

Page

Inside this Issue:

Presidents Report HOF Nomination VP/CC Hand Held Loop Antenna - NA6O May Lunch Gathering	1 5 7 8 14
Ham Life in Hell - AJ6CY	15
NCCC May meeting	19
Point Generator Profile - KF6NCX	23
KB Competition	33
NCCC News	37
Forthcoming Meetings	37
Tube of the Month	38
Hornet ARC needs our help	39
Contest Calendar	40
NCCC Information	43
HRO	44

NCCC June Meeting

Tuesday June 11th at 6pm

Venue

Tony & Alba's, Pizza and Pasta, San Jose

Program: Rick N6XI, SDR-Driven Spectrum Display in N1MM

Sign up here

Or visit the meeting page of the NCCC website <u>here</u>

Presidents Report:

Giants...

When it comes to the folks who have molded our hobby, there is no shortage of NCCCers on the list. The CQ Contest Hall of Fame honors many of the folks who have shaped the hobby. As of May 2018, that list included AI6V, K3EST, W6OAT, N5KO, N6RO, W0YK, N6TJ, K5RC, N6TV and a few others who either are current NCCC members are have been in the past. To be on this list is quite an honor, for it means that you have worked very hard not just to be one of the best contesters around, but have contributed greatly to our avocation. We learn not just how to contest from these folks, but how to do it right and what it takes to be among the best. We give a big thanks and congratulations to them.

What does it take to be in the CQ Contest Hall of Fame? To quote from CQ itself:

"The CQ Halls of Fame, The CQ DX Hall of Fame (started in 1967) and the CQ Contest Hall of Fame (started in 1986) were established to recognize those amateurs who have made major contributions to DXing and contesting, respectively. The CQ Amateur Radio Hall of Fame, started in 2001, recognizes those who have made major contributions to amateur radio as a whole, and radio amateurs who have made major contributions to society at large. The activities and accomplishments that qualify one for membership in these elite groups involve considerable personal sacrifice and can usually be described by the phrase "above and beyond the call of duty." " These folks are considered the Giants of our hobby. It sounds like you have to fill pretty big shoes to me.

Continued on Page 3



Officers:

President	Jack Brindle	W6FB	jackbrindle@me.com
Vice President /Contest Chair	Hank Garretson	W6SX	w6sx@arrl.net
Treasurer	Tom Carney	K6EU	treasurer.nccc@gmail.com
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Director:	Bill Haddon	N6ZFO	n6zfo@arrl.net
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Thursday Night Sprint:

The Northern California Contest Club sponsors Thursday evening (NA local time) contest practice sessions of 30 minute duration.

On the Thursday (and, sometimes Friday also) prior to a major contest weekend, the practice format follows the upcoming contest.

Generally, on other 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.

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

non-NCCC: Thursday night Contesting Advisory Group:

The Thursday night NCCC Net

Bill, N6ZFO Tom, N3ZZ (initially, Ken N6RO) Ken, K6MR Bill, N6ZFO John, K6MM. Tim N3QE (Ladder Scores manager) N6ZFO, Bill (Chair) Mark K6UFO, (with W4NZ, N4AF, W9RE, K4BAI, N3BB and W0BH). Ken, N6RO I recently had the privilege of helping to introduce a new member to that list. Dean Straw, N6BV was inducted into the CQ Contest Hall of Fame at the Contest Banquet and Awards ceremony at Dayton this month. So what has made Dean an ideal candidate for the honor? The short answer is a lifetime of helping and mentoring others, being a great engineer, creating outstanding things (especially having to do with radio) and sharing this with anyone smart enough to listen. Somehow that just doesn't describe Dean well enough...

Dean was born in KH6-land (which explains his WH6DKD call), and moved to the mainland in order to pursue an engineering degree and career. Overshooting W6, he managed to land in the NorthEast where he began infecting others with his love for radio. Dean spent many years in New England building stations, operating from them (and others), and even managed to find time to work with the folks at a small facility in Newington, CT. While at ARRL, he edited numerous articles for QST and other League publications along with the ARRL Antenna Book, ON4UN's Low Band DXing and several other publications. But to say he edited them is not enough, Dean expanded the information in the books, making it more accurate and applying new techniques to help our understanding grow in ways that were previously unseen. He helped to lead League publications in ways that were previously not considered.



Photos thanks to Bob N6TV

During all this time, he became recognized as a source for great material at hamfests and conventions, teaching countless hams the right ways of building stations, handling antennas and feed lines, bringing an understanding to the details of how the technology works that was previously unheard of in our world. His application of computer techniques to antenna system analysis was something that even the masters of ham radio hadn't foreseen in previous years.

We are very happy that in the first decade of this century, Dean chose to move from snowy New England to the much better climate of our area, where he continued his work to grow the knowledge in not just the hobby, but the radio world as well. We have enjoyed his presentations on propagation (he revolutionized the use of the VOA program), antennas, transmission lines and contest operating. His patience with answering questions is amazing. But his work is not just for us hams. Dean has helped many Christian broadcast stations to improve their stations and signals, pitching in to help do the actual work himself at times. Basically Dean has devoted his life to helping to improve the lives of others through improvements in radio knowledge and technology.

All of this convinced us that our friend Dean is truly one of the Giants of contesting, and should be honored as such. In January of this year we embarked on creating an application that would convince the CQ committee members that they should agree with us and include N6BV. The application was built on a previous one crafted by K6UFO, and expanded to include new and better information and arguments for Dean's inclusion. This application would be submitted on behalf of NCCC. At the same time, Dennis, W1UE, President of YCCC crafted a similar application to be submitted on behalf of YCCC. As we all now know, the teamwork payed off as the two applications were successful in convincing the CQ Hall of Fame committee that Dean did indeed belong among the giants of radio contesting. We are very honored not just to have our application succeed, but most importantly to count Dean among our friends.



Behind every great man Rayma with Dean

During my tenure as NCCC President I have heard many new members comment on the high quality of the technical information available from our members; most are amazed at how freely available this information is. N6BV is one of the many suppliers of this excellent knowledge and one of the many amateurs who make NCCC the best contest club anywhere. Thank you to the CQ Contest Hall of Fame committee for adding another NCCC Giant to the list in 2019. Most o fall, thank you Dean for all you have done and taught us. We are very honored to call you friend.

Jack Brindle, W6FB

CQ Contest Radio Hall of Fame Nomination Form

The purpose of the CQ Contesting Hall of Fame is to recognize individuals who have made significant contributions to the amateur radio hobby, and/or radio amateurs who have made significant contributions to society at large.

Name of Person Nominated: Dean Straw, N6BV

Callsign (if licensed amateur/if multiple callsigns, list most recent): N6BV

Other calls used: WH6DKD, WB6AIN, WB4YOJ, WA1IRG

If your nominee is still living and you know how to contact him/her, please supply the following contact information:

Dean Straw N6BV 5328 Fulton St San Francisco, CA 94121 Phone: (415) 873-6780 E-mail address: <n6bv@arrl.net>

Please write a brief (one to two paragraph) description of this person's accomplishments/achievements and why you feel he/she should be elected to the CQ Contest Hall of Fame (if you need more room please attach a separate piece of paper):

Dean Straw is an outstanding contester, a talented writer, editor, presenter and educator, and has advanced the state of the art in antennas, computer modeling, propagation and contest planning and preparation. The Northern California Contest Club is very proud to nominate him for the CQ Contest Hall of Fame.

First licensed as WH6DKD in 1959 at age 12, Dean has spent 59 years participating in HF operating, DXing and contesting. He operated for many years as N6BV/1 from New Hampshire, before moving to California in 1998. He has been a member of top multi-operator teams at K1AR, 6Y2A, 4M7X, TI1C, KH7X and N6RO. As a designer, mentor and operator at the N6RO Multi-op station, Dean has spent countless hours sharing his knowledge and skills with many new contesters, teaching and helping develop the next generation of competitive operators.

As a writer and editor, Dean was a Senior Assistant Technical Editor for ARRL from 1993 to 2008, specializing in antennas, transmission lines and HF propagation. Editor of five editions of The ARRL Antenna Book and four volumes of The ARRL Antenna Compendium series. Co-author for Simple and Fun Antennas for Hams. Editor for ON4UN's Low Band DXing and K1VR's Antenna Zoning, and several times as editor of The ARRL Handbook.

An accomplished engineer and software developer, Dean crafted the High Frequency Terrain Analysis software (HFTA) which revolutionized antenna system planning by linking antenna design, installation height, tower location, surrounding terrain, and the expected angles of propagation to target regions. His work with the propagation prediction program VOACAP revolutionized the way we plan for contests, allowing specific band opening predictions dependent on solar conditions to indicate when band changes and operations should be planned.

Dean has a special talent for making complex topics such as antennas and HF propagation and contest operations easy to understand. He has been a prolific speaker to the benefit of many radio conventions, radio clubs and innumerable audience members. His ability to patiently explain details of many aspects of contesting technology to experienced engineer and neophyte set him head and shoulders above others. He has truly grown the talent pool of contesters through his teachings.

Dean has been active in two great contest clubs. In 1996-1997, he served as vice-president of the Yankee Clipper Contest Club., stepping up to the office of President for 1997-1998. In 2006-2007, Dean served as President of the Northern California Contest Club. In 2007-2008, Dean was on the board of the Northern California Contest Club as past-president.

For these exemplary radio contest activities, the Northern California Contest Club proudly nominates our member and friend, Dean Straw N6BV to the CQ Contest Hall of Fame.

Nominator Information (This is only for the purpose of contacting you in case of questions, and will not be published.):

Nominating Club: Northern California Contest Club

Your name: Jack Brindle, W6FB

Mailing address: 1290 South Clover Avenue

City: San Jose, CA 95128

Country: USA

Phone: (408) 219-1692

E-mail address <jackbrindle@me.com>

VP/CC Report:

Field Day 1961. **R**adio **A**mateurs of **G**reater **S**yracuse. 0200 local. I'm struggling to make perhaps 25 contacts per hour. K2KIR, now W2RU, shows up and takes over. Bang! Rate jumps to 50 and Bud maintains it for a three-hour shift. Lesson learned: If something isn't working, change something.

Field Day 1967. Three buddies and I team to take first place overall in Class 1A. I'm still very good friends with two of my teammates; the third was a too-early SK.



Field Day 2011. My 3830 report says, "My own doing, but I haven't enjoyed FD for many years because I haven't been with a group and because of the relatively low operating standard. This year I made a real effort to be mellow. I took the operators as they came, tried to encourage and help, and tried to set a good example. It was fun hearing so many people enjoying themselves. Field Day is a ham-radio celebration. I had a blast. Yee Haw!"

So, what is Field Day? Field Day is not a contest. Field Day is a contest. Field Day is camaraderie. Field Day is emergency preparedness. Field Day is public outreach. Field Day is barbecue and beer. Field Day is rain and mosquitoes. Field Day is fun. Field Day is all of the above, and more.

For contest aficionados, Field Day is an opportunity to show others how much fun contesting can be, to infect them with contest fever. Make some contacts. Explain how it works. Show them computer logging. Let them take the chair. Mentor, encourage, compliment. Invite them over to your shack for a contest. RAC Canada Day Contest (1 July zulu) would be perfect—low-key, very friendly. Tell them about NCCC. Infect them with contest spirit.

And, an extra bonus. For dyed-in-the-wool traditionalists, Field Day is an opportunity to observe and perhaps make a few FT8 contacts. We can always learn something new and, in the process, have fun and perhaps return the favor by encouraging FT8ers to try traditional modes.

Celebrate Field Day everyone! Hank W6SX

Handheld Direction Finding Loop Antenna for RFI Location

Gary W. Johnson, NA6O May, 2019

A good way to locate radio-frequency interference (RFI) in the HF bands is with a small direction finding antenna and a portable radio. Here is a simple antenna design that is effective from 3 to 22 MHz. Based on a resonant magnetic loop, it has high transducer gain (high sensitivity), and also very good directionality. You can build it cheaply from junk box parts.

The basic design is a simple resonant loop with a smaller coupling loop. Since this is only for receiving, there is no concern about achieving very high efficiency nor are there any high voltages, so component selection is simplified. Figure 1 shows the complete handheld antenna and Fig. 2 is a schematic for a good reproducible design



Figure 1. The complete antenna.



Figure 2. Direction finding antenna schematic.

Resonant Loop

The tricky part is finding a compromise loop diameter (wire length) that will cover the desired frequency range with reasonable capacitor values. This takes some experimentation. I ended up with 73 inches of14 ga magnet wire (any insulated wire is fine), wound into a two-turn loop. The outer loop is about 12 inches diameter and is a bit egg-shaped to connect with the tuning box. Be sure the overlapping parts don't short to one another. Net inductance is around 2.75 uH.

Tuning Capacitors

The graph in Fig. 3 shows the approximate capacitance values for various frequencies. A singlesection 365 pF variable capacitor will cover roughly 5-25 MHz. Then switch in a fixed 470 pF capacitor to cover 3-4 MHz. Something from an old transistor radio such as a plastic Polyvaricon will work, as will a common 12-365 pF air variable. Those are easy to find on Ebay or Amazon. If you can find one with gear reduction that will make tuning easier because the resonance is pretty sharp. (Or just use a larger knob.) The one I actually used was a rather different two-section variable but in the end the capacitance range is roughly 365 pF. My band switched ranges ended up covering 3-4 and 6.5-22 MHz.

You could add additional capacitance to reach 1.9 MHz or even lower but the tuning range will be very limited. A larger loop and/or one with more turns would work better there.



Figure 3. Approximate capacitance for various resonant frequencies.

Coupling Loop

Current flowing in the resonant loop can be picked up by several methods. I chose to use a coaxial coupling loop. Figure 4 shows the required shield and center conductor connections. I used RG316, a small Teflon coax, because it's easy to strip and easy to solder without melting insulation. RG58 will work fine. Loop diameter should be on the order of 20-25% of the resonant loop in order to obtain a match to 50 ohms, though that isn't terribly important in this receive-only application. Figures 5 through 7 show construction details. When working with small coax, use a sharp knife on the jacket and nip away the braid with diagonal cutters that have fine tips. Remember to install heat shrink tubing before soldering.



Fig. 4. Detail of coupling loop connections [1].



Fig. 5. Midpoint gap in the shield is covered with heatshrink.



Fig. 6. Ready to solder the loop closed. Heatshrink is in position.



Fig. 7. Completed pickup loop, about 3 inches diameter.

Enclosure, Assembly, and Testing

A metal enclosure is needed because hand capacitance will affect the tuning (Fig. 8). Size will depend upon the variable capacitor you have. The stator (fixed part) of the capacitor should be grounded to the enclosure. Then you can use a metal knob. If you don't have gear reduction, use a larger knob, at least 1.25 inches diameter. Run the resonant loop connections in through rubber grommets. Coax from the pickup loop can go to any kind of connector mounted on the enclosure. I used a BNC. Mount everything on a wooden stick or some kind of insulating support to make it easy to carry around.



Figure 8. Inside my prototype tuning box.

If you have an antenna analyzer or VNA, connect it to the antenna output and look at the SWR as you tune the capacitor. You should see a very sharp dip in the SWR at resonance. My antenna had a very good match on 40-15 m with the SWR below 1.3:1. It was higher on 80 m, around 4:1, but this is perfectly acceptable.

Using the Antenna

You can use any kind of portable radio that covers the shortwave bands for RFI hunting. AM demodulation is preferred. I use an old Radio Shack DX-398 that I found on Ebay. If you have a portable spectrum analyzer or SDR with a waterfall display, that would be very useful. Because the antenna has narrow bandwidth, be sure to peak it up when you tune around. The noise level jumps right up at resonance.

Is it sensitive? Heck yeah. On 40m in the afternoon during a contest, I was standing in my back yard listening to the East coast with easy copy on CW. That is plenty of sensitivity for suburban noise hunting. The only time it may come up short is if you're trying to find some miniscule source of noise in an extremely quiet rural location.

My usual noise hunting procedure starts with a list of frequencies with RFI as detected on the station receiver. If the station has directional antennas, you might already know where to start looking. This antenna should exhibit a sharp null (looking thru the loop) and also a peak at 90 degrees to the null. It is most effective when the noise source is nearby, within a few wavelengths. If you walk right up to a noise source, the directionality often collapses but the relative signal strength can still tell you when you are getting closer. If the source is down the block somewhere, walk along with a Google Earth image of the neighborhood on a clipboard and draw heading lines from many locations. They will tend to intersect at some location. I easily found a problem in a nearby garage that way. Happy hunting!

References

1. Frank Dorenberg, N4SPP, "Small Magnetic Transmitting Loop for 80-20 Mtrs." <u>https://www.nonstopsystems.com/radio/frank_radio_antenna_magloop.htm</u>

NCCC May 31st Lunch Gathering

The occasion of a visit by Dennis, W1UE, president of YCCC and former resident of the Bay area, provided a great excuse for a lunch gathering. We met at Sam's barbecue on Bascom in San Jose on Friday May 31st. This was an appropriate venue, just a block or so from the location held so long by Quement Electronics. In keeping with the theme of the articles in this edition, three of the attendees were prominent in N6BV's Hall of Fame trek - Dennis and Jack submitted the applications for their respective clubs, and John gave a very good speech at the dinner in Dayton



Order round Table L to Right Empty Chair Bill W9KKN took the photo, Jim K9YC, Brian NT6F, Rick N6XI, Dennis W1UE, John K6MM, Jack W6FB & Tom K6EU

A great time and good food were enjoyed by all! Perhaps we might wish to do have a lunch gathering on a regular basis?

Ham Life in Hell; or How I chased interference.

AJ6CY Roberto May 2019

I own an Icom IC7300. That little Rig is amazing and one of the features that attract us all is that we don't only listen to stations; we can "see" them. There is nothing better for a ham that having a clean screen with candle lights pouring wax down the waterfall. Well, one day in April this is what showed up on my screen:



This was in 80m, 40m, 20m, everywhere with different strengths.

My first thought was to find out where it was coming from:

1) The Rig? To rule out the IC7300 was misbehaving I used an SDR Dongle on a laptop and connected the same antenna (AV680 vertical) that was connected to the IC 7300. This was the result of the experiment:

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So the problem was not the rig.

2) The antenna? I swapped antennas with a homebrew buddipole 20m and also could see the inference.

By that time it was clear that this signal was coming to the antenna from somewhere.

When I was on vacation in Brazil last March, my friend Fabio: PU2KLM gave me a Grundig SW Radio that has an antenna jack suitable for listening to these types of signals. My other friend Gary NA6O, lent me a small directional mag loop that being used with the radio gives you a portable way to chase the signal and point to the direction of maximum strength. I proceeded to walk around the yard and when I went to the back of the house the signal was very strong. The antenna was pointing to a particular neighbor's house. I left the house and walked around the block with the "RFI chaser" (antenna and radio) hoping nobody would call Police.



When I got close to this particular neighbor's house the signal was boosting. I turned in different directions to make sure it was that house and sure enough it was evident. The big problem started. How to approach a neighbor about a problem they don't care about. My neighborhood does not have HOA so I installed my AV680 without having to ask anybody for permission (but my XYL). An argument or a miscommunication could easily trigger neighbors talking about forming an HOA.

I knew that this particular owner was at some point very active on a neighborhood phone app called Next door. I sent her a very polite and private letter through the application talking about my hobby, how I help the community with events, how we take care of potential emergencies and that my station was shut down with this interference. We Hams have some tools to help us point to the origin of the signals and we also have ways to mitigate this without disturbing normal life (chokes and such). Four weeks passed by and no answer.

Last weekend I decided to go for a walk and when I passed by their house the owner was taking the garbage bins out. I stopped and introduced myself and he was very friendly. I explained my hobby and that something last month happen and I was worried because it could point to an electrical malfunction. He agreed for me to bring the "RFI chaser". I explained in very simplistic words how that worked and demonstrated the different noises coming out of the radio as I rotated the antenna and the strongest signal was coming from his house. We went to the backyard and he showed me that nothing was there but my radio screamed as I pointed to a window. I asked: What's there? He said it's the Garage. We moved to the Garage and the noise was increasing in level as we walked in.

Suddenly I saw something plugged on the wall next to a car covered for storage. He mentioned it was a trickle charger so the car battery won't be dead when they decided to use it. **Aha!!!** However, he insisted it couldn't be that. He had it for 4 years and I noticed the interference only the last month. I asked if I could unplug the device. When I did the noise disappeared. He was then totally convinced that was the culprit but why the last month? I speculated perhaps the charger was going bad or the battery was going bad and overstressing the charger. In any case I came back to my house and picked up a bunch of ferrite cores. I chocked the line that goes from the charger to the battery at the charger edge (so the cable could not act as an antenna). My XYL was videoing the screen of the IC7300 with her phone to my phone while I wound as many turns as I could on the core.

Finally the interference disappeared. Talking with Gary NA6O later he mentioned that it would have been good to choke the AC line too since the house wiring would make for a very good antenna. I did not have any more of the type of chokes that can be opened and closed so I could not do it. The plug would not let me pass more than one turn at most.



This is a picture of the tender with the installed ferrite core:

I am helping the neighbor now get a new trickle charger that is not defective and is not making so much RFI.

I purchased a BMW tender and tested it in my Garage with my minivan to make sure it was not spewing RFI debris and it was clean. Since the choke worked well I installed one on both sides of the charger as depicted in the picture just in case.



This is what the screen looks like now:



Ham life is now paradise. The most difficult part of this type of problems is how to approach the suspect neighbor, how to make them collaborate and participate in the chase and how to make it so that they see they get something in return. In this case a new tender charger and avoiding potential risks. Have a lot of patience and wait for the right moment to approach



Meeting Minutes, 5/11/2019, Cattlemen's, Livermore

Greg DesBrisay, N6GD, NCCC Secretary

New member approved!: K6HS, Hank Styron (Hank has lots of VHF contest experience!)

Upcoming contests:

We have a shot at winning CQ WPX CW!

Upcoming meetings:

The board are hammering out the meeting calendar for the next year. We try to stage meeting outside of the Silicon Valley Area every other month, and we try to co-host those meetings with neighboring clubs. Unfortunately scheduling out-of-area meeting this fall are a challenge with so a full contest calendar and conflicting schedules for neighboring clubs. The full calendar for this coming year will be published soon. In the mean time, here are a few dates that are set:

- June 11: Tony & Alba's, San Jose, N6XI on the new spectrum display in N1MM+
- July 27: Joint meeting with MLDXCC--Stockton?

Dec 9: Holiday Party @ Michael's at Shoreline

Presentation:

California QSO Party--Activate Fifty-Eight, County Expeditions in 2018

Glen had a personal emergency today, so Jim Brown expertly filled in for Glen and delivered Glen's presentation.

The presentation slides will be posted online.

Key takeaways:

--Lots of groups are making expeditions to counties that wouldn't otherwise be on the air, and they're having fun!

--Get out there and put more counties on the air. Dean's analysis shows that each county need only be put on the air for one day to make it possible for out-of-state contestants to get a sweep of all counties.

--A few rules changes are being considered to encourage county-line operations.

Attendees:

AJ6CY, K6GHA, K6JAT, K6TQ, K9YC, KD6WKY, KI6OY, N3ZZ, N6AJS, N6GD, N6TV, NA6O, NS6T, NT6F, W6FB, W6GJB, W6RC, W6SFI, W9KKN, WB6ETY, WT6K

Online Attendees:

K6MR, N6RNO











Point Generator Profile – KF6NCX

(Interviewed by Bob, W1RH)

Larry Mitchell, KF6NCX

Location: Chico, CA

Larry, KF6NCX is this month's Point Generator Profile. The nice thing about these NCCC Jug profiles, is that they have featured both the small, medium and large stations in the Club. Without all of them, this club simply cannot win contests. Every point counts, and that includes the points that Larry contributes to the Club.

Larry has what NA6O would call a Pea-Shooter station, but that little station has been active! I was amazed at what popped up on 3830....173 contests, since he began posting in 2014. By far, CW Ops is the most prominent among them, but you'll also find many QSO parties and some of the big contests listed. It's pretty clear that Larry is an accomplished CW operator that K6RB would be proud of!

Now, more from Larry:

Ham History: If someone had told me in 1995 that I would soon become a ham radio operator, I would have thought they were crazy. Ham radio was among the farthest things from my mind. In fact, I'd had virtually no exposure to the hobby. As it happened, the mother of the best friend of my 10-year-old son, Jevon, thought it would be good for the boys to become hams. (Her father was a ham).

One day I came home from work to find 70-year-old Bill Pope, W6TKE (SK) and Jevon making a 2-meter ground-plane antenna in our back yard. A few months later, when I heard Bill and Jevon listening to CW and understanding it, I was amazed. Suddenly, I was hooked on ham radio.

I was commuting to work on my bicycle at that time, so I rigged up a system so I could hang a small tape recorder around my neck and listen to code, a few letters at a time, as I pedaled back and forth between home and work. In time, I learned the alphabet and numbers and was able to pass the 5 wpm exam and become a novice in 1997.

Jevon, KE6YLH, and I got interested in contesting through Field Day. The local radio club, which Bill had helped found in 1939, held its FD operation up in the mountains near Chico. We'd have a lot of fun there. So we were excited to discover that contests were held on a regular basis, although the fast CW was quite a deterrent, especially since we were only using straight keys at the time. Eventually, we made some progress with contesting and the rest is history.

How did you happen to join NCCC?: I didn't even know contest clubs existed until about three years ago. One Saturday I got on the air hoping to work stations in a state QSO party. I only heard one contester — someone calling "CQ Test" but not identifying any particular contest. So, I sent him an email to ask if he was in the QSO Party. He wasn't. He was hoping to work hams in a contest based in England and Ireland. We started an email conversation in which I asked questions about contesting. After a few days of emails, he said he had a demanding job and couldn't answer so many questions. Fortunately, I lived within the NCCC's magic circle, he said, and he recommended I apply for membership to get my questions answered.

How has your experience been as an NCCC member? It's been great. Everyone has been friendly and help-ful.

What could NCCC do to make your ham life more wonderful? Gary Johnson, NA6O, describes small stations like mine (and his) as pea-shooters. I'd like to see a list of members with pea-shooter stations. It would be fun to communicate a bit and prepare notes.

How much property do you have? About a third of an acre, a largish city lot.

Describe your antenna system: My antenna is a 130-foot long wire that is end fed. It's a half wave made by MyAntennas.com. You could say I have three "towers" supporting this antenna. On the west side, nearest the shack, is a five-foot wooden post that anchors the antenna and its transformer. The wire rises from this post to a branch in a maple tree about 15 feet up. From there it rises to the eastern "tower," our tall liquidambar tree. It's held up by a rope over a branch, about 45 feet up. Finally, the wire runs a fairly short length to the north, where its end is held up at the 25-foot level by a branch in another maple tree. I also have a Buddipole for portable use.

Future: This is as grand as my backyard antenna farm will get although I'd like to add a small amplifier at some point for those DX contests. I want to improve my CW skills and learn RTTY.

What's in your shack? My transceiver is a Yaesu FT-450D. I've got an automatic antenna tuner. The other important element is an HP laptop which contains the N1MM+ logger.

What are your previous QTH's? Chico is my only radio QTH.

If you're working, what is your career? If not, what was your career? I retired in 2013 after a career as a newspaper reporter. I worked at papers in Newhall, Ashland, OR, Glenn County, Paradise and Chico.

Married? Kids? Grandkids? I'm married to Margot, who is not a ham but whose attitude toward the hobby is benevolent. We have two grown kids, Jevon and Bryna. No grandkids but two granddogs, Mijo and Sophie.

How many DXCC entities have you worked? I really haven't kept track although now I am starting to. At this point, I'll guess about 20.

What are your favorite contests? CQP and the big CW DX contests like the CQ WPX. I'm also a fan of the CW OPS Club's weekly one-hour CWT.

Any other hobbies besides ham radio? I enjoy trying to play old-time and bluegrass guitar. Once upon a time, I was a semi-regular golf duffer. I'd like to get out on the course once in a while again.





















Revised March 1, 2019

Current rules and standings are always available at http://nccc.cc/awards.html.

Purpose: To provide a means of rewarding NCCC members who are DX contesters, sprinters, VHFers, and especially active contesters in all modes.

Time period: The contest year starts at 0000 March 1 UTC. ARRL DX SSB is the first contest of the year. NAQP RTTY is the last.

Eligible contests: Currently, points from 29 contests are counted. See the table on the next page

Scoring:

Score = N_Contests * sum of (points for each contest * each contest's multiplier).

Where N_Contests is the number of contests you participated in, with a maximum value of 20. Points for all contests in which you participate are always counted.

NCCC weekly sprints are special. Points for the entire year are added up, but it is only counted as a single contest.

Multi-ops: Points = total score divided by the number of operators.

Station owners: A station owner who does not participate in a particular contest receives 25% of the points.

Valid scores: Only scores posted to 3830scores.com are counted. Scores obtained by use of High Power in the 6 NAQP competitions and the NS CW/NS CW Ladder series will not be counted for the KB competition, either as scores or as contest multipliers. Scores are counted regardless of which club received the contest points (NCCC, MLDXCC, REDXA, PL259, etc.). The only requirement is that you MUST be an NCCC member to receive credit for the contest, and to be eligible for an award.

Brackets: There are four independent brackets for the purpose of awards: 1-Platinum, 2-Gold, 3-Silver, and 4-Bronze. Brackets are assigned at the beginning of the contest year according to your final position in the previous year's standings.

Awards: Paid NCCC members may receive awards.

How to Improve Your Standing

Post all your scores on 3830. Those are the only ones that count.

Participate! Even the smallest score has value. Every contest on the list is a multiplier.

Try a new mode or a new band (VHF, 10, 160).

Try the sprints. Small score, big multiplier.

Go for a big score in WPX: Exponential score growth and a big multiplier.

Join a multi-op: The score is split among ops.

Let someone else use your station: You get 25%.

Comments are welcome, as always. I log and track every comment and suggestion and try to improve the KB Competition each year. The one thing I can guarantee is that each year will be different!

Contact: Gary NA6O, NCCC Awards Manager, gwj@wb9jps.com

Neece Annual ICB competition Table					
Contest	Month	Mult			
ARRL DX Contest SSB	March 2	10			
CQ WPX SSB	March 30	10			
7QP	May 4	20			
NEQP	May 4	150			
CQ WPX CW	May 25	5			
ARRL June VHF	June 8	500			
RAC Canada Day	July 1	15			
IARU HF World Championships	July 13	10			
NAQP Summer RTTY	July 20	25			
NAQP Summer CW	August 3	25			
NAQP Summer SSB	August 17	25			
CQWW RTTY	September 28	5			
NA Sprint Fall CW	September 8	150			
CQP	October 5	10			
Makrothen RTTY Contest	October 12	1			
CQWW SSB	October 26	6			
ARRL Sweepstakes CW	November 2	15			

NCCC Annual KB Competition Table

ARRL Sweepstakes SSB	November 16	15
CQWW CW	November 23	3
ARRL 160 Meter Contest	December 6	30
ARRL 10 Meter Contest	December 13	100
ARRL RTTY Roundup	January 4	50
NAQP Winter CW	January 11	25
NAQP Winter SSB	January 18	25
NA Sprint Winter CW	February 2	150
CQ WPX RTTY	February 8	10
ARRL DX Contest CW	February 14	4
NAQP Winter RTTY	February 22	25
NCCC Sprint CW	Weekly	50

KB Award Brackets

There are four independent brackets for the purpose of issuing awards: 1- Platinum, 2- Gold, 3-Silver, and 4-Bronze. Your bracket is assigned automatically at the beginning of the contest year according to your final position in the previous year's standings. New members or those who have never posted a score to 3830 default to the Bronze level. On the left, is an alphabetical list of the current assignments to the top three brackets. If your call is not listed, you are in Bronze. If you believe your current bracket is incorrect, please contact NA6O.

Platinum	Gold	Silver
AD6E	K3EST	AE6JV
AE6Y	K6AW	AJ6CY
AF6SA	K6DGW	KOBEE
AJ6V	K6IJ	КОЈР
K2RD	K6JS	K6KR
K5RC	K6MR	K6MI
K6DAJ	K6NV	К60К
K6EU	K6RIM	K6RB
K6GHA	K6TQ	K6ST
K6LRN	K6UF0	K6TD
көмм	КН2ТЈ	K6UM
K6SRZ	KH6LC	K6XN
K6XX	N0KQ	K6XV
K7XC	N2NS	K7GK
K9YC	N5KO	K7MKL
KA6BIM	N6EE	KA6W
N3RC	N6IE	KD6WKY
N3ZZ	N6JV	KE6GLA

Platinum	Gold	Silver
N6RO	N6KT	KE8FT
N6TV	N6PN	KF6NCX
N6WM	N6RK	KI60Y
N6ZFO	NC6R	KM6I
N7MH	NJ6G	KU7Y
NA60	VE3RUA	КХ7М
NW6P	W6DR	N6DE
W0YK	W6EU	N6DW
W1RH	W6FB	N6GD
W1SRD	W6IA	N6JS
W2SC	W6JTI	N6NU
W6FA	W6LD	N6XI
W60AT	W6NV	N6YEU
W6SX	W6RC	NQ6N
W9KKN	W7IV	NR6Q
WC6H	WB6JJJ	OH1VR
WX5S	WU6W	VY1JA
		W6GJB
		W6NL
		W6RGG
		W6SC
		W6SR
		WA6O
		WE6Z
		WK6I
		WU6X
		WX6V

NCCC Life Membership!

The NCCC Life member program was introduced for a flat fee of \$250. If you are interested in becoming an NCCC Life member, please contact <u>secretary.nccc@gmail.com</u>

80/20 Rule:

Members who have reached 80 years young and been a NCCC Member for 20 years are eligible for Honorary life membership. Contact <u>secretary.nccc@gmail.com</u>

Forthcoming NCCC Meetings

July 27th, Joint meeting with MLDXC Program K9YC

BoD meeting minutes

The monthly minutes from the NCCC BoD meetings are available in the members only section of the NCCC website. See http://nccc.cc/members/minutes.html

JUG Articles Wanted!

Without your help we cannot reproduce a quality newsletter so please consider submitting a suitable article!

We welcome any and all relevant articles for inclusion in the JUG.

Deadline is 7 days before month end. Preferred format is MS Word, Arial 12 point and pictures should be full resolution. Send your material to Ian, W6TCP at w6tcpian@gmail.com Don't worry about the formatting, we can take care of that if necessary !

Tube Of The Month Norm, N6JV

Visit the Museum: www.n6jv.com

WE 101(*)

Western Electric was very interested in the new triode that DeForest had invented. They needed something to replace the mechanical repeaters they were using. By 1914 they were making a small triode called the 101A for use as a repeater amplifier. They knew that "long distance" telephone service was going to be the ultimate money making application. In 1914 telephone service began from New York to San Francisco. This only required the erection of 130,000 telephone poles and stringing 2500 tons of copper wire. The 101A tubes were used in eight repeaters on the line. The 101A had a filament that used 4 volts at 1.45 amps. The maintenance on the tubes and the batteries must have kept them busy.

As improvements were made, the 101A was replaced by the 101B, 101D and finally the 101F. The 101F had a 4 volt, half amp filament and had a life of 40,000 hours or 50 times longer than the older 101A. In the late 1920's, over 50,000 tubes were in use in the Bell system. The shape of the bulb was changed in the late 1930's and it was continuously produced until about 1984. This family of tubes was the first to use the bayonet base with its side pin that is still used today.

The first example shown is an early 101D with the plate in two pieces so you could see the guts from the side. The second example is a 101F with the early patent dates marked on the glass and the closed sided plate. These tubes are known as "tennis ball" tubes.



Hornet ARC needs our help...



Historic Landmark Restoration Project

I recently received a note from Mark Gang, N6SF of the Hornet ARC. The club has started a gofundme page to raise money to repair antennas on the ship. In the spirit of originality and preservation the antennas they use are only those that were installed on the ship when it was decommissioned in 1970. These antenna installations are now 50 years old and in need of serious repairs. Most are located on the ships mast, the top of which is 190 feet above the water line. Due to possible corrosion and other issues the only safe way to reach some of the antennas is with a large crane which will be very expensive. Thus the reason for the gofundme page.

You do not have to be a ship volunteer to be a member of the Hornet ARC and guests are welcome with coordination. Members and guests do not have to pay the ship entry fee to access the club station. The station includes 6 operating positions using military radios on loan from the Air Force.

Aircraft Carrier Hornet Foundation preserves and honors the legacy of USS Hornet, a national historic landmark, and its role in naval aviation, the defense of our country, the Apollo Program and exploration of space. The USS Hornet Sea, Air & Space Museum connects the greatest generation of Americans with future generations, educating and inspiring them to meet their challenges.

Go Fund Me page https://www.gofundme.com/uss-hornet-antenna-restoration



Contest Calendar– June page 1

PVRC Reunion	00
	0
10-10 Int. Open Season PSK Contest	00
DigiFest	04
	2
	1
Wake-Up!QRP Sprint	06
	0
	0
	0
SEANET Contest	12
UKSMG Summer Contest	13
Kentucky QSO Party	14
RSGB National Field Day	15
Dutch Kingdom Contest	15
IARU Region 1 Field Day, CW	15
ARS Spartan Sprint	01
Phone Fray	02
CWops Mini-CWT Test	13
	1
	0
NRAU 10m Activity Contest	17
	1
	1
	2
SKCC Sprint Europe	19
NCCC RTTY Sprint	01
NCCC Sprint	02
HA3NS Sprint Memorial Contest	19
	1

0000Z-0200Z, Jun 1 and 000Z-0200Z, Jun 2 007, Jun 1 to 2400Z, Jun 2 100Z-1200Z, Jun 1 and 000Z, Jun 1 to 0400Z, Jun 2 and .200Z-2000Z, Jun 2 500Z-0629Z, Jun 1 and 630Z-0659Z, Jun 1 and 700Z-0729Z, Jun 1 and 730Z-0800Z, Jun 1 200Z, Jun 1 to 1200Z, Jun 2 300Z, Jun 1 to 1300Z, Jun 2 100Z, June 1 to 0200Z, Jun 2 500Z, Jun 1 to 1500Z, Jun 2 500Z, Jun 1 to 1500Z, Jun 2 500Z, Jun 1 to 1459Z, Jun 2 L00Z-0300Z, Jun 4 230Z-0300Z, Jun 5 300Z-1400Z, Jun 5 and .900Z-2000Z, Jun 5 and 300Z-0400Z, Jun 6 700Z-1800Z, Jun 6 (CW) and .800Z-1900Z, Jun 6 (SSB) and .900Z-2000Z, Jun 6 (FM) and 2000Z-2100Z, Jun 6 (Dig) 00Z-2100Z, Jun 6 45Z-0215Z, Jun 7 230Z-0300Z, Jun 7 00Z-1929Z, Jun 7 (40m) and 1930Z-1959Z, Jun 7 (80m)

Contest Calendar– June page 2

DRCG WW RTTY Contest

VK Shires Contest Asia-Pacific Sprint, SSB Portugal Day Contest SKCC Weekend Sprintathon GACW WWSA CW DX Contest REF DDFM 6m Contest ARRL June VHF Contest Cookie Crumble QRP Contest 4 States QRP Group Second Sunday Sprint RSGB 80m Club Championship, Data NAQCC CW Sprint Phone Fray CWops Mini-CWT Test

NCCC RTTY Sprint NCCC Sprint All Asian DX Contest, CW SMIRK Contest ARR BPSK63 Contest Ukrainian DX Classic RTTY Contest IARU Region 1 50 MHz Contest AGCW VHF/UHF Contest

Stew Perry Topband Challenge West Virginia QSO Party ARRL Kids Day 0000Z-0759Z, Jun 8 and 1600Z-2359Z, Jun 8 and 0800Z-1559Z, Jun 9 0600Z, Jun 8 to 0600Z, Jun 9 1100Z-1300Z, Jun 8 1200Z, Jun 8 to 1200Z, Jun 9 1200Z, Jun 8 to 2400Z, Jun 9 1500Z, Jun 8 to 1500Z, Jun 9 1600Z, Jun 8 to 1600Z, Jun 9 1800Z, Jun 8 to 0259Z, Jun 10 1700Z-2200Z, Jun 9 0000Z-0200Z, Jun 10 1900Z-2030Z, Jun 10 0030Z-0230Z, Jun 12 0230Z-0300Z, Jun 12 1300Z-1400Z, Jun 12 and 1900Z-2000Z, Jun 12 and 0300Z-0400Z, Jun 13 0145Z-0215Z, Jun 14 0230Z-0300Z, Jun 14 0000Z, Jun 15 to 2400Z, Jun 16 0000Z, Jun 15 to 2400Z, Jun 16 1200Z, Jun 15 to 1200Z, Jun 16 1200Z, Jun 15 to 1159Z, Jun 16 1400Z, Jun 15 to 1400Z, Jun 16 1400Z-1700Z, Jun 15 (144) and 1700Z-1800Z, Jun 15 (432) 1500Z, Jun 15 to 1500Z, Jun 16 1600Z, Jun 15 to 0400Z, Jun 16 1800Z-2359Z, Jun 15



Contest Calendar– June page 3

Feld Hell Sprint	1800Z-1959Z, Jun 15
WAB 50 MHz Phone	0800Z-1400Z, Jun 16
Run for the Bacon QRP Contest	0100Z-0300Z, Jun 17
Phone Fray	0230Z-0300Z, Jun 19
CWops Mini-CWT Test	1300Z-1400Z, Jun 19 and
	1900Z-2000Z, Jun 19 and
	0300Z-0400Z, Jun 20
RSGB 80m Club Championship, CW	1900Z-2030Z, Jun 19
NAQCC CW Sprint	0030Z-0230Z, Jun 20
NCCC RTTY Sprint	0145Z-0215Z, Jun 21
NCCC Sprint	0230Z-0300Z, Jun 21
His Maj. King of Spain Contest, SSB	1200Z, Jun 22 to 1200Z, Jun 23
Ukrainian DX DIGI Contest	1200Z, Jun 22 to 1200Z, Jun 23
ARRL Field Day	1800Z, Jun 22 to 2100Z, Jun 23
QCX Challenge	1300Z-1400Z, Jun 24 and
	1900Z-2000Z, Jun 24 and
	0300Z-0400Z, Jun 25
SKCC Sprint	0000Z-0200Z, Jun 26
Phone Fray	0230Z-0300Z, Jun 26
CWops Mini-CWT Test	1300Z-1400Z, Jun 26 and
	1900Z-2000Z, Jun 26 and
	0300Z-0400Z, Jun 27
QRP Fox Hunt	0100Z-0230Z, Jun 27
RSGB 80m Club Championship, SSB	1900Z-2030Z, Jun 27
Battle of Carabobo International Contest	0000Z, Jun 28 to 2400Z, Jun 29
NCCC RTTY Sprint	0145Z-0215Z, Jun 28
NCCC Sprint	0230Z-0300Z, Jun 28
Feld Hell Sprint	0000Z-2359Z, Jun 29
UFT QRP Contest	0600Z-0900Z, Jun 29 and
	1400Z-1700Z, Jun 29



NCCC Membership Information

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

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

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

JUG Articles Wanted!

Without your help we cannot reproduce a quality newsletter so please consider submitting a suitable article!

We welcome any and all relevant articles for inclusion in the JUG.

Deadline is 7 days before month end. Preferred format is MS Word, Arial 12 point and pictures should be full resolution. Send your material to Ian, W6TCP at w6tcpian@gmail.com Don't worry about the formatting, we can take care of that if necessary !

Northern California Contest Club Reflector—Guidelines

This reflector is devoted to the discussion of contesting.

This includes contests, station building, dxpeditions, technical questions, contesting questions, amateur radio equipment wants/sales, score posting, amateur radio meetings/conventions, and membership achievements.

This does not include personal attacks, politics, or off-subject posts which will be considered a violation of the Guidelines.

Violations may result in removal of the violator from the reflector and possibly from club membership in good standing.



Find us on Social Media



Page 43



MULTI-STORE BUYING POWER!





IC-7610 All Mode Transceiver



IC-7200 HF Transceiver



IC-7100 All Mode Transceiver



ID-5100A Deluxe VHF/UHF Dual Band Digital Transceiver



ID-51A Plus2 VHF/UHF D-STAR Portable





TS-590SG HF/50MHz Transceiver



2M/440 Dualband





TM-281A 2 Mtr Mobile



TH-D74A 2M/220/440 HT





FT-991A HF/VHF/UHF Transceiver



FTDX1200 100W HF + 6M Transceiver



FT-450D A100W HF + 6M Transceiver



FTM-400XD 2M/440 Mobile



FT-60R 2M/440 5W HT



Contract-WHO for protocology details. Yest the including Human And Calcula, Cell with to taken and taken as HHOC 200 Homes an another yes. If the first liver yes with in large yes may use instants AC, CA, CD, CA, TV, We residents and active taken





TM-0710G



TM-V71A 2M/440 DualBand