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## *NCCC - 50 years of Contesting Excellence*

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**NCCC May ZOOM Meeting**  
**Tuesday May 11, 2021**  
**1830-2030**

### **"Contest Logging Accuracy"**

**Doug Grant, K1DG**

#### **Short presentations:**

**K9YC — engineering hints**

**K3EST — WPX CW Propagation**

**For Background info on Logging see:**

#### **"Error Control for Contesters"**

Tom Berson, ND2T

<https://anagram.com/nd2t/errorcontrol.pdf>

<http://nccc.cc/meetings.html>

### President's Report - WD6T

#### May — Operating Secrets

Of the various factors that go into making high scores, the most important is location. The second and third, as the real estate cliché goes, are also "location." After that probably comes antennas, followed by antennas and more antennas. Somewhere further down the list, but still crucial, are operator skill and experience.

There are certainly a number of distinct skills that can be practiced. CW copying can be honed with Morse Runner and typing can be improved with numerous software trainers. But much of what makes a successful win is more difficult to pin down. The operator must be constantly evaluating his situation and making numerous decisions, often based on incomplete data. When is it best to change to another band? Is the QRM bad enough that it would be better to find a new run frequency or continue to slug it out? Is there a good possibility of finding a better run frequency, or will QSY'ing just make matters worse? Is SO2R adding to rate or slowing down working the pileup? Is a mult worth focusing on or will it be likely to call in? Is propagation favoring breaking a pileup or should you try later? What are the chances that beaming in a particular direction will be productive? And on and on.

Highly experienced contesters seem to have internalized these trade-offs to the point that they may not even consciously think about them. Rather, they are able to enter a "flow state," relying on hunches and intuition. So how does one develop this sixth sense?

After a contest, you may think "I should have gone to 40 meters earlier." But you don't really know for sure because there is no parallel universe in which only that one variable is altered. Or is there? Having a buddy in the same town with a similar antenna system, power and terrain can make for a fruitful comparison. If he went to 40 earlier and made a lot more QSOs there, and no other factor seems to ex



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## Thursday Night Sprint:

The Northern California Contest Club sponsors a Thursday Night Contesting session of thirty minutes 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 American time. The power limit is 100 watts. Occasionally multi-week ladder competitions are held. See [www.ncccsprint.com](http://www.ncccsprint.com) for details.

Thursday Night Contesting Director and Founder	Bill, N6ZFO
NCCC CW Sprint	Tom, N3ZZ (initially, Ken N6RO )
NCCC RTTY Sprint	Ken, K6MR
NCCC Sprint Ladder	Bill, N6ZFO
Sprint Web master <a href="http://www.ncccsprint.com">www.ncccsprint.com</a>	John, K6MM
Ladder Scores Manager	Tim N3QE
Thursday night Contesting Advisory Group:	N6ZFO, Bill (Chair)
	Mark K6UFO, (with W4NZ, N4AF, W9RE, K4BAI, N3BB, VE3YT and W0BH).
The Thursday night NCCC Net	Ken, N6RO



plain the difference, then perhaps your conclusion is correct. Unfortunately, such a hypothetical buddy is not often available. And, even if he is, how do you know that other variables really were equal? Perhaps you had a local noise source that he didn't have to contend with.

Adding to the complication of making comparisons are the differences in propagation from day to day, week to week, year to year and sunspot cycle to sunspot cycle. The problem is partly that propagation is constantly changing and partly undersampling. If the contest in question happens only once a year, that's a very low sampling rate. There are, however, contests that happen much more frequently. The CWOps "CW Tests" (CWTs) happen weekly and are ideal for experimenting. I have been participating in them--often two per week--weekly for several years. Little by little, I am learning how to maximize my score.

Yet, again it's hard to tease apart the various factors that are at play: is my skill level increasing, or are band conditions more favorable? Did I have a better strategy or was activity greater? Did I make the top 10 because of some technique I just tried, or because the best testers were busy watching basketball that week?

There are a number of tools that can be used to address these conundrums. One is the Reverse Beacon Network ([reversebeacon.net](http://reversebeacon.net)). It will show you how strong your CW or RTTY signal was relative to others' (or your own on a different date) at various locations throughout the world. You can also use it to compare antenna systems and make decisions about stations modifications. PSK Reporter ([pskreporter.info](http://pskreporter.info)) provides similar info for FT8 modes.

Another valuable resource is 3830 Scores ([3830scores.com](http://3830scores.com)), where operators post their scores and comment on their experience of the contest. In particular, studying what others on the West Coast wrote can be enlightening. You may struggle on 80 meters and then read that other comparable West Coast stations had a similar problem. And it goes both ways. Sharing your own experiences on 3830 can be invaluable to other operators in making sense of what they encountered during the contest. I would encourage everyone to post to 3830, do so as soon as possible after the contest, and take the time to say something meaningful beyond "thanks for the Qs."

It is difficult to compare your own performance to anyone else's, or even your own past performance. It is challenging to pin down exactly what you did differently to score higher or lower for a particular contest, and to draw conclusions as to what to change. Still, the more you contest, the more you develop intuition about the tradeoffs and decisions that go into a winning effort. Tools can help. Experimentation can help. Raw talent certainly doesn't hurt. But though it is tempting to think there is some hidden secret to becoming a great operator, the answer may be more prosaic. As the joke goes, a visitor to New York stops someone on the street and asks "How do you get to Carnegie Hall?" The answer he is given is: "practice, practice, practice!"

**73 Dave, WD6T**



## May 2021 VP/CC Report — Andy Faber, AE6Y

I'm very pleased to be the Club's new Vice President/Contest Chairman. I've actually had this job twice before, once circa 1994 and again circa 2001-02. I've also served as President, in 1997-98. A lot has changed in contesting since the mid-90s. We'll be talking about some of those changes in future columns, but here are a few obvious one:

- 1) RTTY was barely in use. I don't think RTTY ops still used Kleinschmidt printers, but the current computer-generated techniques were not mainstream.
- 2) No RBN, WSPR, FT4, FT8, etc.
- 3) Packet was a 2m network.
- 4) Speaking of computers, while I did use a computer to prepare my JUG columns, then I would have to send a floppy disk to the editor to transmit the file (produced in WordPerfect, by the way). Remote operation of ham stations – not a dream.
- 5) Hot rigs included the FT1000D, Kenwood TS930, and Icom 761, and guys still swore by the Drake Twins and argued about whether the R4B was a better RX than the newer R4C. No Elecraft or Flex Radios yet.
- 6) People were starting to use SO2R, but no one had thought 2BSIQ was even possible.
- 7) OTOH, there were some nice years with abundant sunspots. As an example, when I took my first contest expedition, in 2002 to Bruce (N6NT)'s station in the Cayman Islands for WPX SSB as ZF2AF, I made over 3000 Qs on 10 meters. In fact, I recall in 1992 or so making 800 Qs on 10m in ARRL DX CW from home with a vertical on the roof as my sole antenna.

Anyway, I've been conveniently enjoying the fruits of club membership for the last 20 years while everyone else did the work. But our esteemed President Dave, no doubt out of desperation, kept (very politely, to be sure) asking if I would help out again, and I started to think that my excuse of still-being-a-working-stiff-so-go-bother-the-retired-guys was wearing a little thin. After all, if no one volunteers, the Club becomes less and less contest-active and will decay into an ever-shrinking social club. So, I finally felt that I owed it to the Club to get back involved again.

Here's a pome about that. Note that I do know that the normal spelling is "poem," not "pome," but I use the latter for two reasons: the first that honoring my limericks with the appellation poetry is really an uncalled for aggrandizement. Second, I started publishing them in the JUG back in the early 90s in my first stint as VP/CC. Back then the JUG was edited by the noted humorist and Club member Jack Troster, W6ISQ. Jack was a very well-known ham personality (first licensed pre-WW2) and was the author of many popular satirical articles in QST. Jack called them "pomes," and in his honor so do I. So here's a pome about that (as I said):



**Being asked by our Pres to pitch in  
To help the Club onward to WIN,  
I'm delighted to be  
Your new VP/CC.  
Let's roll up our sleeves and begin!**

In future columns and meetings, the officers will be proposing club focus contests. Many will be the same as in recent years. I want to talk here about one of our traditional favorites: the CQ Worldwide WPX Contest.

We'll have a lot more to say about WPX later in the year, as we concentrate on the 2022 version as a focus contest. For now, the CW WPX is at the end of May. I plan to go to the P40L/P49Y station that John, W6LD and I own, where I will probably enter in the new to WPX Classic Category – 24 hours, one radio, no internet.

The CQWW DX contest originated the classic category a few years ago, and I've been entering in that category on both Phone and CW several times. I find it a delightful alternative to the more normal 48-hour grind. There are several advantages, including: (a) strategy involved to pick your off times; (b) if you are just going crazy at some point and need a respite, you can QRT for an hour or so without feeling guilty about taking time off, then get back on when you have regained your faculties; (c) simpler station setup and operation; and (d) last but not least, at the end of the weekend, you aren't a zombie!

Investigating the CQ WPX results database shows that NCCC won the club competition worldwide in 1993, 1994, 1999, 2001, 2002, and 2003, and was the first of the domestic clubs in 2010. The club scores are now broken out by US versus DX. Generally, PVRC has been winning the domestic competition, although YCCC has taken the crown for the past three years.

I remember the 2002 year quite well, as I was the VP/CC and focused our efforts on that contest. The year before, the Contest Club of Finland had won the club competition with 251M points. In 2002, we beat that, setting a new world record of 253M points! We had 80 logs and some very high point DX totals (of course that is how CCF had won it the previous year also).

This shows me that if we set our sights on winning the domestic competition, we can do so with a concerted local effort and some dxpeditioning. Probably the key to a winning club effort now, as it was then, is a combination of DX scores and local multi-op showings. A stretch goal would be to win the world, but that competition has been dominated by the European clubs in recent years.

Getting back to this month's WPX CW Contest, a quirk of the WPX scoring strongly incentivizes us West Coasters to try to work Asia and the Pacific on the low bands. Contacts with stations on another continent are worth three points on the high bands (20, 15, 10) and six points on the low bands (160, 80, 40). Meanwhile contacts with your own country give you only one point regardless of band. So working a JA on 40 or 80 (or theoretically 160, though that band is rarely used in this contest) gives you six points, while working a WB4 nets only one point.

Thus, operating from the West Coast, one of the key score generators in WPX CW is to get on 40 in the early morning hours to work JAs and other Asians. Each contact on 40 with Asia is worth 6 points, and there are well

over a hundred JA prefixes to boot. K3EST points out that judging from recent contest activity, there may also be a lot of YB contesters active, with a variety of related prefixes. From the East Coast, the big block of DX prefixes is in Europe, so we really need the JAs, even though there are not as many as EU.

Here's a pome about that:

**The Sixer with no runs JA  
Is the athlete too injured to play.  
The East Coaster exults  
With European mults,  
But we need calls starting with "J"**

Another nice thing about WPX is that you can be rare by prefix. You may not get pileups with an oddball prefix, but having one probably helps (being loud helps even more), so consider borrowing one from a club member. If someone wants to use AE6Y while I am in Aruba for WPX CW, please let me know. I did have the odd occasion some years ago of having to ask someone who had opened up near my frequency when I was at P49Y to please QSY, and imagine my surprise when it turned out to be myself! – that is, the guy who was using AE6Y. Asking yourself to QSY is definitely in the category of odd psychological experiences!

Finally, unlike, say Sweepstakes, you never run out of multipliers; they just keep coming. As an example, I was looking at my P49Y WPX SSB log for 2018. In the last half hour, while approaching 5k Qs and 1,000 mults, 10 new mults called in, most of which were interesting US prefixes: WT7, WI6, KL4, ND6, KY6, LU3, NV7, JR7, AJ5, KF9. And, of course, you never have to work hard in pileups to get a rare mult, because unlike in most other contests, say a 3V8 is worth no more than a KV8.

A final comment written on Sunday, May 2, as a great weekend for State QSO parties comes to a close. There was a small one (DE), a bigger one (IN) and two major regionals (7QP and NEQP), not to mention an Italian DX contest in full swing (ARI). What's particular fun about this weekend is that the contests don't compete, but rather coexist in harmony. If a guy in New Hampshire works one in Utah, they both can get credit for 7QP and NEQP. N1MM even has a module designed to log multiple parties. It was great to see the activity, probably fueled in part, like that of other contests in the past year, by our stay at home mentality. Even Parks on the Air (POTA) stations were joining in the fun. I also observed, not for the first time that these state parties are an excellent opportunity for ops that are not high speed CW gurus to hone their skills. Most of the CW heard was in the 25-30 wpm range, with very few speed demons in evidence. I used a paddle (no computer sending) exclusively in search and pounce mode, and found that setting the speed at 29 wpm worked well.

I'll have lots more to say in future columns. For now, see you all at the May virtual meeting, and hope to work you on multiple bands from P49Y at the end of the month.

## **73, Andy AE6Y**



## The Four—Event QSO Party Weekend—IN, DE , 7QP and NEQP

NCCC members competed widely and vigorously in the May 1,2 2021 QSO Party extravaganza involving Delaware, Indiana, the states of the 7th Call Area (7-QP) and the six New England states (NEQP). Integrated software from N1MM allows concurrent recording of all four of these contests, increasing their appeal. Both the NEQP and 7-QP are in the KB-competition mix, a further incentive for participation.

NCCC members, Tom K5RC and Bob, W1RH have played important roles, respectively, in the creation of the 7-QP and in the revitalization, starting in 2002, of the NEQP. Bob's account of his NEQP experience while a YCCC member can be found at <https://neqp.org/the-birth-of-the-new-england-qso-party>, a re-print of the article Bob wrote for the JUG in 2016.

K6DGW, N6DE and N6ZFO submitted short accounts of their experience in the first-weekend-in-May contest suite.

### From Skip, K6DGW, operating 7QP as K7RC @ W7RN [remote]

This regional QP just keeps getting better and better ... in part no doubt because the INQP, and New England QP are also running concurrently with similar exchanges and the sponsors [and N1MM+] have coordinated so out-of-region stations just log everything and send it in to all of them. The DEQP is also included but the "DE Ham" apparently can't manage to activate all 3 of the DE counties in one contest.

I managed about 13 hours running W7RN remotely from home using K7RC CW-only and did 904 [unaudited] Q's and 65 mults for 176,280 pts. Best ever for me. I'll likely do the NVQP in the fall the same way, did 289 x 129 on CW last year. I'd sure like to see more of these coordinated regional QP's. Other than CA and TX [and sometimes GA and FL], the single state contests are pretty dull for out-of-staters. There was a Mid-Atlantic QP for a couple of years which disappeared.



Thanks for all the Q's, I figured out how to have the 20 stack East, coupled with the fixed west antenna and I sure made a difference for CA, PNW, and Pac.

73, Fred ["Skip"] K6DGW Sparks NV DM09dn Washoe County

### From Bill, N6ZFO. Wyoming Family History and the 7-QP

My Saturday night 40m SSB call to N7W (WM8Q) in Carbon County, WY should have been like any contest qso, "hello, goodbye." Rate is everything. I was taken aback when the op, Andy, said "are you in a hurry?" Naturally I was intrigued, and not being too serious about 7-QP, I bit. Not knowing what to say, I went through my Wyoming connections: In the late 1800's my paternal gf emigrated from England to the Medicine Bow area of central Wyoming, north of IS 80. In about 1908 he married my gm — not exactly a "shotgun wedding" but similar— in Rawlins, WY, the seat of Carbon County. Lillian had eloped with her true love but was chased down, on horseback and returned to Cheyenne, where her father, John Platt, a WY state congressional rep, "encouraged" Lillian to marry Fred Haddon. The newspaper account starts "friends were surprised when Lillian Platt married Fred C. Haddon last weekend in Rawlins . . . ." My father was born in Cheyenne, WY in 1909. Andy was pleased to hear all this.

I have no information about the Medicine Bow homestead where my gf was raised. Andy noted that his XYL was raised in small communities in the Medicine Bow area, so this unexpected 7-QP QSO has opened exciting possibilities for researching this part of the family history.

The other Wyoming story involves my Aunt Alice from Cheyenne, a not-too-loyal member the WCTU. We found out, on a visit of this worrisome relative to Denver, that Aunt Alice could drink any of us under the table. My dad thought we would send her home by serving drinks. He was wrong, and her "fainting spells" went on for days, moving on to martini therapy. My dad had attended bartending school and was an expert. Aunt Alice was also good with a hand gun and I recall seeing her shoot cans off fenceposts at a great distance with near perfect accuracy.



*N6ZFO's grandfather on left, originally from England, migrating to Medicine Bow Wyoming in the late 1800's.. the dreaded Aunt Alice 2nd from left, at aunt's wedding in our back yard in Denver, CO about 1946 or '47.*



*Same Denver Wedding. . Aunt Alice in the Center, with a future N6ZFO in wedding attire.*

And my first airplane trip, on a UAL DC3, was to Cheyenne to retrieve Aunt Alice's big LaSalle prior to our family trip to Santa Fe NM in the 1940's

One never knows what lies around the corner in a QSO, and it's that aspect of ham radio that has always fascinated me. Have a look at the QRZ.com page for Andy, WM8Q, noting that the display picture is a good competition to Gary's 'maximum smoke' award. Andy has an FT8 supplemental program that is described in detail.

## **From Dean, N6DE. County Expedition From My Backyard**

I operated in the 7QP/NEQP/INQP/DEQP contests on Saturday, May 1. As I don't have any ham antennas installed at home, I store all my radio equipment in containers in my garage. My antennas and coax are stored in a storage shed in my backyard. Whenever I try to operate from home, it is much like going on an expedition. I set up my shack in the back room of my garage on a folding table, and temporarily install an antenna in the backyard. This time I operated part of the time on emergency power using a generator I recently purchased.

In my CQP awards presentation during the April NCCC meeting, I encouraged us to share our contest goals with NCCC members. In this article, I'll list the goals I had for myself in the 7QP/NEQP/INQP/DEQP contests and will comment on the outcome of each goals



## N6DE's Goals

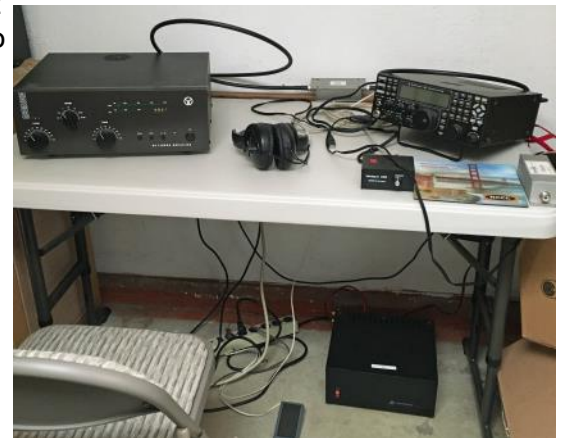
Goal	Result
Test my station equipment I hadn't used in 15 months	Success
Evaluate new generator from RFI perspective	Mixed
Determine whether a permanent location for my 40m vertical dipole is feasible at home	Negative
Gauge my noise level and RFI on 20m to understand whether I should proceed with constructing and installing a 10/15/20 fan dipole in my backyard	Mixed
Give QSOs to QSO Party participants as a way of thanking them for operating in CQP	Success
Practice CW skills by operating in more contests	Success

### 1. Test my station equipment I hadn't used in 15 months

I last operated from home in the February 2020 CW Sprint. The four QSO Parties were a good opportunity to make sure my gear still functioned: Elecraft K3, K1EL Winkeyer, Yamaha headset, Astron power supply, footswitch, 40m vertical dipole and coax. Any problems found could be addressed this summer before I use this gear in the California QSO Party. More recently, I used my Acom 1010 amplifier in CQP 2020 at W6MY's station in Sierra County, but I still wanted to confirm it worked after seven months in storage.

As I was setting up, I went through all my storage containers and found items I forgot that I had: RigExpert antenna analyzer, K3 sub-receiver upgrade kit, Inrad filters, K3 DVR board, KRC2 band decoder, YCCC SO2R Boxes, etc. The antenna analyzer proved to be helpful when tuning the antenna. I will strive to install some upgrades in my K3 this summer. I also have coax in the shed that I need to check out with the TDR function in the analyzer.

I thought the antenna would be the hardest to set up, so I worked on it Friday after dinner. It turned out to be the easiest. The RigExpert analyzer made it easy to determine how I needed to adjust the counterpoise when I switched between 40CW and 40PH. I left the K3, rig control, Winkeyer and N1MM setup for early Saturday morning. That was an unwise decision, as 7QP started at 6:00am PDT. I woke up at 5:00am and tried getting everything set up and connected, skipping my morning coffee. Mistakes got made in a daze. It took me a while to realize I had plugged the Winkeyer into the wrong jack on my K3. Baud rate mismatched settings prevented rig control from working for a while. Also, I am normally a Writelog aficionado, so it took me a while to configure everything in N1MM+ so that I could use the IN7QPNE QSO Party module. Consequently, I missed the first hours of 7QP.



What I learned:

- My gear still works.
- I need to order a replacement plastic knob for the RF gain control on my K3. It cracked and I have been just rotating the shaft.
- I need to look at the keying RCA connector inside my Acom 1010. It is loose from the panel.

- I have some projects this summer with items I found in storage.

## 2. Evaluate new generator from RFI perspective

I purchased a new generator this spring: the Honda EU7000iS. The rationale was twofold:

- Provide sufficient emergency backup house power to important circuits through a transfer switch when electricity goes out without spending significantly more money on a whole-house generator.
- Take a reliable portable generator on CQP expeditions which will power a legal limit amplifier or more than one high power station in a M/M.

This generator is extremely impressive and acoustically quiet, but since it is inverter based, I was concerned about RFI on the HF bands. The QSO Party events provided a good opportunity to characterize the effect.

Condition	S-Meter Reading @ 7200kHz
Generator off; Radio powered by PG&E	S5
Generator on, Radio powered by generator, no filtering	S7
Generator on, Radio powered by generator, AC line filter in-line	S5

I repeated the measurements at 7040kHz with a CW filter. The delta was approximately the same: about 2 S-units.

The generator was physically located about 80 feet away from the vertical dipole antenna.

The AC line filter I used was a Corcom 20EP1. Years ago I constructed a few sets of these filters in a homebrew enclosure and soldered power cable leads to each side of the filter with the appropriate power plugs outside the enclosure. It has proven to attenuate noise from inverter generators in my past CQP expeditions, but did not eliminate the noise completely. Commercial AC line filters usually address differential mode noise, but Jim K9YC has rightly commented in the past that common mode propagated noise is what primarily needs to be addressed with inverter generators. He has recommended common mode choke solutions which he and W6GJB have utilized on their CQP expeditions. W4EF also has a web page where he shared his CMC solution for generators.

What I learned:

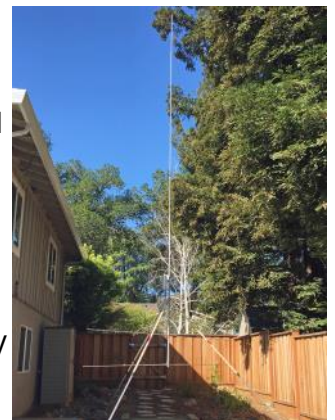
- The inverter generator does indeed put out RFI on HF. While my existing filter helps, I don't have good data on how well it works on all HF bands. The S7 noise was quite concerning on 40m.
- I need to construct a common mode choke solution this summer along the lines of what Jim K9YC has suggested so that this generator does not ruin a very quiet QTH during CQP this year.

## 3. Determine whether a permanent location for my 40m vertical dipole is feasible at home

There is a location in my side yard that theoretically would be ideal to leave the 40m vertical dipole permanently installed. The antenna would be rather close to our house, so I wondered how it would perform, whether it would get detuned from nearby objects such as the gutters and downspouts, and if it would cause RFI in the house.

What I learned:

- Surprisingly, I did not notice any detuning or VSWR effects, compared with February 2020 when I located the antenna in the open space of my backyard. The RigExpert



graphical display was key to determining this and comparing the VSWR curve and lowest VSWR with my logs from February 2020.

- The antenna performed rather well considering what it is. See goal #5 results.
- RFI to the house was the showstopper for this antenna location. My 500W transmissions caused havoc on the side of the house near the antenna. Many devices were affected, such as GFCI outlets, smoke/CO detector, alarm system, power supply for the UV whole house water filter system and even the humidifier unit in the master bedroom. One of the GFCI outlets actually died as a result of my transmitting, so RFI in the house was the most depressing result of the weekend.

#### 4. Gauge my noise level and RFI on 20m to understand whether I should proceed with constructing and installing a 10/15/20 fan dipole in my backyard

I have really wanted to install some permanent antennas at home in order to participate in more contests. One thing I've been thinking seriously about is to construct and install a 10/15/20 fan dipole between a palm tree and a pine tree in my backyard. It would not be particularly high (maybe 25ft. above ground), but it would be something. Before I go through the trouble, I wanted to evaluate my noise level on 20m as well as RFI. Although my 40m vertical dipole adjusted for 20m would not provide an especially accurate representation of my true noise level, it would at least help with a go/no-go decision.

What I learned:

- I had S2 noise on 20m and could hear several signals on 20m. This was good news.
- Running 500W on 20m caused a lot of RFI trouble in the house, more than 40m.
- I would either need to do a lot of work in the house to prevent these problems in the future or I would need to just run low power and give up more an an S-unit in the ability for my signal to be heard.
- I'll need to give more serious thought about all this.

#### 5. Give QSOs to QSO Party participants as a way of thanking them for operating in CQP

As CQP Chair, I should show support to some other QSO Parties by participating in them. We have several operators who travel from Oregon and Arizona to activate rare counties in CQP, so I wanted to contact them at a minimum.

##### Results:

Contest	40CW QSOs	40PH QSOs	20CW QSOs
7QP	121	70	25
NEQP	23	1	0
INQP	3	0	2
DEQP	1	0	0

##### Observations:

- My first QSO on Saturday morning was with Rusty W6OAT. Great way to start 7QP!  
— *Mine as well, Ed.*
- I was able to contact other NCCC members operating stations in 7-land, such as K6DGW, WD6T, K6EI, W6IA, K7XC and perhaps others I have accidentally forgotten.

- I also contacted K6LL, K6WSC and K4XU who travel to CA on expeditions for CQP, as well as several stations in 7-land who are usually active in CQP.
- I was pleasantly surprised to actually be heard on 40m by 24 stations in New England. I had an easier time hearing W1 than W9 on 40m.
- There were several 7-land callsigns that I didn't recognize. I'm going to try to dig into my log and reach out to these stations to encourage them to participate in CQP this year.

## **6. Practice CW skills by operating in more contest**

In recent years, I haven't been able to participate in as many contests as I did 10-20 year ago. For me, my CW skills have been the first to decline. I know I can practice using Morse Runner, but I never seem to be able to carve time out of my day to do that. Operating in contests helps me combat the CW rustiness.

In QSO parties, there seems to be a wide variety of CW speeds by participants. Some stations in 7QP called CQ around 20wpm, most were CQing in the mid to upper 20s, and some were sending over 30wpm (N9RV, KL2A/7, N7DX, ND7K, KH6ND/W7). In NEQP, the speeds seemed to average faster than in 7QP, at least for the stations I contacted. I don't recall working anyone under 25wpm in NEQP, but I remember some above 30wpm (AK1W aka K5ZD, K1ZZ, K1KI, et al).

Hopefully I'll be able to participate in other CW contests later this year.

# NCCC Awards for the 2020/21 Contest Year

At the April, 2021 NCCC on-line meeting Contest Awards Manager Gary, NA6O, and David, WD6T presented over 200 operating and achievement awards to NCCC members. Nine of these awards are voted by club members. There are two special awards, the Founders award (to K6XX) and the President's Award (to N6RO). These 11 awardees are shown below. The JUG congratulates all award winners.

## NCCC – Contester of the Year

Individual award to a multi-talented operator for outstanding overall contesting performance



**WD6T**  
David Jaffe



## NCCC – Most Valuable Player

Individual award for invaluable support to the entire team.



**N6DE**  
Dean Wood



## NCCC – Inspiration Award

Individual award to a member of NCCC who inspires each and every one of us through personal courage and a positive attitude



**K6XX**  
Bob Wolbert



## NCCC – Elmer of the Year

Individual award to an outstanding trainer and Elmer who is always willing to coach others



**N6TV**  
Bob Wilson



## NCCC – Rookie of the Year

Individual award to someone who has joined NCCC during last 1-2 years and who has shown great energy and commitment to the spirit of contesting through participation and results.



**N6TVN**  
Carl  
Mannle



## NCCC – Most Improved Contester

Demonstrated Year-To-Year Improvement  
Willing To Try New Modes (CW, SSB, RTTY)  
Always Looking To Contribute Points



**K6KM**  
Roberto  
Sadkowski



NCCC – Operating Excellence Award  
SSB Mode



**K6GHA**  
Don Taylor



NCCC – Operating Excellence Award  
Digital Modes



**WK6I**  
Jeff Stai



NCCC – Operating Excellence Award  
CW Mode



**W6SX**  
Hank  
Garretson



2020 CQWW DX Founder's Award

**K6XX**  
Bob Wolbert



QSOs	Points
CW = 2,159	CW = 2,345,109
SSB = 562	SSB = 317,052
TOTAL = 2,721	TOTAL = 2,662,162

2020  
K6XX  
2,662,162 POINTS



NCCC – President's Award

In recognition of his mentoring, generosity and inspiration to the Radio Oakley Team and NCCC



**N6RO**  
Ken Keeler



# The JUGHEAD (Jug Head) Award—Revived and Redefined

*Bill N6ZFO, JUG Editor, or, if you will, the JUG Head.*

In the distant past a JUGHEAD award was given to the NCCC member who worked the most NCCCr's in ARRL Sweepstakes. This year, following a mention of this ancient award by Alan, AD6E, we chose to redefine the award in two ways. First, Two awards are given, one to the author of the outstanding Technical article and one to the author of the outstanding General Interest article appearing in the previous contest year.

The second change involves the name itself, formerly the JUGHEAD award. This term, to say the least might be considered not too flattering. Thus we will re-define the name, starting next year, to the JUG HEAD award, thus identifying the award as one given by the Head of the JUG, i.e. Editor.

**And the winners for this year are . . . Ken Beals, K6MR (October 2020) and Tom McShane, NW6P (December 2020).**



# Point Generator Profile

## Bob Moore, K6NV

*Interviewed by W1RH*

In my simple mind, I've always thought that if W7RN is Radio Nevada, K6NV must be the other Radio Nevada, despite the "6" in the callsign. Close, but no cigar. While you will sometimes see K6NV as an operator at W7NV, Bob's QTH is just across the border, in Truckee. Yep, Bob pays California taxes, just like most of us KB'ers. I really should have known that, since I have seen Bob several times at N6XI's Sierra Chapter BBQ in Truckee.

By the way, after I made that "no cigar" comment, I wondered just where it originated from. According to Wikipedia:

*The phrase most likely originated in the 1920s when fairs, or carnivals, would hand out cigars as prizes.*

Ah, but I digress. To put it mildly, Bob is a CW guy. You will often find him week, after week, in the CWops Tests and the NCCC Sprints. While primarily a CW guy, you'll also find Bob in some of the RTTY contests, such as NAQP and WPX, generating points for the KB Club. Field Day and CQP are also favorites.

Bob had his call sign in 75 contest submissions to 3830, in 2020. While many of those include the weekly CWops tests and the NCCC Sprints, it's still good proof that K6NV is a dyed-in-the-wool contester and, indeed, a Point Generator.

Dyed-in-the-wool? With apologies to our fabulous Jug editor for my digressions and idioms, I'll just suggest you look it up.

Now, let's hear from Bob:

**Name/Call Sign:** Bob Moore K6NV

**Past calls:** WN6CGL, WB6CGL, KI6IV, K6NV

**Location:** Truckee, CA

**How much property do you have?** Residential lot, 1/3 ac. Plus a neighbor lets me use tall trees on his lot.

**Describe your antenna system:** The best description of my antenna system is "little pistol". On the positive side I feel pretty loud across the US during most contests. I do have moments when I believe no one can hear me.

**Current:** : Ancient TH-3 up about 65' on a Rohn 25 tower, 80m dipole strung through some trees up 45' or so, it bends and droops at the ends, inverted L for 160m with 2 elevated radials, the vertical portion up about 70'. Two 40m dipoles, one up 40' for east/west, the other up 80' for north/south. K9AY Loop system for receiving on 160m and 80m. I used to have a fan dipole up about 70' for the WARC bands, it was dynamite, but came down during one of our intense winter storms. It will go back up when the sun spots really start coming back.

**Future:** I would like to replace the TH-3, but am space limited and have trees within the turning radius of anything much bigger.

**What's in your shack?** .I have a loaded older K3, KPA500 with a KAT500 tuner. I also have remote capability to W7RN with a RRC-1258. Nothing nicer than to sign on to Tom's station and have no noise when my QTH is noisy and be the loud guy on the block. I have put in switches so no cable moving necessary. I use a Dell Laptop on a docking station which gives me multiple USB and serial ports along with video out ports.

**What are your previous QTH's?** Grew up in Orinda, where I first got licensed in 1962, went through the school system there, including Miramonte High School and Diablo Valley College and a couple of courses at University of Nevada in Reno.

**If you're working, what is your career? If not, what was your career?** I retired from the US Forest Service after 37 years. I held a variety of positions, from Hotshot Captain to Battalion Chief to managing special use permits and overseeing the avalanche programs. During my time with the Forest Service, I was on Type 1 fire management teams as either an Operations Section Chief or Safety Officer. Traveled from Alaska to Florida on fire assign-



ments. When I retired, I went to work for Chester Fire District as a Battalion Chief remaining on a Type 1 management team for 8 years. I now work part time for an avalanche consulting firm, re-establishing an avalanche mitigation program over Donner for the Union Pacific Railroad.

**Married? Kids? Grandkids?** I have been married for 45 years, have 2 grown children, our son lives and works in Reno and our daughter lives in Bozeman, MT and has two kids. We make 4 or 5 trips a year to Bozeman to see them.

**How many DXCC entities have you worked?** I have worked 287 entities from this location.

**What's your favorite contest?** I really enjoy Field Day and CQP. My wife always volunteers to cook for the group for FD. The RTTY contests have been a lot of fun over the years. I also am active in the CWOps events and of course the NS Sprints when I am around. I love handing out the NV mult. when I am on the Remote.

**Any tips for contesters?** The biggest thing is BIC, I am terrible about that.

**What would you like to see changed in NCCC?** An incredible group of people belong to NCCC and are more than willing to share their knowledge, we need to keep that going.

**Any other hobbies besides ham radio?** Living in Truckee and doing what I did, skiing is one of my passions and in the summer I get around a lot on my mountain bike, great for winter conditioning.



## Tube Of The Month

### 8891/4CX18000A

Norm, N6JV

The natural evolution of TV transmitters was always in the direction of less complex designs that were more powerful. RCA began production of power tubes at their Lancaster, PA facility starting in 1946. Their early high power TV transmitters featured running several tubes in parallel. In the early 1970s, RCA introduced the [8891](#) tetrode. It had a dissipation of 20,000 watts using a maximum of 10,000 VDC at 6 amps. The filament was a mere 9.5 volts at 147 amps and it operated up to 400 MHz. RCA incorporated this tube in some of their TV transmitters they called the F line. The F line consisted of both low and high VHF range transmitters. The high range used the 17 KW TT-17FH or the 25 KW TT-25FH. When used with their "OPTO" combiner, the outputs were added to produce the TT-35FH or the TT-50FH. Either transmitter could be chosen or the two combined as necessary. These became common units and they were operated for many years. The TT-35FH used the 8891 in its final amplifier. Eimac made their version of the 8891 that was designated 8891/4CX18000A. In 1987, with the demise of RCA, the management at the Lancaster RCA facility bought the plant and it became Brule Industries. Same tubes, different name. In the Sacramento area at KOVR, the 35 KW TT-35FH eventually became the back-up transmitter for whenever the main 50 KW transmitter needed maintenance. This all changed when digital transmission was mandated and all the old equipment became surplus. The article comes from RCA Broadcast News, Dec. 1975 when Sacramento got their F line transmitters.

The 8891 and its driver tube were mounted in a pair of silver plated, tunable cavities. The tube sockets were made with many finger stock contacts that needed to be cleaned or re-plated periodically. The cavities needed to be disassembled to get to the sockets. When the sockets were re-assembled, the alignment tool shown was used to keep the filament and grid rings in perfect symmetry. (See next page.)



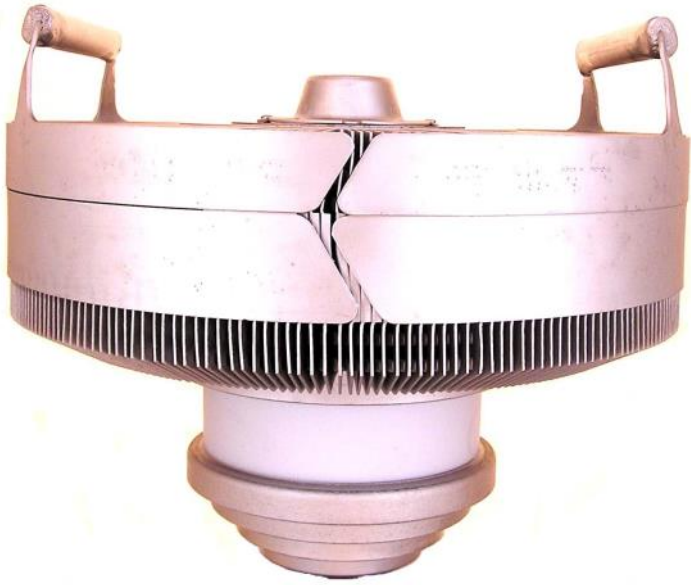
#### **Three Sacramento TV Stations Install New RCA Transmitters**

All three VHF television stations in Sacramento, Calif., have installed new RCA transmitting systems.

KOVR-TV and KXTV-TV are on-air with RCA TT-35FH 35-kilowatt highband parallel transmitters. KCRA-TV is operating a TT-30FL, a 30-kilowatt low-band parallel transmitter. The three installations include equipment for transmitters remote control and monitoring.

The new transmitters have replaced units which are 15 to 20 years old and provide the operational advantages of newer designs, including capability for remote control or unattended operation.

The new units were installed at the Transtower facility located at Walnut Grove, Calif. Transtower, owned jointly by the three stations, includes a 1500-foot tower and antenna array designed and built by RCA. The array was one of the earliest multiple TV antenna sites erected.



*Visit the museum at  
<http://n6jv.com>*

*Norm, N6JV*



## 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](mailto: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](mailto: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 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 Bill, N6ZFO at [n6zfo@arrl.net](mailto:n6zfo@arrl.net) 415 209-3084

## 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"**  
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# 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.

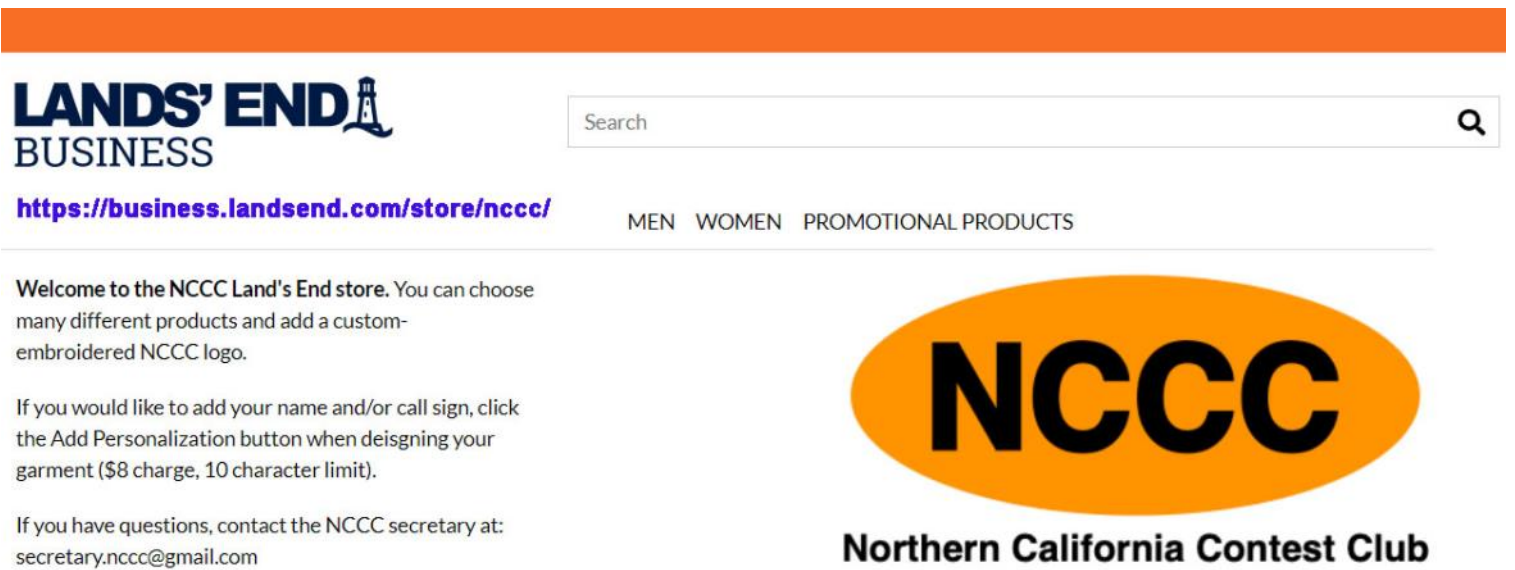
And, you can personalize your item by adding your name and/or call sign. The store is open 24/7 and items are shipped directly to you. No more waiting for everyone else to make up their minds on a group purchase.

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

It's easy to use.

From nccc.cc: <http://nccc.cc/members/lestore.html>

Thanks to W6TCP for helping to set this up.



**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

**NCCC**  
Northern California Contest Club

## Instructions for purchases from the Lands' End NCCC Store:

1. Go to <https://business.landsend.com/store/nccc/>
2. Click on the Men's or Women's link, and then choose an item.
3. Pick a color, then enter the 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. On shirts, for instance, you can place the logo in one of several locations.
6. Click Apply Logo.
7. Optionally, click Add Personalization to add your name and/or callsign (\$8 charge, 10 character limit)
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9. Click Start Secure Checkout. Account creation and credit card required.

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# 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.

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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

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