JUG

Publication of the Northern California Contest Club

NCCC

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NCCC Net
Thursday 8 PM
3610+/-

Our Next Meeting

Next Generation Radios and Signal Processing Software

Jeffrey Pawlan, WA6KBL

Date: Monday, 11 February 2008
Time: 6:00 pm schmooze, 7:00 pm dinner, 8:00pm program

Location: Tibco, Building 2, 3301 Hillview Avenue, Palo Alto, CA 94304

Dinners – pizza, salad, soft drinks - $10 per person

RSVP: to K6MM, webaron@gmail.com

Directions:

Go to www.nccc.cc, and select "meetings."

Presidential Musings

Bob Tellefsen, N6WG

Well, January CW NAQP is now past; a fun contest, as always. I still see a number of calls on our SCORES page with no scores, though. If you haven't already passed your results on to Ed, W0YK, please do so for inclusion in our results. Or you can post them on the NCCC reflector for us all to share. Ed will pick them up from there.

The CQ WW CW 160m contest was fun, too, with much better conditions that the ARRL 160 CW in December. Please send your results for this one to W0YK also.

I think I'll talk about the SCORES web section for a moment. This is an important resource for several reasons. For the individual, it is an easily accessed repository of your previous "pre-log-checking" results for any given contest. It also provides your history of all the contests you have entered. If you are trying to beat, or even keep up with, a friend, you can see how he has been doing in the past and what you will probably have to meet or exceed.

For NCCC, particularly for contests in which we actively compete as a club, it allows us to get visibility on how we are doing, and importantly, who may not have turned in his results! Of course, the LOGS RECEIVED section of some sponsors' web pages help with this. The key point is that logs not submitted deprive NCCC of your

points. In a tight race, even a few small logs can add up to a win or loss.

It's particularly important for members relatively new to NCCC to turn in their scores. We have a number of awards which are given out each year at the March Awards Dinner meeting. Some focus on our primary contest, usually Sweepstakes. Some focus on other contests, and some focus on newer contesters, such as Most Improved Contester or Rookie of the Year. When we work up these awards, the SCORES page is our primary reference work. So, please be sure your scores are in there for us to see.

That's enough for now. See you in the contests.
73, Bob N6WG

VP/CC Report for February 2008

Alan Eshleman, K6SRZ

There are many contests scheduled for February. As always, you can find complete listings and links to the rules of contests at the WA7BNM Web site: http://www.hornucopia.com/contestcal/contestcal.html

Here is a selected list:

There are several state and provincial QSO parties scheduled for February, including:

Vermont February 2-3
Delaware February 2-3
Louisiana February 9-11
New Hampshire February 9-11
British Columbia February 9-10
Mississippi February 23-24
North Carolina February 24-25

Because it's Leap Year, there will be five Thursday night NCCC sprints in February.

CQ WPX RTTY February 9-10

ARRL International DX Contest CW February 16-17

CQ 160 SSB February 23-24

NAQP RTTY February 23-24

A few days ago I met with other officers of the NCCC to plan the March meeting awards program. Some of the NCCC awards are well defined, for example the KB 1000 award. Others are more subjective. It's not my plan for this report to reveal who will get what award. But what I took away from our meeting is yet another reminder of what a talented, committed, and unselfish bunch of members we have.

A big reward for this commitment will come at Dayton later this spring when NCCC will accept the gavel signifying our first place finish in the 2007 ARRL Sweepstakes Unlimited Club Championship. Five in a row! That's impressive.

It's also impressive that we were able to turn out five five-person teams for the recent CW NAQP.

This winter has been the first time that I've been able to get on 160 with any sort of signal. One-sixty is truly a strange and challenging band. After each 160 contest, I've seen lots of chatter on various ham radio reflectors about all the "lids" on 160 who are tarnishing the reputation of this "gentleman's band". Most of the complaints are about calling out of turn or calling while a DX station is transmitting. While I agree that this behavior is frustrating, I'm not entirely convinced that the guilty parties are lids.

One-sixty can be a stern mistress. A maximal effort on 160 requires a lot of real estate, high power, and specialized receiving antennas. Few of us have the space for a 600 foot Beverage and most of the folks who turn out for 160 contests are using the same antenna for transmitting and receiving. Couple this lack of specialized antennas with the rapid and profound QSB that sees on top band and the reason that some operators are calling out of turn becomes clearer: they are calling out of turn because they hear only QRN where only a

few seconds ago they heard a DX station and they assume that the DX station is still looking for a call. Other operators with specialized loops, Beverages, or low background noise can still hear the DX station so they hear others calling out-of-turn.

Partial calls are another problem. I am cursed with a call that ends "RZ". When the DX sends "RZ" as a partial, half the pileup assumes this is "QRZ" and I get buried in the cacophony.

Anyhow, that's just my opinion. Your mileage may vary. And if we're talking lids, my candidates for lid eradication are the racist SHPOSs (it's medical slang: you'll have to Google it) holding forth on 75 and the
upper portion of 20 meter SSB.

As always, thanks for your help. I'll see you at the meeting.

73,

Alan/K6SRZ
VP/CC

The NCCC Newbie: Nine Ways to Have Fun and Learn Something New

Marc Ziegler, W6ZZZ

This article applies to NCCC "newbies" and to "old hands." Volunteering for NCCC activities is a GREAT way to have fun and learn something new about contesting.

1. Volunteer for JUG Articles

Any NCCC member can write an article and get it published in the JUG. Just look at this article as an example. To maximize the "value" of your article to the JUG just try to be:

- Friendly and encouraging towards contesting
- Useful to some majority of NCCC members

A series of JUG articles that I have found interesting are the "NCCC member profiles." This is where somebody visits an NCCC member and then writes a JUG article about him or her, their QTH and their contesting setup.

Heck, if you are really looking for literary fame you can parley your JUG article experience/acumen into national magazine articles for the NCJ and QST.

To volunteer to write an article, contact our JUG Editor, Rob K6RB (k6rb@baymoon.com) .

2. Volunteer for the NCCC Web Page

The NCCC web page (http://www.nccc.cc/) is always looking for more "content" to make the site even more valuable for folks. Take a look at the following web pages for new ideas or to see if you have something to add:

- Suppliers of parts and services – http://www.nccc.cc/members/suppliers.html
- Members Only Section (varied contents) – http://www.nccc.cc/members/index.htm
- NCCC History – http://www.nccc.cc/history.html
- CQP History – http://www.cqp.org/History.html

To volunteer to submit some web content contact our Webmaster, Ed, W0YK.

3. Volunteer to Recruit New NCCC Members

NCCC is always looking for new members. These new members could be contesters or just hams interested in learning a little more about contesting. There are many ways for everyone to recruit for NCCC:

- Give a contesting presentation at your local ham radio club or ARES group (there are a number of pre-packaged presentations available in the Members Only section of the NCCC web page)
- Organize or participate in your local ham radio club's Field Day
- Invite hams to your station to operate in a Multi-Single or Multi-Multi contest effort.

4. Volunteer for NCCC Team Competitions

Besides ARRL Sweepstakes, NCCC enters a number of other contests as a club. You can coordinate an NCCC team effort for a variety of contests, depending on your interests. This includes publicity, building club interest and in some cases organizing NCCC "teams". In past years this has included contests such as:

- ARRL RTTY Roundup
- Three North American QSO Parties (CW, Phone and RTTY)
- Three North American Sprints (CW, Phone and RTTY)

To volunteer, contact the current VP/CC.

5. Volunteer for a Meeting Presentation

We are always looking for members to make a presentation at the monthly NCCC meeting. To maximize the "value" of your presentation it's the same as writing an article for the JUG:

- Friendly and encouraging towards contesting
- Useful to some majority of NCCC members

To volunteer, contact the current president.

6. Volunteer for CQP

CQP can quite arguably bill itself as "the biggest and the best of the state QSO parties". Running an effort like CQP requires a lot of volunteers. There are more things than I can list but here are a few:

- Publicity (email)
- Postal mailing party to send out the brochures (manual labor is the only qualification)
- Log checking after the contest
- Postal mailing party to send out the results, plaques and t-shirts (manual labor is the only qualification).

CQP has more plaques (lumber) than any other state QSO party. Perhaps you can:

- Sponsor an existing plaque – occasionally Kent K6ENT will ask for volunteers to sponsor an existing plaque. Competition to sign up for sponsorship is fast and furious.
- Sponsor a new plaque – this is a very tough one. Besides coming up with an idea for a new plaque that has "good value for CQP" you also have to advertise, promote, champion and push your plaque to success. And do this for years.

For more information you can go to www.cqp.org.

To volunteer for CQP in general, contact the current CQP manager.

7. Volunteer for ARRL Sweepstakes

When the NCCC targets ARRL Sweepstakes as a "contest to win," there are a lot of volunteer activities. The goal of this effort is to increase our club score and "give something back to the NCCC members" such as help with:

- Upgraded antennas, or a new 80m dipole to contact "close in" NCCC members
- Logging software setup/help (WriteLog, CT, TRLog, N1MM Logger, CQPWin, etc.)
- Connecting the computer to the transceiver for logging/automation
- Connecting to Internet packet for sending and receiving spots

Another volunteer activity is the “SS Log Czar”, the person who makes sure that each and every NCCC log is submitted to the ARRL for our club score.

Sweepstakes is over for 2004. To volunteer for SS in 2005 contact the Vice President/Contest Chair.

8. Volunteer for NCCC

Certainly at the “top of the list” is volunteering to be an NCCC Officer or Board of Directors member.

To volunteer, just “speak up” at the January or February NCCC meetings. Or talk with the current president.

If anyone is interested, I have compiled a list of these NCCC Officer/BOD volunteer “stalwarts” since 1997 that I can email to you.

9. Volunteer for Yourself

And finally, every one of you can have fun, participate in contests, work other NCCC members and send in your contest log proudly indicating the “Northern California Contest Club” as your club affiliation.

I attach “Northern California Contest Club” to each and every one of my contest log submissions whether or not the contest has a club competition; ditto for any of my ARRL Soapbox postings.

The NCCC Newbie Contester’s Rate Sheet

Marc Ziegler, W6ZZZ

The “Contester’s Rate Sheet” is an email publication available free to ARRL members. It is filled with timely contest and technical information aimed specifically at contesters.

It is sent out once every two weeks (thus it won’t overload your email inbox) and is edited by Ward Silver N0AX.

Subscribing

Go to http://www.arrl.org/members-only/memdata.html?modify=1
(the Member Data Page). Scroll down to the section "Which of the following would you like to receive automatically via email from ARRL?" Check the box for "ARRL Contest Rate Sheet (biweekly contest newsletter)" and click on the “Submit modifications” button.

Archives
Go to http://www.arrl.org/rate-sheet/ for past issues of the ARRL Contest Rate Sheet. You see a list of the issues and you will have to open the issue to see the table of contents for that specific issue.

Marc, W6ZZZ

A "Double L" Antenna for 160

Rob Brownstein, K6RB

If you do an informal pole of the kinds of antennas that hams use on 160, I'll bet that you'll find that most are either inverted L's, slopers, or inverted V's.

Let's face it, getting a horizontal antenna up a half wave length on 160 means 240 feet! A quarter-wave vertical without lumped inductance would be 120 feet long! So, we make compromises.

One of the compromises for most 160 antennas is radials. An inverted L, or a short vertical, will need radials. That's what is meant to provide the ground return. Now, radials for 160 m should be long and plentiful to provide minimal ground losses.

My tower is at one corner of my property, so I have a pie slice of 90 degrees where I could lay down radials and still have them be on my property. So, even if I wanted to do that, it would be suboptimal.

I've tried slopers, inverted V's, and inverted L's, but found the performance to be disappointing in every case. Then, I found an article by Don Toman, K2KQ on the Yankee Clipper Contest Club site. Here's the URL -- http://www.yccc.org/Articles/double_l.htm.

The lead paragraph read: "A popular misconception about vertical antennas for the low bands is that they must have elaborate ground systems. Here's a vertical antenna for 80 and 160, fed with a single feed line that is simple, effective, and requires no ground system. You won't beat the 4-squares, but you will hold your own against a grounded quarter wave with ridiculous amounts of copper in the ground.

In the two years since I built my "double L," I would have to agree completely with Don. It works a whole lot better than anything I have had up before, but the 4-squares do "kick my butt."

In Don's article, he described a double L that is a full size 160 m dipole mounted from an 80-foot tower. If you visualize a vertical dipole with the top and bottom ends bent parallel to each other and the ground, and about 108 feet long, that leaves a vertical section of dipole (center fed) that is about 70 feet long.

Now, here's the best part – because it is center fed (about 45 feet off the ground), the lower portion of 35 feet plus the bent 108 foot section is the ground return. You don't need radials! Here's the other good part, that 70 foot vertical section is omni-directional

and has a decent low-angle lobe (think DX!). The two horizontal sections will pretty much cancel each other, so you end up with mostly an omni-directional, low-loss signal.

First, here are some disclaimers. Like any vertical, this antenna is not low noise. The ideal situation would be to use it in conjunction with a receiving antenna (Beverage, Uwe, etc.). I do not, by the way, and have my share of noise. But, even so, I have done much better in recent 160 m contests than with any of my earlier antennas. Could I do better with a Beverage for receiving? Sure. But, my double L has been a decent antenna.

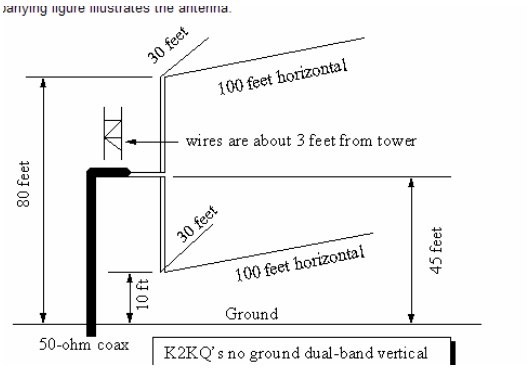
Some modifications

As I wrote earlier, Don's design uses an 80-foot tower, with the lower end of the double L up 10 feet above the ground, and the top section at 80 feet. That gives him the 70 foot vertical section. My tower is 72 feet high. So, my bottom section is also 10 feet off the ground, but the top section is only 70 feet up. Therefore, my vertical section is 60 feet. Without rigorous calculation, the vertical section will have lower radiation resistance in my case, and be slightly less efficient than Don's antenna. If you have a 50-foot tower, you're talking about a 40-foot vertical section. That will be less efficient than my 60-foot. But, keep in mind that with the bent sections, you have a full-size 160 meter antenna. There are no coils to add ohmic losses. And, even the 40-foot section is vertical, with omni-directional behavior and a low-angle lobe.

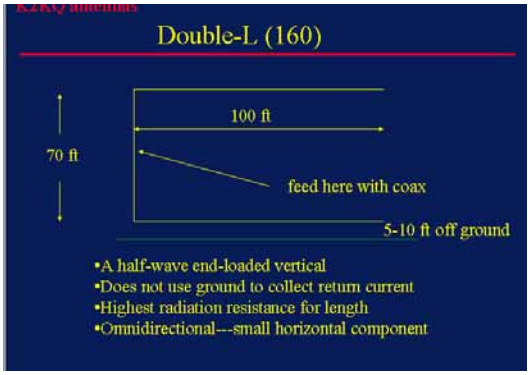
My friend, John, N3AM, did a software analysis of my double L compared with an inverted V with apex at 72 feet. There was significantly better low-angle from the double L and less NVIS radiation.

Don Toman's article described an 80 and 160 double L where you build two vertical dipoles – one of 80 and one for 160 – and feed both at the midpoint. The 80 meter double L also has a 70-foot vertical segment, so it is even more efficient than the 160 m portion.

Here's Don's diagram from the article:



I also found Don's PowerPoint online that dealt only with a 160 m version. Here's the diagram from that source:



Lastly, for those of you who insist on using an inverted L or shortened vertical. Don has a suggestion for a better radial design: