

Publication of the Northern California Contest Club



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NCCC — 52 years of contesting excellence

Inside May Issue

Article	Page
President's Report	1,3-8
About the NCCC	2
VP/CC Report & Column	
Andy AE6Y/P40Y	8-11
How the NCCC won the	
1981 CQWW	12-14
Tube of the Month, N6JV	15
Distributed Contesting	
Tom Taormina, K5RC,	
CW-OPS #108	16-20
Birds by Saraj, KU6F	21-22
NCCC Information	23
Land's End NCCC	24
ELECRAFT Display Ad	25
HRO Display Ad	26

NCCC ZOOM MEETING

FOR DETAILS: https://nccc.cc/meetings.html Tuesday, May 17, 2022

Please join us on line via Zoom at: Date: Tuesday May 17, 2022

Time: Open chat, 6 PM PDST Meeting: 6:30 PM to 8:30 PM Open chat after the meeting, too.

Featured speaker: Brooke Allen N2BA/YN2SX Modern game design principles applied to ham radio.

Web Meeting Info: For Zoom meeting information, please contact the NCCC Secretary at secretary.nccc@gmail.com Program:

We look forward to seeing you all online! Gary, NA60 — NCCC Secretary

President's Report - WD6T

Welcome to NCCC! - Chapter 2

Dave WD6T

This month's column continues the discussion of new members and how to make our club even more inclusive and inviting. Like the April column, it is in two parts, the first addressed to long-time NCCC members, the second to new members.

Part 1 – Consider Mentoring a New Member

Now that Covid restrictions are beginning to be lifted, consider opening your station up to a new member in your area. You need not be a seasoned contester to be a mentor. You merely need to be willing to communicate and educate. In fact, those who are relatively new contesters are closer to the process of learning the ropes than those who have been contesting for many years, which can make them better able to articulate it and have a better understanding of what might be confusing. Recent rookies can make great first mentors to new members. In fact, I received valuable feedback from some recent rookies on how to help new members and have used it as a basis for this column.



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Thursday Night Sprint

The Northern California Contest Club sponsors a Thursday Night Contesting session of thirty minute duration. Often, on Fridays prior to a major contest weekend, a special practice session is held.

Generally, on Thursday evenings, a special format is followed, called NS or "NCCC Sprint". The NS began in the summer of 2004 as a snappy, concise contest occurring most Thursday nights, North America time. The power limit is 100 watts. Occasionally, multi-week ladder competitions are held. See www.ncccsprint.com for details

Thursday Night Contesting Director and Founder NCCC CW Sprint NCCC RTTY Sprint NCCC Sprint Ladder Sprint Web master www.ncccsprint.com Ladder Scores Manager Thursday Night Contesting Advisory Group

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K4BAI, N3BB, VE3TY, and WO8H)

Bill, N6ZFO



PRESIDENT'S REPORT (continued from page 1)

What is involved in being a mentor? First, contact the person and let him know you are available for questions. A phone call can be very effective in opening the lines of communication. If you have a station, consider inviting the new person to watch you operate and take a turn. Like playing the violin, contesting is best learned by watching and doing. A violin teacher can talk for an hour about how to draw the bow and how to execute the vibrato, but if he picks up the violin and demonstrates, the student will learn much more quickly.

Contesting techniques that can be picked up by watching include how operators use the keyboard or mouse, how they use Super Check Partial, how they efficiently fill the fields in the logger, etc. The mentor can help the new member with each stage of the contesting life cycle: preparation/setup, operating, log submission and 3830-reporting.

Beyond the basics, a mentor can help with planning contest strategy. Where are the openings when? When are the best time to take breaks? How do you create a rhythm? How do you avoid getting flustered? How do you control a pileup? How do you sound confident and inviting, while still keeping up a good rate? What are the best parts of the band to operate? Where are frequency allocations different from those of the US? How and when to defend a frequency? You can also suggest YouTube videos that show experienced contesters operating. These can be a real eye-opener for a new operator.

One of the most valuable contributions a mentor can make is to help the new member with his station. Try to visit and see what he has for an antenna, and make practical suggestions on how to maximize the possibilities of his property and budget. Keep in mind that not all of us are construction wizards and it may not be at all obvious how to mount a roof tower, secure a ground-mounted vertical or get a wire up into a tall tree.

Consider encouraging the new member to try one of the less high-pressure contests, such as a VHF contest or QSO party. Suggest a local Field Day site. Many of us got our contesting start on a Field Day.

But the most important element is the human contact: even if all you commit to is a friendly phone call, it can go a long way to making the new member feel welcome and engaged with the club. So, as the old AT&T long distance marketing campaign put it, "reach out and touch someone!" Operators are standing by.



Part 2 – New Members' Contesting Crib Sheet

At it's most fundamental level, contesting is about making as many points as you can within a fixed time period by contacting stations and efficiently exchanging critical information. Each contact is logged by both stations. At the end of the contest, you submit your log and it is cross checked against other logs for accuracy and your score, as well as the scores of those you contacted, is adjusted accordingly. After this process is completed, the winning entries are announced. It is also possible to track your progress versus those of your competition on the fly, using on-line score-reporting web sites.

Contest Modes

The primary contest modes are:

- Voice ("phone") is the most familiar, but can be scary the first few times, due to "mic fright."
 Just jump in there and don't worry. We've all been there. It will quickly become second
 nature.
- CW (Morse code) is a favorite of old-timers, but many new hams have gotten excited about it and become high-speed operators in a short time. If you are interested in learning Morse Code or increasing your speed, check out CWOps (cwops.org), dedicated to advancing the art of CW. They run free classes, as well as four one-hour contests on Wednesdays and one yearly contest.
- RTTY (radio teletype) is a digital terminal-to-terminal mode, similar to cell phone texting or Internet chat rooms. In the past, it required special hardware but with modern radios, it can be done all in software. Rttycontesting.com has a lot of good info about getting set up to do RTTY.
- A fourth mode is emerging as important in contesting: FT8 (and its sister, FT4). These are the
 latest in a series of digital modes originally developed for extreme weak-signal work in the
 VHF and UHF bands and when bouncing signals off meteors or the moon. In the past few
 years, they have become hugely popular in the HF bands and contests have been designed
 around them. They offer smaller stations a chance to work some great DX.



While many contesters have a favorite mode, I'd encourage you to try all modes, as each offers its own challenge and fun.

Contesting Abbreviations and Jargon

There are a plethora of abbreviations in common use in the contesting community that may cause some head-scratching, such as those used for contest entrance categories. SOSB15LP stands for "single operator, single band 15 meters, low power," while SOABHP stands for "single operator all band high power." "Low power" here refers to 100 watts or less. Anything beginning with "M" is a multi-operator category. There are three in many contests: MS is "multi-operator, single transmitter", M2 is similar but allows two transmitters, and MM allows an unlimited number of transmitters. In a typical contest, each of these categories has its own set of awards, top-ten list, etc. However, each contest is a little different, so it is important to read the contest rules. You can find links to the rules of most contests by going to contesting.com. If you see anything you don't understand in the rules, please reach out to the NCCC reflector.

Contests generally consist of an "exchange," which varies from contest to contest. This may be as simple as your state or it may be a serial number that increases with each contact. Some contests use the CQ Zone map for the exchange. We in California are in Zone 3. Signal reports are often included, but by convention, nearly everyone uses "59" or "599," rather than a true signal report.

QSOs are commonly called "Qs." Typical contests have "mults," which are multipliers on the total number of QSOs or QSO points, depending on the contest. Mults may be US states, DXCC countries, call sign prefixes, ARRL sections, etc., depending on the contest. Scoring is often the number of Qs multiplied by the number of mults. In many contests, mults are counted separately for each band, which encourages an operator to work as many bands as possible. Do not confuse contest "mults" with multi-operator "multis!" Thus you can sound like a veteran contester by saying "I worked the multis on 160 for some good mults, but was short on Qs there."

"Running" means calling CQ over and over and having stations call you, while "S&P" stands not for the stock market index, but for "search and pounce," the process of tuning around to find stations to work.

"Moving" a station means asking him to move to another band, at an agreed-upon frequency, so that you can make a second contact with that station; this is often done when a mult is needed on a different band.



Some thirty years ago, hams began using digital radio with "packet" protocol to post DX stations that they found. This alerted their friends to the presence of the rare one. Such "spotting" was later moved to the Internet, but is still referred to as "packet spots." The spotting network became even more useful when the Reverse Beacon Network ("RBN") was set up. The RBN consists of ham radio stations throughout the world that run software-defined radios ("SDRs") capable of decoding a wide swath of spectrum at once, and software that picks out all the CW and RTTY signals in that spectrum and generates spots for the spotting network. Modern contest loggers have displays that use this information to display the frequency of stations and their call signs, turning "search and pounce" into "click and pounce." Computer logging is not strictly required for contesting, but is highly recommended for features such as the "band map" that displays the spots. Common logging programs include N1MM+, WriteLog, DXLog.net, and WinTest. Most logging programs run only on Windows. If you need help with choosing or setting up a logging program, post to the reflector. Not all contests allow use of packet spots, so check the rules carefully. Also, not all computer logging programs are well-suited to contesting; it is best to stick to one that specializes in contesting.

In order to most effectively use packet spots, you will want to interface your radio and your computer. This allows "CAT," the ability for the logger to know and control the frequency of the radio, as well as other functions such as mode. Most of the newer radios make this very easy. For older radios, it is possible to purchase an interface box, such as the RigBlaster Advantage.

Another common abbreviation is SO2R, which stands for "single operator, two radios." It is both an operating technique and a station setup. It involves two radios that are connected to different antennas on different bands, making it possible to search for stations on one band, while making QSOs on another band. The operator typically has one radio in each ear of his headphones, but can quickly switch both ears to one radio or the other.

A related technique involves using a typical radio's dual VFO mode to quickly jump between two frequencies on a single band. This is called "single operator, two VFOs" and abbreviated "SO2V." Unlike SO2R, which requires special station hardware to do switching and prevent inter-station interference, SO2V is simply a clever way of maximizing your single radio's capabilities. Loggers often support it by providing two different call sign entry windows.

Coming up to speed

Since contesting is about making as many QSOs as possible in a fixed amount of time, if you can increase your speed, you will have a higher score. There are various techniques to achieve this, but the general principle is to provide the essential information and avoid extraneous conversation.



While this may seem impolite, keep in mind that the station you are working is also trying to maximize his score and he will appreciate your efficiency.

The typical QSO goes as follows. (This example is taken from the North American QSO Party, where the exchange is your name and state.)

Running station: CQ Contest CQ Contest, Whiskey Delta Six Tango

Answering station: Kilo Six Kilo Mike

Running station: Kilo Six Kilo Mike, Dave California

Answering station: Rob California

Running station: Thanks, Whiskey Delta Six Tango

That's the whole thing. There is no need to repeat the other station's exchange back to him, repeat his call (he knows it already), or say "please copy" or "good luck in the contest," or any such niceties.

If the other station misses your exchange, he will ask for a repeat, referred to as a "fill," since it is filling in missing information.

A CW exchange is similar and looks like this:

Running station: CQ TEST WD6T

Answering station: K6KM

Running station: K6KM DAVE CA

Answering station: ROB CA Running station: TU WD6T

Here "CA" is the standard abbreviation for California. Note that there's no need to add "DE", "SK", "K", "KN", "BK" or any of the other normal CW conventions.

In a RTTY contest, the conventions are basically the same as CW except that the initial CQ is usually repeated after the call sign: "CQ TEST WD6T CQ."

Hints for Making a Big Score

Keep in mind that the longer you operate a contest, the more points you will make, and the faster your skills will improve. Putting in the time, "BIC" (butt in chair), is the secret sauce that can make a nice score.



Be sure to read the contest rules thoroughly well in advance of the contest. You will feel more prepared once the starting bell sounds, and less likely to get flustered.

You will probably want to program your logger to automatically send CQ, as well as the exchange. All loggers have a macro facility that allows this. For SSB contests, you can record a CQ message so your voice doesn't get tired. The recording facility is often called a "DVR", which stands for "Digital Voice Recorder."

Beyond Basics

Once you master the basics, you will start to encounter questions such as how to know when to change bands in order to maximize your score, how to deal with the situation when multiple stations call you at the same time ("pile up"), how to most effectively search and pounce, and how to learn more advanced techniques such as SO2R. Reach out to the reflector and other club members for help. There is a vast world out there to explore.

Most importantly, have fun, and KB!

May 2022 AE6Y VP/CC JUG Column

I have to start off by congratulating our President, Dave, WD6T on his succession of columns and articles that are particularly instructive for new contesters. These include his contributions to the JUG (particularly last month's and this month's columns) and his NCJ article "Pile-Ups I Have Known and Loved" in the March/April edition. I commend this article to all of us, as even the very experienced op can gain some nuggets of wisdom from Dave's cogent analysis.

This column is inspired in part by a few enjoyable hours spent yesterday participating casually in the combined QSO parties going on this weekend: the Seven Area QP, New England QP, and Indiana and Delaware parties. In some casual operating on 20, 40 and 80, mostly CW, I worked 168 contacts, in all but Delaware. I didn't uses packet, but just spent time tuning around, and never heard a DE station, though I assume some must have been on. I would guess about 2/3 of the total were in the 7QP, which seemed to have great participation.

Since I wasn't entering seriously and wasn't planning to send in a score or chase counties, I only used my logging program (CQPWIN) to keep track of dupes. I did all sending by hand just to stay in practice and didn't even have rig control set up. All Qs were logged in the same file, for no particular



archival reason.

One feature of these contests that makes such casual participation possible is that they all have the same exchange for out-of-area participants: just 59(9) + state/province/DX. This means you don't have to read the rules or configure your logging software to send serial numbers (or keep track of them on paper if you are hand sending as I was). This exchange has become pretty much ubiquitous for state QSO Parties.

I think CQP and the PA QP (which occurs each year the weekend after CQP) are about the only parties left that require a serial number. Last year I suggested to Dean, N6DE, that CQP be revised to remove the serial numbers, and I will repeat that suggestion this year. I do believe the simplified exchange encourages casual operators to make a few Qs and help us out; conversely, the serial number requirement discourages such non-contesters from jumping into the fray. Each year in CQP I get dozens of contacts from guys saying something like: "Well, I'm not in the contest but heard you on and thought I'd give you a call. This is Joe in Cook County. Running 100 watts to dipole. Do you need more information from me?" I usually reply: "Thanks for the call. If you're not in the contest, I'll just take a contact number one from you, ok? Please feel free to work some more guys, and just give them number 2, and so on. 73"

This whole exchange would go faster and be more encouraging to non-contesters if they simply heard the previous callers giving a report and the state. And presumably there are also hams out there listening in who never do call in because they don't want to be bothered keeping track of serial numbers and they feel guilty giving everyone in CA number 1!

Here's a pome about the joys of not having to read the rules about contest exchanges and not having to keep track of serial numbers:

The State QSO Tests galore
Are fun without keeping score.
No need to keep count of
Your contacts (amount of).
Those numbers are such a chore!

In keeping with WD6T's theme of mentoring, I thought I'd also pass on some observations from yesterday's operating as an out-of-area contester. One observation is that the standard of phone operating from a number of the running stations was pretty low. Lots of extraneous chatter, repeating information, etc. On the other hand, these are supposed to be friendly QSO parties, after all. In



general, they are not nearly as competitive as many other contests, including CQP – so there is no sense trying to make them more focused and efficient.

There seemed in general to be more activity on CW. In part, this is simply a reflection that many of the running stations aren't big guns and don't have the horsepower (either wattage or antennas) to run a pileup on phone. The average CW speed seemed to be in the 25-30 wpm range. Here are a few tips to help you get through the pileups, which usually are not very large in these contests – the exception is generally the mobiles that run from county to county often running low power and simple antennas, but these are not very evident in the regional parties like 7QP and NEQP:

- 1) Calling on the slow end of their speed seemed to work best.
- 2) Timing can be critical. When there is a pileup, most guys send their call once. Often, by waiting until this initial flurry subsides, you can drop in your call and be the only one in the clear.
- 3) Running break-in is an enormous advantage, so you can hear when the running station responds, and also when the others are calling.

WPX CW Coming Up

Don't forget WPX CW coming up at the end of May. This is an NCCC Focus Contest, and we're hoping for a good showing. We had something like 80M points in the SSB portion of the contest in March and need a concerted effort in this one.

I'm planning to go to Aruba and operate P49Y for the first time since my trip there last May for the same contest. In that one, I entered in the Classic Overlay category, and finished second to KP2M. This is a nice category for a somewhat more casual operation: 24 hours max, one radio, no internet.

This is a wonderfully egalitarian contest. The WB6 prefix is worth just as much as a mult as the 3V8 prefix, so there is no need to fight DX pileups. It's possible to score quite well from California. I've found that from here the most efficient way to get points is to be on 40 meters for a few hours each morning before sunup to work JAs and other Pacific and Asian mults. As we all know, 40 and 80m QSOs are worth double points, as are inter-continental contacts, so these Asians on 40 are the best way to increase your score.

By the way, since you never run out of multipliers, it isn't actually true that 40m Qs are twice as valuable, statistically speaking, as high-band Qs. My rule of thumb is that it takes 70% more Qs per hour on the high bands to overcome the double-point advantage of the low bands. In other words,



assuming the same geographic distribution, 100 Qs on 40 are worth about the same as 170 Qs on 20.

But don't forget to work US/VE stations as well. Unlike CQWW, all contacts give you QSO points (albeit fewer for in-country Qs), and there are vast numbers of W/K prefixes available. The same is true for EU stations, so if the bands are open to Europe, that is a great source of multipliers.

Some preliminary reported scores from the 7QP

M/M HP N6RO N6WM W6DMW)	cw 365	ph 392	dig 3	mult 224	score 247,520	(K6AW KK6PXT N6RO
K7RC (@W7RN) K6DGW, WX5S, all remote))				435,902!	(W9KKN, AA6AA,
SOCWHP NN7SS (WD6T remote) K6KM (@W6SRR)	1215 322	0	0	66 99	240,570 95,634	
SOCWLP N6TTV	155	0	0	69	32,085	
SOSSBLP K6GHA	0	316	0	109	34,444	
SOMixedHP AJ6V	207	27	4	90	62,190	
SOQRP W6JTI	261	0	0	88	68,904	

Upcoming Contests

May 28-29 CQ WPX CW (a Club Focus Contest)



With permission from author and copywriter holder, Ed Radlo, AJ6V. First published in the Jan/Feb 1985 National Contest Journal. Transcribed by Saraj Cory, KU6F for publication.

How the NCCC won the 1981 CQWW

"Hallowed by tradition, revered by DX contesters, loaded with trophies and wild action for participants from 160 to 10 meters......" This was how CQ's DX Editor, Hugh Cassidy, WA6AUD aptly described the CQ Worldwide DX Competition. Winning the CQWW in 1983 was a great thrill for the NCCC, but not as great as when we won it the first time, in 1981. This article explains why.

The club championship trophy, awarded to the local club compiling the highest aggregate phone/cw score, had been routinely won by an established club from the East Coast of the U.S.A. where proximity to lots of European multipliers, a populous geographical base, and years of tradition and experience are potent advantages. Thus, when the NCCC, a relatively young (1970) club from the San Francisco Bay Area, decided to make a run for the roses in 1981, Larry Brockton N6AR, CQ's contest co-chairman, told our contest co-ordinator, WA6VEF, that the CQWW is a "big boys contest", and the NCCC wasn't even qualified to compete in the same league as the "big boys". True, the NCCC had won the ARRL Sweepstakes six years in a row. But the conventional wisdom in 1981 was that a West Coast victory in the CQWW would require planning on the scale of the Normandy Invasion, luck equivalent to working the Heard Island DXPedition on the first call, and secrecy that would be the envy of the CIA and KGB.

Their brains blown by overexposure to the hot California sun, a small group of compulsive overachievers arm twisted the NCCC BOD in January 1981 into agreeing that the impossible should be attempted, using the argument that striving for a seventh straight SS title would be tantamount to dragging the proverbial dead horse around the periphery of the coliseum.

No-nonsense Bob Vallio, N6KB (now W6RGG) was club president and set the proper tone of determination. Human dynamo, Gary Caldwell, WA6VEF (now VA7RR), was the contest co-ordinator, and, as a result of his contribution, later became the first person to ever win NCCC's Contester of the Year award twice. Rich Smith, N6KT, who has won numerous international phone contests, was the vice president / contest chairman.

A big break occurred in the spring of 1981 when Ken Ruddock, K6HNZ, orchestrated a California version of the Camp David Peace Accords. For years, the Northern California DX Club (NCDXC) and the NCCC had sapped each other's strength in DX contests. Ken persuaded the NCDXC board to pass a resolution encouraging joint members of the two clubs to submit their scores on behalf of the NCCC for the 1981 CQWW; in return, these members would submit their scores on behalf of the NCDXC for the 1982 ARRL DX Test. Furthermore, those joint members submitting scores for the NCCC would still be eligible for the trophies of NCDXC awards to top CQWW scorers. Inter-club rivalries thus swept aside, with few exceptions most Northern Californians chose regional pride over personal idiosyncrasy, and enlisted in the cause of the NCCC. This regional cooperation extended to the two meter spotting net, where for both weekends, the better coverage NCDXC repeater was used in lieu of the NCCC machine.



The political jigsaw was fitting together, but the work was just beginning. Applying lessons learned in the local silicon mines, club members labored diligently to improve their stations. Many members decided to venture forth on DXpeditions, and began studying the complexities of foreign languages, customs regulations, licensing procedures, and international airline tariffs. A total of 22 Expeditions, many of them multis, were launched by the NCCC for this one contest. This willingness to travel was critical to our success, as our margin for victory was to be only 600K.

Domestic planning likewise continued apace. Personalities and abilities had to be matched with the fancy hardware at the big gun stations. Enthusiasm had to be generated and timed to reach a feverish plateau just before the phone weekend, while secrecy had to be preserved to catch the competition off guard. WA6VEF injected us with precise doses of adrenaline by means of a series of "secret inserts" sent only to local club members as part of the monthly club bulletin.

Before you could say "5903", it came: the phone weekend. Nine NCCC Expeditions gave members the chance to be personal international emissaries of goodwill. When the final QSO was logged, Rich, operating N6KT/HK0 from San Andres in less-than-ideal zone 7, earned himself the fourth place position in the world single-operator all-band category with 6.8 mega points. N6BT, N6TU, and KC4BH earned 11.3M for the club as they helped push KG6RE to the world number two multi-multi spot with 18.8M; while K6HNZ, W6TPH, and K6SSJ made K6HNZ/CT3 a household word for a world fifth place finish in the same category with 13.1M from Madiera.

WA6VEF played VE7WJ to the tune of 3.3M; WB6EXW, KB6JK, and WA6AHF enjoyed their visit to Niue as ZK2ZZ, earning 3.0M in the process; and K6KLY, N6DOK and K6WJ produced 2.5M in between the Dos Equis south of the border way. KS6H earned 2.1M for the club at VP2VHL in the British Virgins; DX Hall of famers W6KG and W6QL had 2.0M worth of fun in Barbados as 8P6QL; and WB6FCR (now NH7A) tacked on another 0.9M as J6LIR on sunny St. Lucia.

Back in the (SF) Bay Area, the KN6M "Contest Machine" came through with 7.3M in the multi-multi category for the number five position in the USA, beating out fellow big guns N6RO (5.3M), Al6V (4.8M), and K6RU (4.3M). N7GM, N6RZ, K6ZM and W6OWQ each tallied about 1.5M in the M/M Column.

Domestic multi-singles were paced by K6MYC operated by N6IG and N6AMG (2.7M); K6XV (1.9M); W6GO (just Jay plus the repeater for 1.5M); and KV6H (1.3M). AA6T (now KH6LC) and K6HIH produced another .8M each.

Domestic single ops pulling in over a Meg were WA6IQM operating W6BH (1.8M); and WA6HCI operating W6MSF (1.1M). KD6NH finished with .9M, while N6JV and KB6ZA scored .6M each. All in all, 68 phone scores were submitted on behalf of the NCCC.

Now the excitement was uncontainable. Club members were determined to do relatively even better in the Morse madness. The club launched a budget-busting thirteen expeditions to four continents for CW. When the smoke from the blown finals and fried transformers cleared, we were pleased to learn that we had broken three records! Tom Schiller, N6BT/AH0 from Saipan, in a tougher zone than his competition, came up with 4.2M for a world fourth place in the single-operator all-band category, setting a new record for the continent of Oceania. Rusty Epps W6OAT contributed to the world high M/S score of 8.1M at P4IE on Curacao, which



set a South American record. Veteran operators K6RU, AA6AD, and W6VG produced a lofty 5.2M as ZK2RU on Niue for a new Oceania multi-multi record.

N6TU and N6OP finished off the Dos Equis left by the previous group, but still managed 3.5M at XE2BC. W6SZN, N6TV, and AA6G managed to pull their eyes away from the wahines on Bora Bora long enough to capture 3.3M as FO0KP. WA6VEF, not satisfied with his first place finish in the 1981 ARRL Phone Sweepstakes from KV4FZ, tacked on 2.9M from J6LZA in St Lucia using a broken antenna. Lloyd and Iris moved to Trinidad for 1.8M from 9Y4KG; AJ6V enjoyed Guadaloupe, then slid over to Montserrat for 1.1M as VP2MEV; and N6RA withstood 100 MPH winds for 1.1M from FC0FOO on Corsica. WB6SHD contributed .7M from AH6BK, N6OM had a ball as VP2VHX, and K6BR operated portable KP4.

Domestically, N6RO, assembled by world-class CW op Ken Keeler, led the Inter-club Multi-Multi competition with 5.2M. In second place at 4.5M was W6XX, a big station put together practically overnight thanks to the hard work of W6XX, K6HNZ, W6TPH and friends. 3.8M of Al6V's score and 3.6M of KN6M's score were added to the club coffers, while K6XO made 2.9, and K6ZM led the two transmitter multi-multi subclass with 1.3M.

Domestic multi-singles contributing over a meg to the keg were N6IG operated by N6IG and N6NE (2.4M); K6XV (1.5M), W6OWQ (1.2M), K6SG (1.0M) and K6HIH (1.0M). .8M of N6MG's score and W6BIP's .8M helped as well.

N6GG turned in a remarkable 1.1M all by himself, beating WA6HCl operating W6MSF (.9M) and W6SX (.8M) in the domestic single-op all-band category. N6JV, W6OKK, and W6ISQ each contributed .7M. All told, 67 CW stations were activated by the NCCC.

After duping and submitting logs, there was nothing for club members to do but heed the admonition in the final passage of The Count Of Monte Cristo: "Wait and hope". When it finally came, the news of our success provoked astonishment, then joy, then a deep sense of satisfaction, for the impossible had happened. The NCCC had won the 1981 CQWW, the first time ever for the North American West Coast! The final tally was NCCC 160.4M, YCCC 159.8M, FRC 155.5M. It was the biggest upset in the history of club radiosport! Champagne glasses clinked as the sun laid itself to rest over the Farallons.



TUBE OF THE MONTH Norm, N6JV

811() - 812()

The October 1939 issue of RCA's "Ham Tips" featured a pair of new triodes. The <u>811</u> and <u>812</u> are rated at 55 watts of dissipation and featured Zirconium coated plates. At 1500 volts and 150 ma, a pair could be run at 450 watts input. The difference between the tubes was the mu. The 811 had a mu of 160 and the 812 had a mu of 29. These tubes were marketed to hams for only \$3.50 each. The 811 was primarily intended to be a zero bias modulator tube and the 812 was the choice for an AM modulated final tube where it required less drive. The 811 was designated VT-217 by the military and they were used as the modulation tubes in the famous Collins airborne transmitter the AN/ART-13 and in some SONAR equipment. There appears to have been little use for the 812 during WWII so its production was limited.

The 811s were popular tubes after the war but its shortcoming was the thin plate that tended to melt in the middle if you abused it. In 1949, RCA addressed the problem by adding lateral fins on the plate increasing the dissipation by 10 watts and keeping the plate from sagging when it got too hot. The new tubes were the 811A and 812A. Zero bias tubes became popular with the advent of SSB and the decline of AM. Collins used four of the 811As in its 30L1 amplifier that was made for military and ham use. Gonset and Heathkit also made amps with the 811A. With tube production declining in the United States and strong demand remaining, production in China and Russia attempted to fill the demand. Because of the potential for plate sagging when the tubes are mounted on their sides, amplifiers like the 30L1 mounted the tubes with the plates oriented vertically. Some early Chinese tubes had the base rotated 90 degrees to the plate allowing the dreaded sag to short the tubes. The Sacramento Army Depot had an instrument repair lab where they used an RF heater to remove the solder that sealed the cases on panel meters. The heater used three 812A tubes in parallel and they had melted the plates. I went home and found a few well used but workable tubes and got them back in business. Its good to have a tube guy on staff.

Eighty years after its origination, the 811 still maintains its popularity in a new generation of ham amplifiers.

Visit the museum at N6JV.com Norm N6JV





Distributed Contesting

Tom Taormina, K5RC, CW-OPS #108

www.w7rn.com

Some of us old geezers feel like technology is fleeting by and leaving us in the dust. New technologies and modes of operation continue to evolve, and older technology becomes legacy equipment. Fortunately, I just had another example of how CW still rules.

We just completed the 2022 7QP contest. As one of the founders, I am pleased that it has grown to be arguably the second largest QSO Party behind CQP. Another source of pride is that, of nearly 2,500 QSO's in 18 hours, 67% of them were on CW. The adage that most casual operating is on SSB has been proven wrong once again.

W5FU (SK) and I began building the W7RN multi-op contest station in 2007. It has evolved into a world-class contest station with many pieces of lumber on the wall. We've hosted numerous multi-op contests that culminated with more than 40 operators on site over the two weeks of W1AW/7. As my wife, K7AFO, so eloquently stated after that, enough is enough. Since COVID, we only host on-site operations for a few single-op contests. The Pandemic motivated us to dedicate three of the five operating positions to remote hosts. The main SO2R station is intact for single op contests. Curiously, three radios are used for SO5V (Single Op, 5 VFO's) for RTTY contests.

With greatly reduced on-site operating, the three remotes are in use much of the time. Most mornings, W1YL keeps in touch with here worldwide CW following from her retirement residence in FL. AA6AA is catching up on his DXCC after 20+ years off the air, living in a gated community in SoCal. K5XI does 6 Meter EME operations with a 20-element array, also from a gated community in AZ. K5XI and K5VWW represent the station on FT8. As I joke with the CW-Ops and FOC members I rag chew with, sometimes I must wait in line for airtime. No worries, since I still work full time at age 77.

Meantime, I have observed other multi-op stations evolve with the technology and new operating tools. The N1MM logging program has helped this effort with their distributed contesting software. It is now relatively easy to have numerous remote operators and on-site operators for multi-op contests. Since COVID, some of our remote operators have attempted to do multi-remote contests, but with limited success. To that end, I dedicated a computer to host these efforts. It paid off in 7QP.

Since the Pandemic has been receding and the sunspots are increasing, I am once again disposed for us to again becoming competitive in multi-op contesting. I have created a second operating position at the station. It will use Remote 3 to access the network but operate as a local station with butts in chairs in two operating positions. This project is a work-in-progress. It will hopefully be ready for 2023 ARRL DX CW.

Meantime, 7QP 2022 was supposed to be a part-time CW effort by K6DGW, as K7RC, on CW only. By contest time, W9KKN, WX5S and AA6AA got the dedicated computer and VPN system up and running. A screen shot



of the logging computer is Figure 1. They and K6DGW kept the three remotes on the air much of the 18 hours of the contest. You can see the elegance of the distributed logging program. There were times I was just watching and wishing I had bid for an operating slot! I am now ready for us to get back in the multi-op game.

The W7RN station consists of five K3's, two KPA-1500's and three Acom 2000A amps. Remotes 1 and 2 use the Elecraft amps. We employ HamPlus and MicroHam antenna switching, along with Green Heron Rotator controls and software to control the seven rotators on 8 towers and 33 antennas. The amps are controlled by their respective software. The screen that each remote user sees is pictured in Figure 2. The operators access this screen with UltraViewer. RemoteRig interface boxes connect the stations to the Internet. Remotes 1 and 2 are pictured in Figure 3.

Those of you who are using or creating remote sites know that this undertaking is no trivial matter. Getting the equipment interfaced and operating seamlessly is an ongoing headache, even if one operator only uses the remote. I can't imagine how those with truly remote transmitter sites deal with security and maintenance. It is nearly a full-time job sometimes with the equipment on-site.

The other major problem we found was internet connectivity. We experimented for two years with hot-spots and local wireless providers. None could support the uptime we needed. As a not-for-profit, we were able to get AT&T to install dedicated fiber for the station. I am reasonably certain that there are no other residences in our County that has this service. Even if you have local cable internet providers, you will likely have connectivity issues. I watched PingPlotter through much of 7QP and never saw a single dropout in connectivity.

The lesson from this is that we old timers can still be relevant in our ever-changing world, as long as CW is our primary mode of operating! W5FU succumbed to COVID in 2020. He would be proud that his contest, operator training, and CW legacy continues to evolve.

Tom has been active on CW for 63 years. He is on top of the Honor Roll with 374 confirmed. He is a member of the CQ Contest Hall of Fame. Tom is also a member of FOC and A1-Ops. He was twice an Editor of NCJ. He and Midge, K7AFO, live on a ten-acre compound at 6,500' in the mountains of rural Nevada. Tom currently hosts monthly HF Operating Workshops for new hams. He is a Management Consultant, Expert Witness, and prolific author of 12 books.



Figure 1 – The Logging Computer

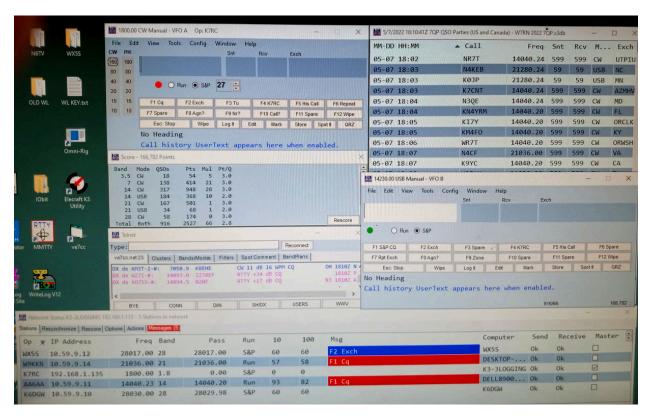




Figure 2 – Antenna Control Computer



Figure 3 – W7RN Remotes 1&2







Exhibit 3 – New Operator Training at W7RN (above)



It's all happening at the Santa Rosa 9th Street Rookery — Just a few fun photos by Saraj, KU6F











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 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).

Life Memberships.— \$250.00 Contact secretary.nccc@gmail.com. The 80/20 Rule: Members who have reached 80 years of age have and been a NCCC Member for 20 years are eligible for Honorary life membership. 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 Mac PAGES or MS Word (.doc or .docx), Arial 11 point. Indicate the insertion point and title of diagrams and pictures in the text and attach photos separately. Pictures should be full resolution. Avoid PDF files and email text. Please contact us if that's your only format.

Send material to Saraj, KU6F, saraj@sonic.net, ph: 707-888-3906 PLEASE INDICATE "JUG SUBMISSION" IN EMAIL SUBJECT LINE.

Northern California Contest Club Reflector—Guidelines

The NCCC reflector is devoted to the discussion of contesting.

Topics include, for example, contests, station building, dx-peditions, 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"



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.

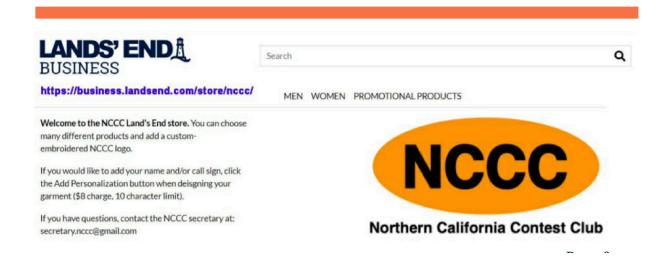
Go to https://business.landsend.com/store/nccc/ It's easy to use.

From nccc.cc: 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.
- 9. Start Secure Check out. Account creation and credit card required.







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.

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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.

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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.

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Optimized for ease of use

Modular, upgradeable design

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ATU with 10:1+ range, 3 antenna jacks

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Full remote control via Ethernet



The K4 interfaces seamlessly with the KPA500 and KPA1500 amplifiers

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