

Publication of the Northern California Contest Club



Issue 492 May 2013

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Guests are always welcome at the NCCC!
Please join us.

Monday, May 13, 2013

Time:

6:00pm schmooz, 6:30pm dinner, 7:00pm program

Location:

Cattlemens, 2882 Kitty Hawk Rd, Livermore, CA 94550, 925-447-1224

Program:

- 1. NCCC President's goals for 2013-2014
- 2. Plans for upcoming WPX CW Contest
- 3. Video from the 3D2C DXpedition
- 4. TF4X Dxpedition presentation

To register:

Please email your callsign, number attending and entree choices to Tom NS6T here: nccc.treasurer@gmail.com



From the President...



Now begins my term as President of the NCCC. I must say that I did not seek the office, but, after a few sessions of flattery and arm twisting, I agreed. A big factor in making my

decision was the use of WebX to broadcast our meetings. This is especially important to this NCCC officer who doesn't reside on the Peninsula and who faces a three to four hour round trip to attend Monday night meetings. I'll be present in the flesh for the May meeting, but plan to be present from my home "studio" via desktop computer for many other meetings during the year.

For those of you who don't know me, here are a few salient facts: I'm a 69 year-old retired physician first licensed in 1956 (7th grade). I was off the air from 1962 until 1996, but am now a fairly active DXer (DXCC = 346) and contester. I was recruited to the NCCC while attending meeting of the NCDXC. My local club is the Redwood Empire DX Association, which is one of the vanishing few local clubs with an emphasis on HF operations.

My ham radio career began, strangely, with a boost from the late Senator Joseph McCarthy and his ilk. Let me explain.

In 1956 I accidentally discovered the world of shortwave while fiddling with the controls of my grandfather's big console radio with its glowing green tuning eye.



K6SRZ

AD6E

NS6T

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K6DGW

W1SRD

к9үс

WT6K

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Thursday Night Contesting:

NCCC—Sprint NS Ladder Slow NS (SNS) Ken Keeler Bill Haddon Chris Tate

N6RO N6ZFO N6WM kenkeeler@jazznut.com haddon.bill@gmail.com ctate@ewnetinc.com

NCCC Net

Thursday 8 PM Freq: 3.610 +/-

NCCC

Monthly meetings take place on the second Monday of each month!

Details in May JUG

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. (<u>PDF application form</u>)

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).

Before long I was listening to the BBC, Radio Moscow, NHK, and other international broadcasters and collecting their SWL cards.



The beautiful HRO-W

Now, flash forward a few months to when I visited the home of my 7th grade girlfriend. There, sitting on a table in her father's den, was the coolest radio I'd ever seen: a National HRO-W (the W for "wartime") in a black crackle cabinet sitting next to a wooden box of plug-in coils. Her father switched it on and let me play with the controls. It was amazing.

"So," he said. "I can see you are interested in radio. Would you like to learn more? Would you like to get a license and have your own station?"

"Well, yes, I guess so," I said not really knowing what I was getting into.

My girlfriend's father had been a shipboard radio operator—a commercial telegrapher—for many years. But he had also been a labor organizer, and, in the mccarthyite hysteria of the 50s that was enough for the FCC to brand him a security risk and to pull his ticket.

So, banned from the art of Morse code, which he clearly loved, and the father of girls [nothing against YL operators here, but in 1956 there weren't many girls interested in ham radio], I think he saw in me a way of getting back on the air, if only by proxy. Thus began my education as a radioman. While my fellow 7th graders were observing bean seeds sprouting in science class, I was learning Ohm's Law, the difference between frequency and wavelength, and how to make an amplifier with a triode. And every night I would go to my girlfriend's house for code practice sessions. Her father was a stern taskmaster. For an entire month he sent nothing but five letter groups. I remember the moment that he sent the first text message: "Sister Kenny has a boil on her bottom...". I stared at the paper and then broke out in laughter while the teacher just smiled. Sister Kenny, by the way, was a pioneer in treating the ravages of polio, which, like Senator McCarthy, was a scourge of the 1950s.



I might not have become a ham if it weren't for this man

I was probably copying code at 20 WPM when I took my novice test.

Time passed. I got my general class license and spent a lot of time talking with other teenaged hams on 75 meter AM phone. When Sputnik was launched, my recording of the beep, beep on 20.005 megacycles (no "Hertz" in 1957) was played at an assembly at my high school while the principal urged students to study hard and learn science. Then I went off to college where my last QSO for the next 34 years was signing W1ET, the Dartmouth College radio club station on the roof of the physics building.



K6SRZ and family in Honolulu 1972
--the year my license expired

In 1972 I was doing graduate work in Hawaii and starting a family when my license expired.

Again, flash forward 34 years. I found myself at a dinner party with a friend who was a hang-glider enthusiast. During the course of our conversation, he brought out a tiny 2-meter HT. "We use these to communicate with the ground crew," he said. I was amazed: the last 2-meter transceiver I'd seen was a suitcase-sized, bright yellow Gonset Communicator with a Civil Defense logo on its side.

And that rekindled my interest in ham radio. In a short time I got licensed again, regained "K6SRZ" through vanity, discovered HRO (the store—not the radio) and got back on the air with a TS 850 and attic dipole. My first QSO was with a V7.

And the rest, as they say, is history. Perhaps when I'm feeling nostalgic I'll share some more of that history, but now it's time to turn my attention to the NCCC.

My goals for my term are modest:

- First, to do what's needed to ensure that NCCC remains one the nation's premier radiosport clubs.
- To continue the emphasis on focus contests—contests in which we've excelled and which, for the most part, minimize the East Coast bias. For 2013, the ARRL Sweepstakes is back on the focus list. It is not too soon to reserve those dates on your calendar
- To revisit the awards we give and perhaps make some changes in what we honor (and how much we spend). I think our first priority in the awards department should be deciding on an appropriate award or gift to acknowledge the contributions of our late brother Robert "Smitty" Smithwick, W6CS. As a physician, I'm inclined to think of something that recognizes his contributions to Medishare (http://www.medishare.org/) but I definitely want member input.
- To continue perfecting the WebX format to encourage wider member participation in the operation and management of NCCC.

More to follow. I welcome all the help I can get.

73 & KB,

Alan/K6SRZ

From the Vice President/Contest Chair...



WPX Going Strong!

We're in 1st place North America and 2nd place World as of this writing, based on claimed scores. That's a BIG advantage going into the CW weekend May 25. Are you ready?

From last year's WPX club results:

BCC	184 logs	441 million points
Rhein Ruhr	136	319
PVRC	120	250
Araucaria	65	227
NCCC	97	217
LU Contest	58	204
Croation CC	64	193
YCCC	94	169
Ural CC	33	146
FRC	55	139
Russian CC	63	127

Notice that I've mixed "DX" clubs with "USA" clubs. Our goal is to win the USA which means beating out PVRC and staying ahead of YCCC. This seems achievable. What I find amazing is that right now after the SSB weekend, we're also well ahead of BCC and all the DX clubs except Rhein Ruhr. If it wasn't for one score (D4C), we would be neck-and-neck with them.

From 3830:

Rhein Ruhr	196 million
NCCC	104
Araucaria	75
BCC	70
PVRC	65
YCCC	47
SMC	27

Of course, 3830 does not show ALL scores, and even those scores are before log checking. Where do we go from here? How do we clinch this one?

WPX club score is simply the sum of SSB and CW weekends. CW is in 3 weeks .. May 25 and 26.

- Get on the air!
- Operate from DX (requires a bit of advance planning I'll be at KH6LC)
- Maximize your score by joining with your neighbor and do a Multi-op .. unless you're one of those mutants that can stay in the chair for 36 hours. Even then a Multi can stay on the air for the full 48 hours.
- Use packet and/or the reverse beacon network to find new mults.
- Spend as much time as you can on the low bands for twice the points.
- Have fun! WPX is a great contest because your score grows geometrically with time.

My Townhome Shack - Byron N6NUL

Load the Bannister



There have been a number of excellent NCCC presentations on antennas for small stations recently, and I have been enjoying not only the ingenuity of the solutions, but also the different notions of what constitutes "small". My meaning of small is shown in image 1, a picture of my townhome (the left half of the building). This month, I want to describe the antennas I packed into that space in 2012, and the modeling I attempted.

From roughly the same angle as image 1, figure 1 shows the current EZNEC model for my station (the files are available here). This figure has all of the wire files added in, because it looks impressive, but the antennas are a lot easier to visualize if you download the base model; the description file has wire numbers for source locations.

My goals were to have fun, think big, and have individual antennas resonant in the contest bands, with some gain on 15 and 20 meters if possible. From left to right in figure 1 they are: 3 octagonal RX loops (see Jug #486), a 10m vertical loop, a 40m dipole folded to a delta shape, 80m vertical and ground radials, and a pair of coupled 15/20 dipoles, intended to be a reversible beam.

I wanted to model the antennas because since they are so close together, they behave more like 1 antenna with resonant feed points than individual antennas. Also, my home has a lot of extra metal in it, and I wanted to see how it affected their patterns. The first thing I added to my model is my home's 3 story iron bannister (the dense set of vertical lines in the middle of figure 1).

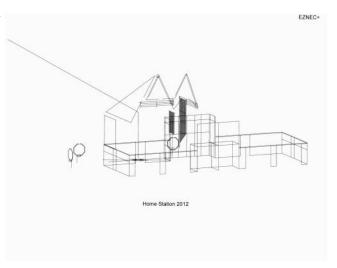
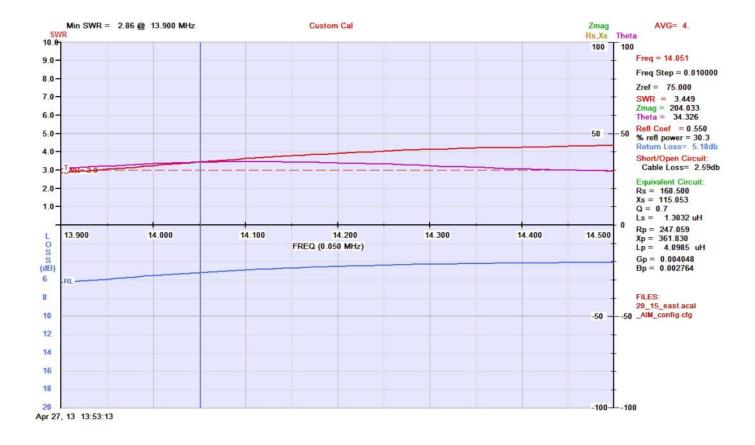


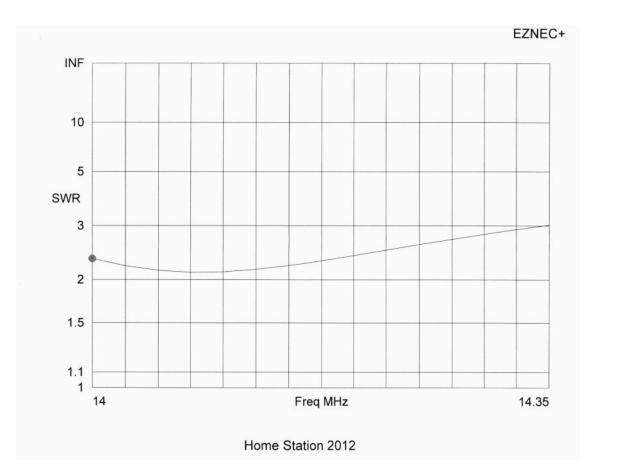
Figure 1

Before I became a ham, I remodeled my home to convert a loft into a 3rd story. My architect designed an iron bannister and safety rails. They are very pretty, but the wires for this year's antennas are only a few feet away from the 2" iron pipe and stainless steel wire from which they were made! Alas, both modeling and measurement with an RF ammeter show that the bannister resonates beautifully on 10 and 20 meters, as well as adding a lot of antenna effect.

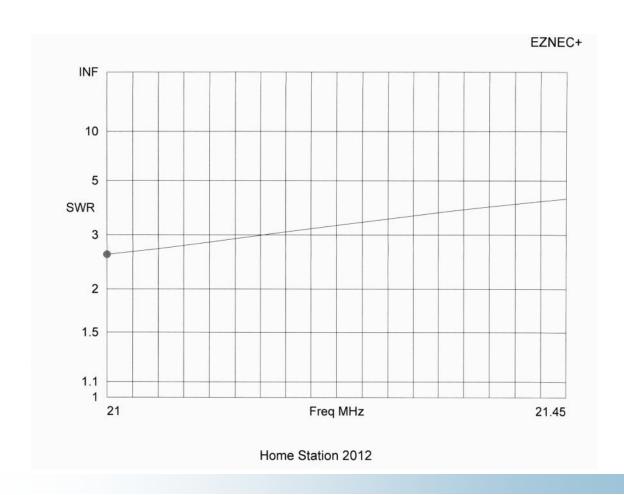
Second, the homes in my complex have a first floor wrapped in stucco: galvanized wire and light weight concrete. I had hoped that the wire had become non-conductive in the past 20 years, but when I cut out a rectangle for my antenna entry port (see Jug #489), my multi-meter quickly disabused me of that notion! So, I added the stucco to the model, using boxes of their outer dimensions to keep the virtual segment count reasonable (the figure 1 model uses nearly all of the 1500 segments allowed by EZNEC+ on 10 meters).

Continued on page 7









Figures of the EZNEC SWR calculations for the east-most 15/20 dipole, along with AIM 4170 scans of the actual antenna are shown. This is an apples and oranges comparison, since I was unable to trim this antenna to resonance at the same frequency as the model (and, didn't update the model to match reality).

The antenna trimming was a physical limitation: I couldn't reach all of the wire ends once they were in place, and my attempt at pre-positioning them indoors and trimming them was not successful. Not updating the model was simply fatigue.

This was a lot of work, without much return. The model is not even finished: the gutters and downspout files are not done (and not included), nor are the feedlines or chokes included. To do it again, I would not spend the time to create the files for the stucco or bannister. Instead, I would focus on the antennas themselves to see how they interacted, and then adjust the model to the actual frequencies of the antennas as built to improve the model.

That said, I have the data now. If anyone has comments on how I can improve my model, or modeling in general, I would be grateful to receive them.

My experience with these antennas since last fall matches my expectations based on the modeling, with the exception of the 15/20 meter "beam". But, this is subjective: I have not done the objective testing demonstrated in some of the other recent NCCC presentations on antennas for small shacks. I hope to utilize some of those techniques for changes I plan on making this summer!

73, Byron N6NUL



Please consider writing an article for JUG!

June 2013 Newsletter Deadline-June 3rd

This is your newsletter so lets make it something we are proud of. I hope you will consider writing an article for the JUG! Whether its about your station, recent contest experience or a technical article we would appreciate hearing from you. Send your articles to Ian W6TCP w6tcp@comcast.net



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