



#638 Sep 2025



Publication of the
Northern California
Contest Club

NCCC

**55 years of
contesting
excellence**

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NCCC MEETING
<https://nccc.cc/meetings.html>
21 Sep – Summer BBQ
(See notice in this issue)

President's Report

David West, KO6M



Can you believe it's September? That means the official *unofficial* contest season is underway! We kicked things off with NAQP and All Asia – great ways to warm back up. Now we're heading into September VHF, several of our BIG QSO Parties, NA Sprint, CQ WW DX RTTY, the Makrothen RTTY Contest, and Oceania DX CW. I could go on, but that's just what's coming up in the next five weeks. Add in fall sports for our children or grandchildren, and some of us may not get any rest between now and ... well, who knows!

It's exciting! Do you have big plans this season? Traveling, perhaps? Maybe you're opening up your station to others for the first time? Or trying out a new radio? Whatever it is, don't forget to let us know so we can cheer you on – or even lend a hand. As so many have said, we are a club of helpers and supporters. Post on groups.io or on our all-new Slack system. If you don't yet have Slack access, message N6WM. It's a wonderful way to ask questions, get quick answers, and share score reports. One member told me they prefer Slack over groups.io because it helps them cut through inbox noise and get to what they need faster. Thanks to N6WM, we're set up on a not-for-profit plan, so we get all the big-business features without the cost. I'd love to see more of us using it!

But I digress – back to the club. Don't forget our Club BBQ this month:



September 21st, at Shoup Park (Patriot Corner) in Los Altos, from 4–8 pm. It's free!

Also, Gary, NA6O, was prompted by one of our members to restart the 5 Meg Program. He'll have his own article about that. I do want to highlight, though, that it's not just the main KB competition we have to support you, our members. There are several stand-alone awards that anyone can win. Plus, we're always happy to create on-the-spot awards for special achievements. Remember – the best way to be eligible for awards is to post on 3830. The next best way is to share your scores on groups.io or in Slack. Those are the places where the stories of blood, sweat, and tears really get noticed.

Whatever you decide to do this month ... KB!
David, KO6M

(Re)announcing the 5 Meg Award

Gary, NA6O

NCCC Awards Manager

Hey little pistols, are you suffering from a lack of plaques? Well NCCC has something for you called the **5 Meg Award**. It's been around for decades but regularly forgotten. So here's the lowdown.

The simple rules are detailed at nccc.cc/5meg.html. Basically, the points from ANY contest that you have entered counts towards your total of 5 million points. How easy is that?? Just combine everything into a spreadsheet and email it to me for validation. (One reminder: Awards like this only go to paid NCCC members.) So gather up your points and send it in!

<h1>California QSO Party</h1>		
	<p>60th Running Of The CQP!</p> <p>1600 UTC October 4, 2025 to 2200 UTC October 5, 2025</p> <p>CQP 2025 Begins: 21 : 21 : 24 : 36 <small>Days Hrs Mins Secs</small></p>	

Less than a month to go! It's probably fair to assert that CQP is the premier, best attended QSO Party in North America. All 58 counties will be represented on the air, most with fixed higher powered stations and full coverage of the contest period. We typically receive close to or over 1,000 logs demonstrating that interest is high. Visit cqp.org if you haven't already and be ready for pileups!



Upcoming State/Province QSO Parties

Thanks to WA7BNM

<https://contestcalendar.com/stateparties.php>

State/Province	Dates/Times
New Jersey	20 Sep 1400Z to 21 Sep 0159Z
Washington Salmon Run	20 Sep 1600Z to 21 Sep 0700Z 21 Sep 1600Z to 2400Z
New Hampshire	20 Sep 1600Z to 21 Sep 0400Z 21 Sep 1200Z 2200Z
Maine	27 Sep 1200Z to 28 Sep 1200Z
California	4 Oct 1600Z to 5 Oct 2200Z
Nevada	11 Oct 0300Z to 12 Oct 2100Z
Arizona	11 Oct 1600Z to 12 Oct 0500Z
Pennsylvania	11 Oct 1600Z to 12 Oct 0400Z 12 Oct 1300Z to 2200Z
South Dakota	11 Oct 1800Z to 12 Oct 1800Z

Larger Contests on the Horizon

WAE DX – SSB	13 Sep 0000Z to 14 Sep 2359Z
NA Sprint – CW	14 Sep 0000Z to 0400Z
NA Sprint – RTTY	21 Sep 0000Z to 0400Z
CQ WW DX – RTTY	27 Sep 0000Z to 28 Sep 2359Z
CQ WW DX – SSB	25 Oct 0000Z to 26 Oct 2359Z
ARRL Sweepstakes – CW	1 Nov 2100Z to 3 Nov 0300Z
JIDX Phone	8 Noa 0700Z to 9 Nov 1300Z
ARRL Sweepstakes – SSB	15 Nov 2100Z to 17 Nov 0300Z
NA Sprint – SSB	23 Nov 0000Z to 0400Z
CQ WW DX – CW	29 Nov 0000Z to 30 Nov 2359Z
ARRL 160	5 Dec 2200Z to 7 Dec 1600Z
ARRL 10	13 Dec 0000Z to 14 Dec 2359Z
RAC Winter	27 Dec 0000Z to 2359Z



Weekly CW (1 hr) Events

ID	DAY	UTC	EXCH	WPM	SPONSOR
SST	Fri	2000 - 2100	Name+SPC	<20	K1USN
	Mon	0000 - 0100			
MST	Mon	1300 - 1400	Name+QSO#	20-25	ICWC
	Mon	1900 - 2000			
	Tue	0300 - 0400			
CWT	Wed	1300 - 1400	Name+CWO# or Name+SPC	20-> ∞	CWops
	Wed	1900 - 2000			
	Thu	0300 - 0400			
	Thu	0700 - 0800			

Thursday FT4 NCCC Sprint

The Northern California Club is again pleased to sponsor our weekly FT4 Sprint, aka FT4NS (NCCC Sprint). This contest is held every Friday UTC between 0100Z and 0130Z (Thursday evening in North America). Non-North American stations are welcome to participate. No logs are necessary; please submit your score to 3830scores.com using the "NCCC FT4 Sprint" template. FT4 NS Sprint Rules are posted at: <https://www.ncccsprint.com/ns.html> See you on the screen! Frequencies: 1839, 3575, 7047.5 (also 7080), 14080, 21140, 28180, 50318.



Doug's Workshop

Doug Phillips, WE6Z

An Iambic Keyer For Tube Rigs



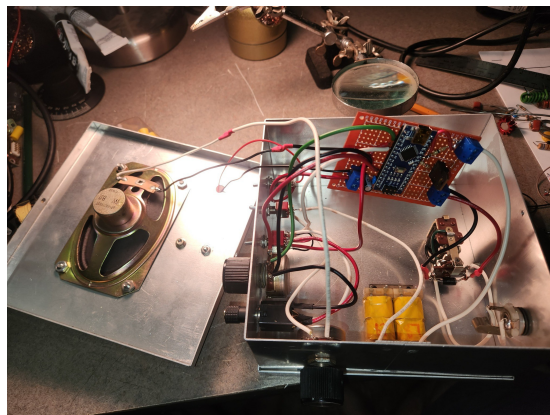
I recently felt the urge to get my Navy TCS set back on the air ... I restored this unit a couple years ago. It's a Navy HF transmitter/receiver that was found on a wide variety of ships and even a few aircraft in WW2, the Korean War, and even into the Vietnam War. Designed and manufactured by Collins Radio, some were manufactured by others as well. The transmitter is good for about 10 watts on AM and 25 on CW. The TCS doesn't have a side tone output and the relays are pretty loud., so it makes it hard to send code because the relay clank doesn't seem to follow the dits and dahs, at least to my brain.



I decided I needed an iambic keyer for the TCS set. I remember reading that there is high voltage across the key contacts -- if I remember correctly it is more than 100 volts, so a normal 2N2222 single transistor keying circuit wouldn't work.

I located a suitable relay in my collection that would handle about 250 volts across the relay contacts and had a 6 VDC coil. I also scrounged up an Arduino Nano. I was able to find an Arduino-based iambic keyer project with code on the internet and I downloaded and modified the code to fit my needs. I built it all into an aluminum project box and added switches and knobs for the different functions such as On/Off switch, speaker, paddle reverse, speed pot, volume pot, and a manual tune button.

The Arduino drives the speaker with a square wave which tends to sound very harsh so I routed the audio through an 80mH inductor and volume pot. This rounded the corners off the square wave so it sounds better to the ear. The relay is driven by a TIP120 Darlington transistor pair. The Arduino reads the speed pot and sets the character speed. The keyer is all powered by two 18650 cells.



Putting it all together, the high voltage across the key contacts is switched safely by the relay inside the box, and the speaker is loud enough to override the sound of the TCS relays. Not a perfect solution to the TCS noise but a thoroughly adequate ham solution.

This was just a quick project I put together across a couple days. In fact, the fabrication and drilling of the chassis took more time than the assembly and testing. Here is a quick YouTube video of it in action.

www.youtube.com/watch?v=TYSOQW6080E



NCCC Family BBQ

Sunday 21 Sep 1600 to 2000 PDT

**Patriot Corner at Shoup Park 1600
400 University Avenue
Los Altos, California 94022**





Northern California Contest Club

Excellence In Amateur Radio Contesting



The Lumber Yard

Awards and Kudos for NCCC Members



The Radio Amateur's Journal

Takes pleasure in awarding this Certificate of Merit to

W2DON

World Wide WPX Contest

#1 United States 6th Call Area

ROOKIE OVERLAY

ALL Bands - High Power

#5 World

#2 North America

#2 United States

A Total score of 24,966 points was computed on the basis of the number of stations worked and call sign prefixes contacted. In witness of this achievement, we hereby affix our signatures on this day.

Bud Trench, AA3B

CQ WPX Contest Director

Jimmy J. Duffy K3LR

President WWRF

Don is a new contester AND a new member of NCCC



After Fiesta Summary Summary

Fiesta del Norteamerica, our on-the-air celebration of NCCC's 55th anniversary, took place late in August with varied reactions. Many thanks to Andy, AE6Y [K6C in the event] for gathering and reporting on the reactions from several of our more active members. You can read his full report at <https://www.nccc.cc/pdf/FiestaReport-AE6Y.pdf>. This is a short summary by your editor of the major reactions provided by Gary, VA7RR; David, WD6T; Jack, W6FB/W6C, operating from the bayou in Lake Charles LA; Frank, W6JTI; David, KO6M [who was the primary organizer]; and Andy, AE6Y/K6C.



GENERAL REPORTS:

Conditions: Widespread agreement ranging from poor to lousy.

Bands: Fifteen was non-productive [see Conditions above]. Forty opened late and Eighty was not included in the rules, leaving Twenty meters for most of the Q's for most of the participants.

Modes: CW was a non-starter for most, SSB was by far the best place to work stations and to explain what the event was all about. As far as is known, there was no RTTY activity.

Participation: Participation reports range from “sort of slim” to almost none. For several, Search and Pounce, which really just meant calling any station heard, seemed to work best and often meant POTA/SOTA stations. Most Q's were with NCCC members.

POSSIBLE LESSONS LEARNED:

Start planning early: We were well into the year when we realized we were going to be 55 in 2025. Going forward, we know when our birthdays will be and can begin publicizing and planning earlier.

Tweak rules: Event and contest rules are notoriously difficult to get right to maximize participation. Starting early is a big plus. We also have our CQP group who have finessed those rules over years and are well experienced. Figure out scoring/multiplier/special station rules that encourage both CW and SSB and multi-band activity.

Outfox conditions: We never really know the conditions that everyone will face ... August is typically less predictable than winter, but that can be approached by permitted bands and event times in the rules.

On-air event name: The Fiesta really needed a short abbreviation for calling CQ ... similar to “FOC,” “RAC,” or others.

All in all, and considering conditions and that we got a late start, our Fiesta came off well.



John Litz, NZ6Q

1434 Douglas Rd, Stockton, CA 95207 • (209) 687-0774 •

www.nz6q.com

Dear Northern California Club members, ARRL Members and friends.

ARRL Members in our Pacific Division have the opportunity to vote for their next ARRL Director. That's something that hasn't happened in as far back as I can remember. If you're not an ARRL member reading this, I encourage you to ask your ARRL member friends to take this opportunity seriously and vote - carefully considering the future of Amateur Radio. To the ARRL Members, Thank You for taking time to vote in this election. Your voice matters. There is work to be done both here and at ARRL HQ and we've only just begun. I have the skill to recognize our challenges; I have a plan; I have the energy to see the plan through. I'm asking for your vote as your Director for the next 3 years.

Thanks to Amateur Radio, I have a lifetime of experience as a leader working with others both professionals and volunteers. My first career in public safety E911. My second as an Engineering Leader. I'm energized to give back to our great community.

ARRL isn't healthy today like it should be. The hobby is growing – ARRL should be too. We can fix things. I've already begun bringing in fresh ideas, common sense and collaboration to the board. Together we can make ARRL a leader in Amateur Radio again.

In our division, I have a plan for better connecting our clubs, sharing best practices, and connecting new hams to clubs like NCCC. Hearing you, listening to your ideas, amplifying your voice, connecting ideas to make them more powerful – this is what I bring to the Pacific Division as Director. I love amateur radio. I'm on the air every day. I'm in the field everyday – enthusiastically meeting hams, helping them explore new technologies, teaching others and listening – always learning. That's part of what's so beautiful about Amateur Radio - You're always learning.

The ARRL status quo leadership of the last 10 or 20 years will not survive the future. ARRL knows this. The organization is thirsty for new perspectives, and fresh ideas. I have a plan for steering the ARRL into a new leader for the 21st century. I want to hear your ideas as well. Together we will shape the future of the ARRL and Amateur Radio and leave it better for the next generation.

I'm asking for your vote and help to shape the future of Amateur Radio.

73,
John NZ6Q





Background:

1974 licensed as WN6IQZ after taking a novice class by Lloyd Bumpus N6EL
1975 upgraded to advance WA6IQZ – ARRL Member (Life Member 2007)
1976 participated in my first California QSO Party and November Sweepstakes
1978 – 1980 served as Radio Officer for San Joaquin County RACES / OES (16 yrs old)
1980 hired by Stockton PD as a 911 Dispatcher largely influenced by Amateur Radio experience
1980 – 1990 member of the Central Valley VHF FM Club and the Stockton ARC
1991 upgraded to Extra Class
1992 relocated to Georgia and was appointed EC for White County GA
1996 published in February QST on the real value of Amateur Radio operators and ARES
1993 – 2010 pretty booked up raising six children but still regularly operated on all bands
2007 received my current call NZ6Q felt it honored in a small way the two hams most responsible for getting me started – Lloyd Bumpus N6EL and Cliff Kurtz N6ZU
2010 First CalQSO Party County Expedition to Glen County
2011 started as a VE offering one-day HamCrams + Test - over 1500 licenses issued.
2012 Elected President of the Stockton-Delta Amateur Radio Club
2017 appointed Assistant Section Manager for San Joaquin Valley
2019 appointed Section Manager for San Joaquin Valley
2024 appointed Vice Director for Pacific Division by President Roderick K5UR
2025 advanced to Director position and serve on ECFSC and A&F committees.
DXCC Mixed 213 confirmed, missing a few on 80M for 5-Band DXCC
WAS on Phone, CW, Digital and 5-Band WAS
Numerous times Pacific Division Low Power winner in November Sweepstakes CW
CQP Multi-op County Expedition repeated winner with mostly new hams as operators
Operated from my home station as W1AW/6, N6F, K6C
Route 66 On-The-Air with Annie N6ACL as W6V (1900QSOs in 9 days)
Guest Op at W7RN and WW6LL as W1AW/7 and W1AW/4



Hello to all ARRL members,



I have been serving in elective offices of the ARRL continuously from January 1978 through January 2024, as:

- ARRL East Bay Section Communications Manager,
- ARRL East Bay Section Manager
- ARRL Pacific Division Vice Director
- ARRL Pacific Division Director
- ARRL Second Vice President

I was unanimously elected by the ARRL Board of Directors as ARRL Honorary Vice President on January 19th, 2024. Since that time I have received several emails from ARRL members who are concerned about the current direction and some recent decisions of the ARRL Board of Directors. A few suggested that I run again for ARRL Pacific Division Director, a position that I held for fifteen years.

This note is to let you know that I'm running again, and I humbly request your vote when you receive your ARRL ballot in September. I will do my best to honor your concerns. Thanks for your consideration.

73,

Bob, W6RGG



A CQP Tale

Steve Mosconi, K6KS

CQP 2025 takes place on the weekend of 4 Oct. Steve shares his experiences with CQP Expeditions to rare counties

I had just finished watching the most recent NCCC meeting with Dean's CQP presentation on YouTube. The question was asked as to why some CQP operators chose to use 1x1 call signs for CQP. I don't know about others but here are my reasons.

I've been a ham since 1969. I didn't get into contesting until 2010 when I decided to give CQP a try. I think that I was getting tired of Field Day. After giving CQP a try for a couple of years, I wondered what it would be like to be part of a team effort. I had always done Field Day as a 1-Bravo station, preferring to take on the challenge by myself.

In 2012, I saw that a group of hams were going to do a CQP Expedition to Trinity County, not too far away from my home. I contacted Rick Huisman N6DQ (SK), who appeared to be the team leader, and asked him if I could visit them during the last hours of CQP to see what a multi-station CQP Expedition looked like. He said, "Sure." I didn't know Rick at that time but he sure made me feel like I'd be more than welcome at their expedition site.

After making my own contacts in CQP, I drove up to Lewiston, CA, and found them in a cute little cottage.

<https://lewistonvalleymotel.com/> <https://lewistonvalleymotel.com/guest-cottage>

They had crammed 6 stations into this little cottage. They were using 2 hex beams with 3 stations sharing each one. I got to see my first triplexers and first band pass filters. I got to see my first coax stubs. All of their stations were connected via computer cables. It was overwhelming and awesome at the same time. They made close to 3000 contacts that year. And, they used the call sign WHISEY SIX TANGO.

Fast forward to 2020. I had just signed up to operate CQP again from home in Shasta County. I was looking at the results for CQP 2019 and saw that the two hams who had operated from Trinity County that year had made only 77 contacts total. Trinity County was the least represented county that year. I started to wonder about doing a CQP Expedition to Trinity County. I shared some e-mails with Dean, N6DE, and then changed my plans ... I was going to do CQP from Trinity County!. Not knowing the county very well, I decided to use the same Guest Cottage that Rick and his team had used.

To honor Rick and his team, I wanted to use the call sign W6T. It meant a lot to me to be able to use the same call sign in the same cottage that they had been in. It was a lot of work and I had a lot of fun. I think that the cottage shrank from the time Rick and his team were there. I couldn't believe how they had six stations operating there.

I have done expeditions to Trinity County in CQP again in 2021, 2022 and 2023. In 2023, I teamed up with Kole KM6BDN to try a great county-line spot, covering both Shasta and Trinity Counties, at 4850 feet with a nice down-slope to the east. Dean helped us a lot with that. It was my first time doing CQP, or any contest, in a multi-operator environment. In each of those years operating from Trinity County, I've used W6T.

I had to back out of what would have been a 3-man effort to the same county-line spot in 2024. Victor N6DVS and Kole used that site again with great success. And, they used W6T.



I think that some op's from other states recognize that W6T represents Trinity County so I've wanted to keep using that call sign, I think of Rick and his team, including Joanna K6YL, Kristen K6WX, David AA6XV, Andreas NN6U, and Rhona K6RHO every year during CQP. Their offer to let this new contester watch them in action led me to an incredible path where I am now trying to share with others.

The current plan for CQP 2025 is for me to join Victor on the county-line site. We've invited Michael K6MLF and his son Steve K6ETA to join us in a Multi-Single effort. This is going to be interesting. Victor and I have each done CQP from Trinity County for 4 years, Victor on CW and I on SSB. This will be the first time that we've operated together. I am really looking forward to it.

I have really enjoyed doing CQP from a rare county. It is really a thrill to get on the air and know that everyone outside of California is hunting for you. If you live close to a rare county, consider operating from there as an Expedition station.

So, for those of you who are doing multi-op expeditions, keep inviting other hams to join you as part of the team or to at least visit your site and see what you are doing. I am so grateful to Rick and the others for sharing their expedition experience with me.

73 Steve K6KS

WHISKEY SIX TANGO from Trinity and Shasta counties.

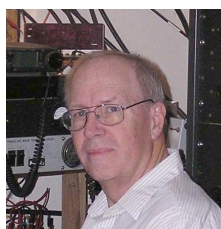


Tube of the Month

Norm Wilson, N6JV

Visit the Tube Museum at n6jv.com

304T



In 1940, EIMAC tried using four 75T tubes in parallel and designated it the [304T](#). The 304T had plates with caps and external grid connections. A cup shield that was concave down was added later (2nd example). I believe the shield is used to protect the glass seals from overheating due to the proximity to the extremely hot anodes and grids. Experiments were made to make the grids connected internally (3rd example).

By 1941 the [304TL](#) ([VT-129](#)) with a mu of

12 and the [304TH](#) ([VT-254](#)) with a mu of 20 were being produced. They had an external grid ring and the cup shield was now concave up. The late 1942 production of 304TLs was made with their plates open at the top (4th example). In 1943 the caps returned to the covered type and with the external grid ring for the first 3 months. In

May of 1943, the grids were all internally connected (5th example). The 304TL was made in great numbers especially in Salt Lake City. In 1941 alone, a total of 544,473 TLs were made. The TLs were used primarily as pulse modulators most commonly in the Army SCR-584 RADAR. With the great demand for these tubes, the type became copied by competitors especially Heinz & Kaufman. The last (6th) example shows a [HK-304L](#) which had the same Army VT designation in spite of the fact that was a taller tube and may not fit in all applications. The 304L had no internal shield as there were four separate wire seals that were a distance away from the anode/grid heat sources.



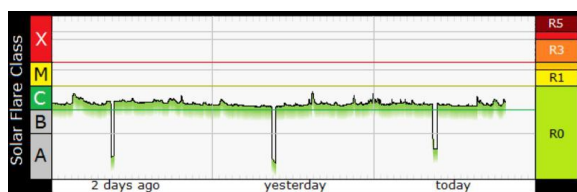


Editor Notes



We have a new occasional feature for the JUG this month -- Doug, WE6Z, adds to his on-air contesting with a construction project, demonstrating that Ham construction is alive and well, at least on Lathrop Rd in Shingle Springs. Doug's soldering gun is always hot so we may see a few others from him taking us back to a time when we actually built the things we use on the air.

Good News! The equinoctial eclipses of the sun for geosynchronous satellites that occur for a few minutes each day around the equinoxes have begun. They show up for the GOES satellite that measures the sun's X-ray flux as the narrow downward spikes in the daily record. In Sep, for hams, they are a hopeful signal that astronomy still works and we're really moving into the winter propagation season. The 10 cm solar flux index [SFI] has been well over 200 consistently as this JUG issue was coming together, a good sign that Cycle 25 is alive and well, maybe even with a double peak!



Fodder For The JUG

I peeked in the JUG Content Closet for future issues and find it moderately empty. We'll make it really easy on authors, just write in an email [text, not HTML], and attach [not embed] photos, diagrams, and other graphics as .jpg or .png files. The "production crew" will respond to XML-ish tags [<photo 1>, <bold></bold>, etc] if you want to suggest placement – just make them up. A measure of fame as a published author awaits ... sorry, no fortune. Contributions to k6dgwnv@gmail.com.



About NCCC

Officers and Directors, 2023-2024 Contest Season

President: David West, [KO6M](#)
Vice-President/Contest Chairman: **VACANT**
Secretary: Victor Denisov, [N6DVS](#)
Treasurer: Nian Li, [WU6P](#)
Past President: David Jaffe, WD6T
Director: Jim Brown, [K9YC](#)
Director: Jeff Stai, [WK6I](#)
Director: Ed Radlo, [AJ6V](#)

Volunteers

Charter Member: Rusty Epps, [W6OAT](#)
Awards Chair: Gary Johnson, [NA6O](#)
California QSO Party Chair: Dean Wood, [N6DE](#)
QSL Mgr [[K6ZM](#)]: **VACANT**
QSL Mgr [[K6CQP/N6CQP/W6CQP](#)]: Dean Wood, N6DE
NAQP Teams: **VACANT**
NA CW Sprint Teams: Bob Vallio, [W6RGG](#)
NCCC Email Reflector Admin: Phil Verinsky, [W6PK](#)
Worked All CA Counties Award: Fred Jensen, [K6DGW](#)
Photographer: Bob Wilson, N6TV

NCCC Thursday Night Contesting

NCCC Sprint: Tom Hutton, [N3ZZ](#)
NS CW Ladder: Bill Haddon, [N6ZFO](#)
NS RTTY Sprint/Ladder: Ed Radlo, [AJ6V](#)

Communications

Webmaster: John Miller, [K6MM](#)
Webinars: Bill Fehring, [W9KKN](#)
Membership: Gary Johnson, [NA6O](#)/Ian Parker, [W6TCP](#)

JUG Editor

Fred Jensen, [K6DGW](#): k6dgwnv@gmail.com
Home: 775.501.5488
Cell: 530.210.0778

NCCC Membership Information

If you wish to join NCCC, please fill out an application for membership, which will be read and voted upon at our monthly meeting. To join, you must reside within club territory which is defined as everything in California north of the Tehachapi's up to the Oregon state line, and part of northwestern Nevada (anything within our ARRL 175-mile radius circle centered at 10 miles north of Auburn on Highway 49).

Life Memberships

Life memberships are \$250.00 Contact secretary.nccc@gmail.com. Members who have reached 80 years of age have and been an NCCC member for 20 or more years are eligible for Honorary Life Membership ("80/20 Rule"). Contact secretary.nccc@gmail.com

JUG Articles Wanted!

Please consider submitting an article! The preferred format is plain, unformatted ASCII text MS Word (.doc/.docx) are acceptable, Pictures should be as high a resolution as available. Please do not spend time formatting your submittal, the templates will re-format everything. Send your material to k6dgwnv@gmail.com

Northern California Contest Club Reflector—Guidelines

The NCCC email reflector is devoted to the discussion of contesting. Topics include contests, station building, dxpeditions, technical questions, contesting questions, amateur radio equipment wants/sales, score posting, amateur radio meetings/ conventions, and membership achievements. Postings may not include personal attacks, politics, or off-subject posts. Such postings will be considered a violation of the Guidelines

Find NCCC on Social Media

Facebook: "Northern California Contest Club"

Twitter: "NCCCKB"



LANDS' END
BUSINESS



<https://business.landsend.com/store/nccc/>

MEN WOMEN PROMOTIONAL PRODUCTS

Welcome to the NCCC Land's End store. You can choose many different products and add a custom-embroidered NCCC logo.

If you would like to add your name and/or call sign, click the Add Personalization button when designing your garment (\$8 charge, 10 character limit).

If you have questions, contact the NCCC secretary at: secretary.nccc@gmail.com



Northern California Contest Club

NCCC Lands' End Store

We are pleased to announce that the new NCCC Land's End store is online! You can choose from an array of shirts, jackets, and hats and apply your choice of custom-embroidered NCCC logos: A plain one, or one that also says Fifty Years. And, you can personalize your item by adding your name and/or call sign. The store is open 24/7 and items are shipped directly to you. No more waiting for everyone else to make up their minds on a group purchase.

<https://business.landsend.com/store/nccc/> or from the NCCC website: <http://nccc.ccc/members/lestore.html>
Thanks to W6TCP for helping to set this up. Instructions for purchases from Lands' End NCCC Store

1. Go to <https://business.landsend.com/store/nccc/>
2. Click on Men's or Women's link, then choose item(s)
3. Pick color, inter quantity of each size you want to order.
4. Click Apply Logos and Personalizations. This will display the logo choices. Try them out. It will show you what they look like on your chosen fabric color.
5. Select a location for logo (left side, ride side, back, etc)
6. Click Apply Logo.
7. Optionally, click Add Personalization to add your name or call sign (\$8.00, 10 character limit)
8. Click Add to Bag and Continue Shopping or.



Northern California Contest Club

Excellence In Amateur Radio Contesting

K4 HIGH-PERFORMANCE DIRECT SAMPLING SDR



A direct-sampling SDR you'll love to use

Our new K4 transceiver harnesses advanced signal processing while retaining the best aspects of the K3S and P3. It features a 7" touch display, plus a rich set of dedicated controls. Per-VFO transmit metering makes split mode foolproof. Band-stacking registers and per-receiver settings are versatile and intuitive. Control usage information is just one tap away thanks to a built-in help system.

Modular, hybrid architecture adapts to your needs

The basic K4 covers 160-6 m, with dual receive on the same or different bands. The K4D adds diversity receive, with a full set of band-pass filters for the second receiver. (Thanks to direct RF sampling, there's no need for crystal filters in either the K4 or K4D.) The K4HD adds a dual superhet module for extreme-signal environments. Any K4 model can be upgraded to the next level, and future enhancements—such as a planned internal VHF/UHF module—can be added as needed.

Single or dual panadapter, plus a high-resolution tuning aid

The main panadapter can be set up as single or dual. Separate from the main panadapter is our per-receiver *mini-pan* tuning aid, with a resampled bandwidth as narrow as +/- 1 kHz. You can turn it on by tapping either receiver's S-meter or by tapping on a signal of interest, then easily auto-spot or fine tune to the signal.

Comprehensive I/O, plus full remote control

The K4's rear panel includes all the analog and digital I/O you'll ever need. All K-line accessories are supported, including amps, ATUs, and our K-Pod controller. The Video output can mirror the K4 screen or display a high-res Panadapter only screen. Via Ethernet, the K4 can be 100% remote controlled from a PC, notebook, tablet, or even another K4, with panadapter data included in all remote displays. Work the world from anywhere—in style!

K4 KEY FEATURES

Optimized for ease of use

Modular, upgradeable design

7" color screen with touch and mouse control

ATU with 10:1+ range, 3 antenna jacks

Up to 5 receive antenna sources

Full remote control via Ethernet



The K4 interfaces seamlessly with the KPA500 and KPA1500 amplifiers

'The performance of their products is only eclipsed by their service and support. Truly amazing!' Joe - W1GO



For complete features and specifications visit elecrafter.com • 831-763-4211

Start Secure Check out. Account creation and credit card required.

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IC-9700 | All Mode Tri-Band Transceiver

• VHF/UHF/1.2GHz • Direct Sampling Now Enters the VHF/UHF Arena • 4.3" Touch Screen Color TFT LCD • Real-Time, High-Speed Spectrum Scope & Waterfall Display • Smooth Satellite Operation



IC-718 | HF Transceiver

• 160-10M** • 100W • 12V operation • Simple to use • CW Keyer Built-in • One touch band switching • Direct frequency input • VOX Built-in • Band stacking register • IF shift • 101 memories



IC-V3500 | 144MHz FM Mobile

• 65W of Power for Long Range Communications • 4.5 Watts Loud & Clear Audio • Modern White Display & Simple Operation • Weather Channel Receive & Alert Function



IC-7851 | HF/50MHz Transceiver

• 1.2kHz "Optimum" roofing filter • New local oscillator design • Improved phase noise • Improved spectrum scope • Dual scope function • Enhanced mouse operation for spectrum scope



IC-705 | HF/50/144/430 MHz All Mode Transceiver

• RF Direct Sampling • Real-Time Spectrum Scope and Waterfall Display • Large Color Touch Screen • Supports QRP/QRPp • Bluetooth® and Wireless LAN Built-in



IC-2300H | VHF FM Transceiver

• 65W RF Output Power • 4.5W Audio Output • MIL-STD 810 G Specifications • 207 alphanumeric Memory Channels • Built-in CTCSS/DTCS Encode/Decode • DMS



IC-7300 | HF/50MHz Transceiver

• RF Direct Sampling System • New "IP+" Function • Class Leading RMDR and Phase Noise Characteristics • 15 Discrete Band-Pass Filters • Built-In Automatic Antenna Tuner



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 RTTY Functions

IC-V86 | VHF 7W HT

• 7W Output Power Plus New Antenna Provides 1.5 Times More Coverage • More Audio, 1500 mW Audio Output • IP54 & MIL-STD 810G-Rugged Design Against Dust & Water • 19 Hours of Long Lasting Battery Life • 200 Memory Channels, 1 Call Channel & 6 Scan Edges



IC-7610 | HF/50 MHz All Mode Transceiver

• Large 7-inch color display with high resolution real-time spectrum scope and waterfall • Independent direct sampling receivers capable of receiving two bands/two modes simultaneously



IC-2730A | VHF/UHF Dual Band Transceiver

• VHF/UHF, UHF/UHF simultaneous receive • 50 watts of output on VHF and UHF • Optional VS-3 Bluetooth® headset • Easy-to-See large white backlight LCD • Controller attachment to the main Unit



IC-T10 | Rugged 144/430 MHz Dual Band

• Disaster Ready - Excellent Fit for Your Emergency Bag • Loud Audio - New Speaker Design • Long Battery Life - Up to 11 Hours • FM Broadcast & Weather Channels



IC-R8600 | Wideband SDR Receiver

• 10 kHz to 3 GHz Super Wideband Coverage • Real-time Spectrum Scope w/Waterfall Function • Remote Control Function through IP Network or USB Cable • Decodes Digital Incl P25, NXDN™, D-STAR • SD Card Slot for Receiver Recorder



ID-5100A Deluxe 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



ID-52A | VHF/UHF D-STAR Portable

• Bluetooth® Communication • Simultaneous Reception in V/V, U/U, V/U and DV/DV • Enriched D-STAR® Features Including the Terminal Mode/Access Point Mode • UHF (225-374.995MHz) Air Band Reception



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FTDX101MP | 200W HF/50MHz Transceiver

- Hybrid SDR Configuration • Unparalleled 70 dB Max. Attenuation VC-Tune • New Generation Scope Display 3DSS • ABI (Active Band Indicator) & MPVD (Multi-Purpose VFO Outer Dial) • PC Remote Control Software to Expand the Operating Range • Includes External Power With Matching Front Speaker



FT-710 Aess | HF/50MHz 100W SDR Transceiver

- Unmatched SDR Receiving Performance • Band Pass Filters Dedicated for the Amateur Bands • High Res 4.3-inch TFT Color Touch Display • AESS: Acoustic Enhanced Speaker System with SP-40 For High-Fidelity Audio • Built-in High Speed Auto Antenna Tuner



FTM-400XD | 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



FTDX10 | HF/50MHz 100 W SDR Transceiver

- Narrow Band and Direct Sampling SDR • Down Conversion, 9MHz IF Roofing Filters Produce Excellent Shape Factor • 5" Full-Color Touch Panel w/3D Spectrum Stream • High Speed Auto Antenna Tuner • Microphone Amplifier w/3-Stage Parametric Equalizer • Remote Operation w/optional LAN Unit (SCU-LAN10)



FT-891 | HF+50 MHz All Mode Mobile Transceiver

- Stable 100 Watt Output • 32-Bit IF DSP • Large Dot Matrix LCD Display with Quick Spectrum Scope • USB Port Allows Connection to a PC with a Single Cable • CAT Control, PTT/RTTY Control



FT-70DR C4FM/FM 144/430MHz Xcvr

- System Fusion Compatible • Large Front Speaker delivers 700 mW of Loud Audio Output • Automatic Mode Select detects C4FM or Fm Analog and Switches Accordingly • Huge 1,105 Channel Memory Capacity • External DC Jack for DC Supply and Battery Charging



FT-991A | HF/VHF/UHF All Mode Transceiver

- Real-time Spectrum Scope with Automatic Scope Control • Multi-color waterfall display • State of the art 32-bit Digital Signal Processing System • 3kHz Roofing Filter for enhanced performance • 3.5 inch Full Color TFT USB Capable • Internal Automatic Antenna Tuner • High Accuracy TCXO



FTM-300DR | C4FM/FM 144/430MHz Dual Band

- 50W Output Power • Real Dual Band Operation • Full Color TFT Display • Band Scope • Built-in Bluetooth • WIRES-X Portable Digital Mode/Mod Node with HRI-200



FT-5DR C4FM/FM 144/430 MHz Dual Band

- High-Res Full-Color Touch Screen TFT LCD Display • Easy Hands-Free Operation w/Built-in Bluetooth® Unit • Built-in High Precision GPS Antenna • 1200/9600bps APRS Data Communications • Supports Simultaneous C4FM Digital • Micro SD Card Slot



FTDX101D | HF + 6M Transceiver

- Narrow Band SDR & Direct Sampling SDR • Crystal Roofing Filters Phenomenal Multi-Signal Receiving Characteristics • Unparalleled - 70dB Maximum Attenuation VC-Tune • 15 Separate (HAM 10 + GEN 5) Powerful Band Pass Filters • New Generation Scope Displays 3-Dimensional Spectrum Stream



FT-2980R | Heavy-Duty 80W 2M FM Transceiver

- 80 watts of RF power • Large 6 digit backlit LCD display for excellent visibility • 200 memory channels for serious users



FT-6SR | 144/430 MHz Transceiver

- Compact Commercial Grade Rugged Design • Large Front Speaker Delivers 1W of Powerful Clear Audio • 5 Watts of Reliable RF Power Within a compact Body • 3.5-Hour Rapid Charger Included • Large White LED Flashlight, Alarm and Quick Home Channel Access



FTM-200DR | C4FM/FM 144/430MHz Dual Band

- 1200/9600bps APRS® Data Communications • 2" High-Res Full-Color TFT Display • High-Speed Band Scope • Advanced C4FM Digital Mode • Voice Recording Function for TX/RX



FTM-6000R | 50W VHF/UHF Mobile Transceiver

- All New User Operating Interface-E20-III (Easy to Operate-III) • Robust Speaker Delivers 3W of Clear, Crisp Receive Audio • Detachable Front Panel Can Be Mounted in Multiple Positions • Supports Optional Bluetooth® Wireless Operation Using the SSM-BT10 or a Commercially Available Bluetooth® Headset



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