the menu CONFIG: CW WGHT, then tap [3] until "New QSK" is displayed.

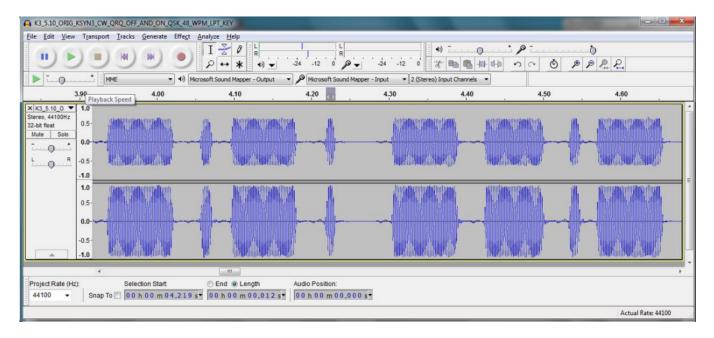
Here are some recordings of the local sidetone (headphone audio) at high speed, made during the ARRL DX CW.

<a href="http://bit.ly/KSYN3sidetone">http://bit.ly/KSYN3sidetone</a> (old boards, new firmware)
<a href="http://bit.ly/KSYN3Asidetone">http://bit.ly/KSYN3Asidetone</a> (new boards, new firmware)

I've also posted some recordings I made with a separate receiver. This first one demonstrates the high speed CW jitter problem when using the original KSYN3 board. CW is 48 WPM via external keying, QSK mode (but it sounds just as bad with semi-breakin). In the middle of the recording I switch to CW QRQ mode, which cleans everything up, but at a high cost (no more RIT or PB tuning):

# http://bit.ly/KSYN3

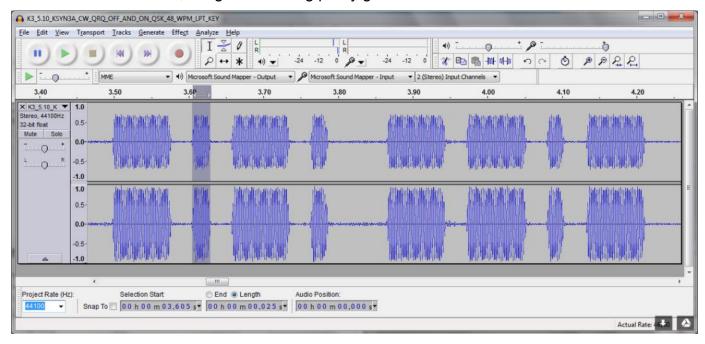
At 48 WPM, each dot (and the space between them) is supposed to be 1200/48 = 25 ms long, but some are only 12 ms long (per Audacity), and the timing variation is easy to see when you zoom in on "CQ



The second recording was made of a K3 transmitter with two new KSYN3A boards (again, listening on a separate receiver).

http://bit.ly/KSYN3 A

Even with CW QRQ OFF, things are looking pretty good:



I can barely hear the difference now, with CW QRQ ON or OFF (CW QRQ ON still sounds a little better, but not by much).

I say this is a nice piece of work by Elecraft Chief engineer N6KR. The new KSYN3A boards are \$189 each and pretty simple to install. If you have the subreceiver, you need two boards, one for the main, one for the sub. If you plan on operating any CW above 37 WPM, which is common on expeditions, you really should get them.



# Contest Calendar—March page 1

NSARA Contest 1200Z-1600Z, Mar 1 and

1800Z-2200Z, Mar 1

SARL Hamnet 40m Simulated Emerg Contest 1200Z-1400Z, Mar 1

North Carolina QSO Party 1500Z, Mar 1 to 0059Z, Mar 2

RSGB 80m Club Championship, Data 2000Z-2130Z, Mar 2

ARS Spartan Sprint 0200Z-0400Z, Mar 3

AGCW YL-CW Party 1900Z-2100Z, Mar 3

QRP Fox Hunt 0200Z-0330Z, Mar 4

CWops Mini-CWT Test 1300Z-1400Z, Mar 4 and

1900Z-2000Z, Mar 4 and

0300Z-0400Z, Mar 5

AWA John Rollins Memorial DX Contest 2300Z, Mar 4 to 2300Z, Mar 5 and

2300Z, Mar 7 to 2300Z, Mar 8

NRAU 10m Activity Contest 1800Z-1900Z, Mar 5 (CW) and

1900Z-2000Z, Mar 5 (SSB) and

2000Z-2100Z, Mar 5 (FM) and

2100Z-2200Z, Mar 5 (Dig)

NCCC RTTY Sprint 0145Z-0215Z, Mar 6

QRP Fox Hunt 0200Z-0330Z, Mar 6

NCCC Sprint 0230Z-0300Z, Mar 6

ARRL Inter. DX Contest, SSB 0000Z, Mar 7 to 2400Z, Mar 8

Wake-Up!QRP Sprint 0600Z-0629Z, Mar 7 and

0630Z-0659Z, Mar 7 and

0700Z-0729Z, Mar 7 and

0730Z-0800Z, Mar 7

SKCC Weekend Sprintathon 1200Z, Mar 7 to 2400Z, Mar 8

Open Ukraine RTTY Championship 1800Z-2059Z, Mar 7 (Low Band) and

2100Z-2359Z, Mar 7 (Low Band) and

0800Z-1059Z, Mar 8 (High Band) and

1100Z-1359Z, Mar 8 (High Band)



# Contest Calendar—March page 2

UBA Spring Contest, CW 0700Z-1100Z, Mar 8

DARC 10-Meter Digital Contest 1100Z-1700Z, Mar 8

QRP Fox Hunt 0100Z-0230Z, Mar 11

CWops Mini-CWT Test 1300Z-1400Z, Mar 11 and

1900Z-2000Z, Mar 11 and

0300Z-0400Z, Mar 12

RSGB 80m Club Championship, CW 2000Z-2130Z, Mar 11

QRP Fox Hunt 0100Z-0230Z, Mar 13

NCCC RTTY Sprint 0145Z-0215Z, Mar 13

NCCC Sprint 0230Z-0300Z, Mar 13

Nauryz DX Contest 0800Z-1359Z, Mar 14

RSGB Commonwealth Contest 1000Z, Mar 14 to 1000Z, Mar 15

All Africa International DX Contest 1200Z, Mar 14 to 1200Z, Mar 15

F9AA Cup, SSB 1200Z, Mar 14 to 1200Z, Mar 15

AGCW QRP Contest 1400Z-2000Z, Mar 14

Louisiana QSO Party 1400Z, Mar 14 to 0200Z, Mar 15

QRP ARCI Spring Digital Sprint 1500Z-1800Z, Mar 14

EA PSK63 Contest 1600Z, Mar 14 to 1600Z, Mar 15

TESLA Memorial HF CW Contest 1800Z, Mar 14 to 0759Z, Mar 15

QCWA QSO Party 1800Z, Mar 14 to 1800Z, Mar 15

Idaho QSO Party 1900Z, Mar 14 to 1900Z, Mar 15

North American Sprint, RTTY 0000Z-0400Z, Mar 15

UBA Spring Contest, 2m 0700Z-1100Z, Mar 15

WAB 3.5 MHz Phone 1800Z-2200Z, Mar 15

Wisconsin QSO Party 1800Z, Mar 15 to 0100Z, Mar 16

Run for the Bacon QRP Contest 0200Z-0400Z, Mar 16

Bucharest Contest 1800Z-2059Z, Mar 16

CLARA HF Contest 1700Z, Mar 17 to 1700Z, Mar 18 and

1700Z, Mar 21 to 1700Z, Mar 22

QRP Fox Hunt 0100Z-0230Z, Mar 18



# Contest Calendar—March page 3

CWops Mini-CWT Test 1300Z-1400Z, Mar 18 and

1900Z-2000Z, Mar 18 and

0300Z-0400Z, Mar 19

NAQCC CW Sprint 0030Z-0230Z, Mar 19

RSGB 80m Club Championship, SSB 2000Z-2130Z, Mar 19

QRP Fox Hunt 0100Z-0230Z, Mar 20

NCCC RTTY Sprint 0145Z-0215Z, Mar 20

NCCC Sprint 0230Z-0300Z, Mar 20

BARTG HF RTTY Contest 0200Z, Mar 21 to 0200Z, Mar 23

SARL VHF/UHF Analogue/Digital Contest 1000Z, Mar 21 to 1000Z, Mar 22

Russian DX Contest 1200Z, Mar 21 to 1200Z, Mar 22

Oklahoma QSO Party 1300Z, Mar 21 to 0100Z, Mar 22 and

1300Z-1900Z, Mar 22

AGCW VHF/UHF Contest 1400Z-1700Z, Mar 21 (144) and

1700Z-1800Z, Mar 21 (432)

Virginia QSO Party 1400Z, Mar 21 to 0200Z, Mar 22 and

1200Z-2400Z, Mar 22

Feld Hell Sprint 1700Z-1859Z, Mar 21

UBA Spring Contest, SSB 0700Z-1100Z, Mar 22

SKCC Sprint 0000Z-0200Z, Mar 25

QRP Fox Hunt 0100Z-0230Z, Mar 25

CWops Mini-CWT Test 1300Z-1400Z, Mar 25 and

1900Z-2000Z, Mar 25 and

0300Z-0400Z, Mar 26

QRP Fox Hunt 0100Z-0230Z, Mar 27

NCCC RTTY Sprint 0145Z-0215Z, Mar 27

NCCC Sprint 0230Z-0300Z, Mar 27

FOC QSO Party 0000Z-2359Z, Mar 28

CQ WW WPX Contest, SSB 0000Z, Mar 28 to 2359Z, Mar 29

# HAM RADIO OUTLET

## 14 STORE BUYING POWER!



### IC-7600 | All Mode Transceiver

• 100W HF/6m Transceiver, gen cov. receiver • Dual DSP 32 bit • Three roofing filters- 3, 6, 15khz . 5.8 in WQVGA TFT display . Hi-res real time spectrum scope



### IC-7200 | HF Transceiver

- 160-10M 100W Simple & tough with IF DSP AGC Loop Management • Digital IF Filter • Digital Twin PBT • Digital Noise Reduction
- Digital Noise Blanker USB Port for PC Control



### IC-7100 | All Mode Transceiver

• HF/50/144/430/440 MHz Multi-band, Multi-mode, IF DSP • D-STAR DV Mode (Digital Voice + Data) . Intuitive Touch Screen Interface . Built-in



### ID-5100A | VHF/UHF Dual Band Digital Transceiver

 Analog FM/D-Star DV Mode
 SD Card Slot for Voice & Data Storage 50W Output on VHF/UHF Bands . Integrated GPS Receiver . AM Airband Dualwatch • FM Analog/DV Repeater List Function

### ID-51A | VHF/UHF Dual Band Transceiver

• 5/2.5/1.0/0.5/0.1W Output • RX: 0.52-1.71, 88-174, 380-479 MHz\*\* • AM/FM/FM-N/WFM/DV • 1304 Alphanumeric Memory Chls . Integrated GPS . D-STAR Repeater Directory . IPX7 Submersible



# KENWOOD



### TS-590SG | HF/50MHz Transceiver

• Equipped with 500 Hz/2.7 kHz roofing filter as standard • ALC derived from TS-990S eliminating spike issues . Antenna output function (shared with DRV connector) • CW - morse code decoder



### TM-D710G | 2M/440 Dualband

• V+V/V+U/U+U operation • Built-in GPS • Built-in TNC for APRS & DX-Cluster operation • 50W 2M & UHF • 1,000 memories • Dual receive • Green or amber backlight colors • Latest APRS firmware w/new features . Sky Command II remote functions



### TM-V71A | 2M/440 DualBand

• High RF output (50W) • Multiple Scan • Dual receive on same band (VxV, UxU) . Echolink® memory (auto dialer) . Echolink® Sysop mode for node terminal ops . Invertible front panel . Choice of green/amber for LCD panel • 104 code digital code squelch



### TM-281A | 2 Mtr Mobile

. 65 Watt . 200 Memories . CTCSS/DCS . Mil-Std specs . Hi-quality audio

### TH-F6A | 2M/220/440

• Dual channel receive • .1 - 1300 MHz (cell blocked) RX • FM, AM, SSB • 5W 2M/220/440 TX, FM • 435 Memories • Li-Ion Battery



# $oldsymbol{YAESU}$



### FT-991 | HF/50MHz/2M/440 Transceiver

• 160 M-440MHz - SSB/CW/FM/C4FM Digital/AM/RTTY/PSK • 100 W (2M/4440: 50 Watts) • 3.5" TFT full-color touch panel operation • High speed spectrum scope . Roofing filers: 3kHz & 15kHz . 32-bit high speed floating point IF DSP



### FTDX1200 | 100W HF + 6M Transceiver

• Triple Conversion Receiver With 32-bit Floating Point DSP • 40 MHz 1st IF with selectable 3 kHz, 6kHz & 15 kHz Roofing Filters Optional FFT-1 Supports AF-FFT Scope, RTTY/PSK31 Encode/ Decode, CW Decode/Auto Zero-In • Full Color 4.3" TFT Display



### FT-450D | A100W HF + 6M Transceiver

- 100W HF/6M Auto tuner built-in DSP built-in 500 memories
- . DNR, IF Notch, IF Shift



### FTM-400DR | 2M/440 Mobile

• Color display-green, blue, orange, purple, gray • GPS/APRS • Packet 1200/9600 bd ready • Spectrum scope • Bluetooth • MicroSD slot • 500 memory per band

### FT-60R | 2M/440 5W HT

- Wide receiver coverage AM air band receive
- 1000 memory channels w/alpha labels Huge LCD display . Rugged die-cast, water resistant case . NOAA severe weather alert with alert scan





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