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Publication of the Northern California Contest Club

54 years of contesting excellence

CALIFORNIA REPUBLIC

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> NCCC MEETING https://nccc.cc/meetings.html Tue 10 Jun 2025

Updates from BoD meeting, WPX CW roundtable, 2025-2026 Budget, Launch of "Fiesta 55", Helper Program

President's Report David West, KO6M



Greetings KB'ers! Have you ever actually thought about that sentence? "Greetings Kick Butters". Should I be saying "Greetings to those who Kick Butt"? Like AC/DC does in their song," For Those About to Rock..." Well either way, we salute you all! Clearly, I've been working too hard and staying up late if that's what I'm going with as my opener.

Next, the business, I feel like we have a lot coming up. Truckee in July. MLDXCC joint Meeting in August. IT changes to help with our communication. On Air Event for our 55th Anniversary.

So, with that said, don't forget about Rick, N6XI, opening up his house for us all on July 27th. Please RSVP so he may plan properly. I hear it was a blast year and this year I really hope to make it this year. In August, we will team up with MLDXCC for a joint meeting. Bob and I are finalizing the location now, I need to take a quick look at a restaurant and vet it for us, but we should nail it down soon.



About NCCC

Officers and Directors, 2023-2024 Contest Season

President: David West, <u>KO6M</u> Vice-President/Contest Chairman: **VACANT** Secretary: Victor Denisov, <u>N6DVS</u> Treasurer: Nian Li, <u>WU6P</u> Past President: <u>D</u>avid Jaffe, WD6T Director: Jim Brown, K9YC

Director: <u>J</u>eff Stai, <u>WK6I</u> Director: Ed Radlo, <u>AJ6V</u>

<u>Volunteers</u>

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

NCCC Thursday Night Contesting

NCCC Sprint: Tom Hutton, <u>N3ZZ</u> NS CW Ladder: Bill Haddon, <u>N6ZFO</u> NS RTTY Sprint/Ladder: Ed Radlo, <u>AJ6V</u>

Communications

Webmaster: John Miller, <u>K6MM</u> Webinars: Bill Fehring, <u>W9KKN</u> Membership: Gary Johnson, <u>NA6O</u>/Ian Parker, <u>W6TCP</u>

JUG Editor

Fred Jensen, <u>K6DGW</u>: <u>k6dgwnv@gmail.com</u> Home: 775.501.5488 Cell: 530.210.0778 Also in August, we will be hosting our own NCCC 55th Anniversary Fiesta. August 9th, 2025, (noon – midnight pacific time). Work anyone. This is in honor of the 55th anniversary of the club. I want to stress that it's an event not a contest. Get on the air, contact others, contact long lost friends. We will be doing 15M, 20M, and 40M. CW, SSB, and RTTY. Rally times to be announced soon. In fact all the rules/guidelines will be announced very shortly. Save the date! Want to be a special call sign station? Contact me and let's work it out. I would love to see/hear N6N, N6C, K6C, AND W6C and even their 7 land counterparts on the air for this.

Finally, the IT change, we have been researching a roll out of Slack. Stay tuned, Chris, N6WM, will be helping us roll it out this month. We are very excited about this additional tool for quick communication and archival of information. We thank Chris for setting it up.

Wow, lots going on. Plus Field Day! I hope you all have fun plans. I plan on being with one of my nearby clubs. I've never done it with a group but I'm looking forward to it this year.



Upcoming State/Province QSO Parties

Thanks to WA7BNM

https://contestcalendar.com/stateparties.php

State/Province	Dates/Times
West Virginia	21 Jun 1600Z to 22 Jun 0400Z
Alabama	26 Jul 1500Z to 27 Jul 0300Z
Maryland	9 Aug 1400Z to 10 Aug 0400Z
Hawaii	23 Aug 0400Z to 25 Aug 0400Z
Ohio	23 Aug 1600Z to 24 Aug 0400Z
Colorado	30 Aug 1300Z to 31 Aug 0400Z
Kansas	30 Aug 1400Z to 31 Aug 0200Z 31 Aug 1400Z to 2000Z
Tennesee	7 Sep 1700Z to 8 Sep 0300Z
New Jersey	20 Sep 1400Z to 21 Sep 0159Z

Upcoming Larger Contests

ARRL Jun VHF	14 Jun 1800Z to 16 Jun 0259Z
All Asia CW	21 Jun 0000Z to 22 Jun 2400
ARRL Field Day	28 Jun 1800Z to 29 Jun 2100Z
NAQP RTTY	19 Jul 1800Z to 20 Jul 0600Z
NAQP CW	2 Aug 1800Z to 3 Aug 0600Z
NAQP SSB	16 Aug 1800Z to 17 Aug 0600Z
CWops CW Open	6 Sep 0000Z to 2359Z
WAE DX - SSB	13 Sep 0000Z to 14 Sep 2359Z



Weekly CW (1 hr) Events

ID	DAY	UTC	EXCH	WPM	SPONSOR
SST	Fri	2000 - 2100	Nome+SDC	<20	K1USN
	Mon	0000 - 0100	Nameroro		
MST	Mon	1300 - 1400		20-25	ICWC
	Mon	1900 - 2000	Name+QSO#		
	Tue	0300 - 0400			
сwт	Wed	1300 - 1400		20->œ	CWops
	Wed	1900 - 2000	Name+CWO#		
	Thu	0300 - 0400	or Name+SPC		
	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 <u>3830scores.com</u> using the "NCCC FT4 Sprint" template. FT4 NS Sprint Rules are posted at: <u>https://www.ncccsprint.com/ns.html</u> See you on the screen! Frequencies: 1839, 3575, 7047.5 (also 7080), 14080, 21140, 28180, 50318.

SAVE THE DATE!

N6XI Truckee Radio Grill

27 July 2025

Priliminary Notice: Rick and Ann are planning to host the NCCC Sierra radio grill at their Truckee home overlooking Boca Reservoir. Begins at 1100, Burgers et al go on the fire at 1200

STAY TUNED HERE FOR MORE INFO AND SIGN-UP







More De-Forestation





Antenna of the Month Gary, NA6O

Fan (Parallel) Dipole



Those who must live with simple wire antennas are always searching for a way to get as many bands as possible with a single feedpoint. We've looked at things like off-center fed dipoles which may work ok though it has issues with common-mode current and some unpredictability as to what bands may actually work, plus the fact that a tuner is mandatory. And then there's the G5RV which may be ok in some situations, and also some fairly nutty end-fed wires that leave many users rather dissatisfied. But I'm quite convinced that the most compromise-free choice is the fan, or parallel, dipole, which is simply a set of dipoles cut for different bands, all connected to a common feedpoint (Fig. 1).



Fig 1: Plan for a basic fan, or parallel, dipole

Advantages and Disadvantages

The main advantage of a fan dipole is that it's... a plain old dipole. That means it's balanced so you don't have to battle with excessive common-mode current on the feedline as you would on an off-center fed design. It's also highly predictable when it comes to the radiation pattern, which is primarily driven by how high you install it. Finally, it's impedance at resonance on all selected bands typically will be in our very friendly range of about 50 to 75 ohms without the need for any transformers or odd feedlines, again height-dependent.

The main drawback is that you can't realistically expect to access more than about four bands on a single fan. There are several reasons for this. First, the various lengths of wire do interact and an overly-complicated array becomes very difficult to tune. Second, the SWR bandwidth may be slightly reduced on some bands. Third, certain band combinations are not recommended because they may produce an undesirable feedpoint impedance. An example would be where the frequencies are rather close (12 and 10m).

Here are some common combinations which you may also find in commercial products such as those from Alpha Delta:

- 80, 40, 20, 15 (via third harmonic of 40) using 3 dipoles
- 40, 30, 20, 15 (via third harmonic of 40) using 3 dipoles
- 40, 20, 15 (via third harmonic of 40), 10 using 3 dipoles



Construction

Most commonly we hang the shorter wires under the longest one via insulating spacers. Spacing between wires really isn't critical. A few inches is acceptable and commonly used. The longest wire needs to be the strongest and is firmly anchored and tensioned at each end. Spacers can be made of things like small PVC pipe, acrylic, or Lexan strips with holes for each wire. With close spacing, the higher frequency dipoles tend to be longer than expected (10-15%), so be sure to start out with excess wire to trim off. Also, the SWR bandwidth on those higher bands is reduced somewhat. If you want lots of separation, run each wire to a separate tie point. Some comparative data is presented in Ref. 1.



You can potentially add all kinds of dipole enhancements including loading coils or bent ends to shorten things up, inverted-vee format, or my famous third-harmonic capacity hat that was discussed in a recent Antenna of the Month article (Fig. 2). Traps are possible but tuning such a contraption could be frustrating. At the feedpoint, always use a good common-mode choke. K9YC [Ref 2] has all the design information if you want to make one that is fully optimized to reduce receive noise and improve the radiation pattern.

Fig 2: Closeup of my backyard fan dipole (40/30/20/15m) with a 15m hat. Wire is Tefloninsulated 20 ga. Spreaders are 1/8-inch acrylic strips about an inch wide. It's been up for 12 years

Tuning and Typical SWR

A good antenna analyzer is highly recommended when tuning. Begin with the lowest frequency band first and work progressively to the highest frequency band. Expect to go through all the bands at least twice to walk them in to desired resonant frequencies. I prefer to fold the ends of wires back on themselves and twist them when tuning. That way, it's easy to "add" wire if needed. Figure 3 shows the SWR of my 40/30/20/15m installation. SWR bandwidth (2:1) was at least 200 kHz on each band. I ran it for many years at 500 W and even though it's quite low (only 15 ft up!) it was effective enough and trouble-free for my DXing and casual contesting activity in an HOA community.



Fig 3:. *SWR of my* 40/30/20/15*m fan dipole showing* 50-*ohm* 2:1 *SWR bandwidths*



References

1. L. B. Cebik, W4RNL, "My Top Five Backyard Multi-Band Wire HF Antennas." http://on5au.be/content/fdim/fdim9.pdf

 Jim Brown, K9YC, "A New Choke Cookbook for the 160-10m Bands." <u>http://k9yc.com/2018Cookbook.pdf</u>

Revolutionizing Recognition in Contests

Clubs: Balancing Competitive Excellence with Community Inclusivity By Lee Zalaznik, KI6OY

Contest clubs, like the Northern California Contest Club (NCCC), thrive on the spirit of competition and the joy of participation. For years, awards have traditionally focused on top performers, but a growing dialogue within these communities suggests that recognizing every effort can be just as transformative. This article explores the benefits and challenges of awarding participation certificates—or similar tokens of merit—to all contest operators, while ensuring that competitive excellence maintains its prestigious standing.

The Case for Recognizing Every Contender

Participation certificates represent more than just a piece of paper; they are a celebration of every individual's time, effort, and dedication. Awarding certificates to every participant can:

- **Boost Engagement:** When members know that every contribution is acknowledged, they're more likely to take part actively. This inclusivity fosters an environment in which everyone feels they have something valuable to contribute.
- Elevate Morale: A tangible recognition of effort—even in the absence of a top score—can enhance selfesteem and encourage future participation. The certificate becomes a memento of dedication and the spirit of perseverance.
- **Build Community:** Publicly recognizing all participants reinforces the idea that every contact made, every improvement achieved, and every moment of effort adds to the club's collective success. It's not just about winning; it's about growing together.

Potential Pitfalls and Considerations

However, the practice of universal recognition is not without its challenges. Some key drawbacks to consider include:

• **Dilution of Prestige:** When everyone receives a certificate, there is a risk that the award may lose its special significance. Top awards and exceptional performances require distinct acknowledgment to celebrate the highest achievements.



- Administrative Demands: Whether digital or physical, creating and distributing certificates for every member requires careful planning and resources. Without proper management, this endeavor can become a logistical challenge.
- **Perception of Value:** If certificates are seen as routine or automated, their intended purpose—as symbols of merit and appreciation—might be undermined. Ensuring that each certificate feels personalized and meaningful is essential.

For clubs aiming to strike a balance between inclusivity and distinction, several alternative approaches can complement or even replace traditional participation certificates.

Tiered Recognition Systems

A tiered recognition system adds depth and variety to awards by categorizing achievements at different levels of effort and accomplishment. This approach ensures that every participant is acknowledged while still maintaining a spotlight on to:

- **Bronze Tier**: Awarded to participants who meet the basic criteria for contributing to the contest, such as making a minimum number of contacts or participating for a set duration. This tier recognizes effort and participation as an essential part of the contest's success.
- Silver Tier: Reserved for operators who exceed baseline participation, demonstrating notable commitment or achievement. This could involve reaching a significant contact milestone or engaging with multiple bands/modes.
- **Gold Tier**: Honoring top contributors who showcase excellence in contesting. This tier could be based on the highest scores, exceptional multiplier captures, or innovative strategies during the contest.

Additionally, "custom" tiers can be employed to capture achievements beyond scores:

- Most Improved Award: Recognizing operators who show the greatest improvement in score or strategy compared to previous contests.
- **Multiplier Specialist**: Celebrating participants who excel at capturing rare or high-value multipliers, critical for maximizing scores.
- Club Contributor Tier: Acknowledging operators who go above and beyond to support the contesting community, such as mentoring newcomers or promoting participation within the club.

Benefits of Tiered Recognition:

- Encourages Broad Participation: Operators at all skill levels have a pathway to recognition, motivating newcomers and seasoned operators alike.
- **Promotes Growth and Learning:** Intermediate tiers, like Silver, incentivize operators to strive for higher levels of involvement and achievement.
- Maintains Prestige: By reserving Gold-level awards for top performers, the system ensures that



competitive excellence retains its value.

The State QSO Party Challenge

If you look at the State QSO Party Challenge leader board, you'll see the vision I have in mind. The leader board illustrates how structured recognition can incentivize participation, encourage competition, and celebrate achievements across different skill levels.

Additionally, the 2024 SQP results reflect a marked increase in participation, showing that when operators feel their efforts are acknowledged—whether through rankings, certificates, or tiered awards, engagement and enthusiasm grow. This trend underscores the importance of balancing competitive excellence with community exclusivity, fostering a contesting environment where every participant feels valued.

Some ideas for implementation:

- Create visually distinct certificates or digital badges for each tier, incorporating unique designs or color schemes to reflect the level of merit.
- Highlight tier recipients during award ceremonies or in newsletters to celebrate their achievements.
- Share recipient success stories or strategies to inspire others in the community.

Beyond certificates, consider creating an interactive honor board on the club website. Regular newsletters or social media shoutouts can also spotlight the contributions of all members, strengthening the club's sense of community. Sometimes a certificate may be paired with non-traditional rewards such as access to exclusive workshops, training sessions, or even discounts for future contests. These perks serve as both acknowledgment and motivation.

Striking the Right Balance

A balanced approach is the key. Every contest club needs to celebrate competitive excellence while nurturing the broader community. The solution might be to maintain prestigious awards for standout performances while implementing tiered or alternative forms of recognition to honor every participant's contribution. Engaging club members through surveys or feedback sessions can provide valuable insights into what recognition methods resonate most with the community.

Conclusion

The evolving landscape of contest club culture calls for innovative recognition strategies. By adopting a balanced recognition model—one that values both competitive prowess and the inclusive spirit of participation—clubs like the NCCC can foster a vibrant, engaged community where every member feels celebrated. Whether through beautifully designed participation certificates, digital badges, or interactive community acknowledgments, the journey toward more inclusive awards systems is a transformative one, promising growth and unity along the way.



WPX CW and I am on the road? No problem! Roberto K6KM

This year I decided to travel to Hamvention for my second time. My main motivation was to attend FDIM ("Four days in May") which is a QRP gathering happening before the Xenia Hamvention. Through my SOTA obsession I have come in contact with people who regularly attend such convention and heard good things about it. Since I was to travel all the way why not stay a little longer and have some SOTA fun in the hills of Pennsylvania? Last time I activated 19 peaks in Ohio (Yes, I know, peaks?).

Well, I schedule a whole two weeks of traveling. From Xenia to visit K3LR, then Pittsburgh, then Gettysburg, then Philadelphia, Edison Museum in West Orange, NJ, ARRL in Newington CT, more SOTA in the Warren PA area, Cleveland and back to Dayton to enjoy the Air Force Museum.

After I purchased the tickets and reserved the car plus hotels, I realized WPX CW is overlapping my schedule. Well, I had my SOTA gear, can I at least have a little fun on a SOTA peak and work the contest QRP?

I started by learning how to control a KX2 via N1MM+. That was not too hard. Then I purchased a little inverter for the car so I can plug the computer. Gary NA6O and I went to lunch in Livermore and I commented my plans to him. His question immediately was: Is the inverter noisy?

Next day I plugged the whole system in the car and sure enough it was S9+20. After unplugging one by one all the gadgets, it turned out to be not the inverter but the laptop brick. It was not the original manufacturer but one of those eBay specials where there is not even a fake FCC homologation sticker on it. I proceeded to turn the house upside down looking for the original brick and I found it showing no signs of significant RFI.

Contest Strategy

I was going to be on different places every day and the contest has to be run from a single location. The weather Friday and Saturday was horrible with rain, fog and cold (in the 40's). My best bet was going to be Sunday as fresh meat which didn't matter much as, good luck running with 5W and a low wire but at least many stations would be tired and hungry for QSOs.

Sunday I drove to Richfield, OH where I had a hotel reserved. There is a SOTA peak in that town; in fact half of the town is in the activation zone (25m vertical from the peak). From previous activators I knew that there was a cute park ideal for a SOTA activation. After arriving (3 hour drive from Warren, PA), had a quick lunch and headed to the Park.

Luckily on Memorial Day weekend the park was not that busy and I found a corner in the parking lot where I could string a 40m End Fed Half Wavelength. First I activated SOTA from a picnic table and got my 4 contacts. Then I moved to the car and set up the station with the laptop.

The first thing that came to mind was how easy we have it when we are in our comfortable shack sitting on a chair, table top and big monitor. The way N1MM+ communicates with the KX2 is via KY codes. Every time you launch N1MM+ there is a pop up message telling you not to use KY codes. Now I know why. They work but if you fumble an F key all bets are off. I have to cycle N1MM+ and probably power cycle the KX2. If you worked me and I disappeared for 10 seconds now you know what happen.



First I listened to the bands. 40m very few local stations (was probably my best bet with a low wire), 20m was ok, 15m smoking but S5 (hold this thought), 10m had DX but no local stations.

When I checked the station in my car at home I might not have probed all the bands. 15m was very noisy, noise blanker helped some. So I decided to move my station to the picnic table anyhow and operate portable (battery).

I tried 40m and got K3LR after 4 repeats plus some other strong stations. 20m got NR6O and some other KB'ers. 15m was the money band. Now, no east coast stations would hear me on 15m, some on the other side of Colorado did. Caribbean stations were quite easy to get and my longest distant station was a very strong PY. I managed 36 QSOs in about an hour and was running out of stations who could hear me so that was it for me. Did I have fun? Some, but got the log. The most enjoyable part was to listen to half of EU on a low wire, something that I might not be able to experience in W6 very often.

There you have it. No excuses. You travel, get a QRP rig, a wire and get into the action.

Call Ope Stat	: <mark>K6</mark> rato ion:	KM r(s): Ke K6KM	5KM		
Clas QTH Ope Loca	s: S I: Of ratir ation	OAB Q H ng Time 1: USA	RP (hrs): 1		
Sun	nma	ry: Co	mpare Sc	ores	
B	and	QSOs			
1	60:				
	80:				
	40:	2			
	20:	6			
	15:	21			
	10:	7			
То	tal:	36	Prefixes	34 Total S	Score 1,530

Club: Northern California Contest Club



All Asia CW

Chris, N6WM, reminds us: I wanted to send a reminder to the club that on June 21-22 the Alll asia CW contest is coming up. This is a great dx contest that is uniquely fitted to compete from our geographical situation here in CA. There are plenty of categories, including Multi op, Single Op as well as Single banders, so lots of great opportunities to play. The exchange is simply your age, so for newer CW operators this could be a good contest to practice. This is just the second of 6 contests in the NCCC Champion of Asia-Oceania challenge so further opportunities to compete and win awards are very possible here.

www.jarl.org/English/4_Library/A-4-3_Contests/AA_rule_en.htm

nccc.cc/pdf/COAO-24.pdf



Tube of theMonthNorm Wilson, N6JVVisit the Tube Museum at <u>n6jv.com</u>

8011 (The Micropup)



In 1940, the British were just holding their own in the Battle of Britian. The outcome was not certain as their cities were being flattened by the Luftwaffe and the German "U" boats were stopping much of their shipping. Nations don't like to share their top secrets with even their best allies, but if they lost, their allies could use their research and possibly stop the Axis. A delegation under the leadership of Sir Henry Tizard, sailed to the United

States with a collection of equipment they wished to share with the United States and Canada, They met at the Massachusetts Institute of Technology

(MIT) and shared their "Holy Grail", the cavity magnetron, and some other equipment including a working RADAR system that would allow a plane to find surface ships and "U" boats in any weather. The British were hoping to trade for the Norden bombsight. It was decided to form a new working group to conduct research. This became the MIT "Radiation Laboratory" or just the "Rad Lab".

The RADAR was the ASV (Air to Surface Vessel) Mark 11. Its development started in 1937 and it had been successfully deployed against a "U" boat. The transmitting pulsed oscillator used a pair of British VT90 valves that had an output of 7 kW at 175 MHz. Copies of the VT90 were made by each country. The 8011 was the RCA version. The Canadians made the REL1 and Western Electric made the WE710A but all were interchangeable. The sets were basically the same and the US sets were designated ASE/SCR-521. The Canadians alone made 10,000 units. A search aircraft could spot a destroyer or submarine at about 20 miles using the Mark II. Larger vessels could be spotted up to 35 miles.

The 8011 operated with 9 kV on the plate with a dissipation on 100 watts. The filament operated at 8.25 volts at 7 amps. The mu of the tube was 15 and the maximum frequency was 600 MHz. Air for cooling was applied to the side of the plate through a notched tube. I have never found the reason they called these tubes "micropups".

The British had been mounting their Mark II sets in their PBY Catalina flying boats. As new sets were available, starting in Dec. 1940, they were mounted in the U.S. Navy's PBYs and were an instant success. By the start of the U.S. involvement in WWII, the Mark IIs were widely deployed. The Catalinas played an important role in spotting Japanese ships in the Battle of Midway and the Guadalcanal campaign. The Mark II had a receiving antenna mounted near the end of each wing. Other multi-engine aircraft were used including the B-17 bomber. I have seen photos of B-17s flying long range security for a large convoy traveling to Europe.





Editor Notes



Wow! Almost to the Summer Solstice, the longest day of the year. It seems like it came very fast, and the days will begin getting shorter again too soon. SFI's have been in the lower 100's [110-150 or so] and,, we had an extended G4 storm with Kp's in the 7-8 range for several days which I maintain was organized in honor of my birthday. I can report that 85.0027 feels an awful lot like 84.0073.

Teh E-skip season is upon us and 6 meters is heating up some. My WOOF end fed long wire actually receives so-so on 6 and while monitoring while working on the JUG, I've

heard some. I've called a couple to no avail, perhaps it's a one-way antenna?

This space available

Contact the Editor at k6dgwnv@gmail.com



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!

Your help allows us to produce a quality newsletter. Please consider submitting an article! The editor welcomes any and all relevant articles for inclusion in the JUG. The preferred format is plain, unformatted ASCII text, MS Word (.doc/.docx) are acceptable. Indicate the insertion point and title of diagrams and pictures in the text and attach photos/diagrams separately. Pictures should be as high a resolution as available. <u>Please do not spend time formatting your submittal</u>, the publication templates will re-format everything. Send your material to *k6dgwnv@gmail.com* indicating "JUG Submittal" in the subject.

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' ENDA



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 customembroidered NCCC logo.

If you would like to add your name and/or call sign, click the Add Personalization button when deisgning 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.



GELECRAFT K4 TRANSCEIVER

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 fifters 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 5-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 anywherein 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 window and the second second second second and KPA1500 amplifiers The performance of their products is only eclipsed by their service and support. Truly amazing! 'Joe - W1GO



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*Free Shipping and Fast Delivery!



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-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-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-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-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, NXDNTH, D-STAR · SD Card Slot for Receiver Recorder



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-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-7100 | All Mode Transceive

• 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-2730A | VHF/UHF Dual Band Transceiver

 VHE/VHE, UHE/UHE 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



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



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-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-V86 | VHF 7W HT

 7W OutputPower Plus New Antenna Provides 1.5 Times More Coverage • More Audio, 1500 mW Audio Output • IP54 & MIL-STD 8106-Rugged Design Against Dust & Water • 19 Hours of Long Lasting Battery Life • 200 Memory Channels, 1 Call Channel & 6 Scan Edges





IC-T10 | Rugged 144/430 MHz Dual Band

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

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

 Bluetooth
 Communication
 Simultaneous Reception in V/V, U/U, WU 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 HE/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 mal Power With Matching Front Speake Exte



FTDX10 | HF/50MHz 100 W SDR Transceiver

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



FT-991A | HF/VHF/UHF All ModeTransceiver

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 performance • 3.5 Inch Full Color TFT USB Cap Automatic Antenna Tuner • High Accuracy TCXO



FTDX101D | HF + 6M Transceiver Narrow Band SDR & Direct Sampling SDR • Crystal Roofing

Filters Phenomenal Multi-Signal Receiving Characteristics • Un-paralleled - 70dB Maximum Attenuation VC-Tune • 15 Separate (HAM 10 + GEN 5) Powerful Band Pass Filters • New Generation Scope Displays 3-Dimensional Spectrum Stream



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



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



FTM-300DR | C4FM/FM 144/430MHz Dual Band SOW Output Power • Real Dual Band Operation • Full Color TFT Display • Band Scope • Built-in Bluetooth • WIRES-X Portable Digital Node/Fixed Node with HRI-200



FT-2980R | Heavy-Duty 80W 2M FM Transceiver · 80 watts of RF power · Large 6 digit backlit LCD display for excellent visibility • 200 men Is for s



FTM-200DR | C4FM/FM 144/430MHz Dual Band • 1200/9600bos APRS® Data Communications • 2" High-Res Full-Color TFT Display • High-Speed Band Scope • Adt C4FM Digital Mode • Voice Recording Function for TX/RX



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

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

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

FT-65R | 144/430 MHz Transceiver

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



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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