

## Happy New Year

## **Our Next Meeting**

Watch the reflector and the Web site. It is still being scheduled.

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## RTTY RU Dean Wood, N6DE

The goal for the RTTY Roundup was to win the ARRL club competition and give value back to individual club members while having fun and clearly staying within the rules. With your help, I believe we masterfully accomplished this goal!

Many thanks go to all the club members who tried RTTY contesting for the first time, and to those members who hosted a guest operator. Through the NCCC RTTY presentation, "RTTY Tips" to the reflector, phone calls, and personal visits to some stations, we were able to give value back to a number of members by helping them set up their station on RTTY for the first time. Special thanks to W6ZZZ, W0YK, WK6I, W6OAT, W1SRD, K6ENT, and N6OJ for their organizational and technical assistance in making the NCCC RTTY Roundup club entry a huge success!

At least 37 NCCC member call signs were active in the RTTY Roundup. Our NCCC score table shows we have over 1.3 million points so far, with five unreported scores. The competition in this contest appeared to be the Tennessee Contest Group. Our 1.3M points should be enough for us to take the victory in the medium club category, but there is only one way to make sure we claim the gavel. Everyone who participated needs to submit his/her log!

## The log submission deadline is February 3, 2004.

Please submit your Cabrillo log to RTTYRU@arrl.org. If you hand logged your QSOs, go to the new Cabrillo web applet form at http://www.b4h.net/cabforms/ to directly enter your RTTY Roundup log.

Thanks for another terrific NCCC effort!

## "Radio Oakley" – A Perpetual Work-in-Progress

#### **Rob Brownstein, K6RB**

Ken Keeler's station in Oakley, California isn't just a ham radio station – it's an institution. Come up there on any popular contest weekend and you're likely to find Dean Straw, N6BV; Steve Merchant, K6AW; Michael Shapiro, WA6O; Matt Thomas, WX5S; and/or Ken, himself, N6RO working multiple bands using multiple rigs. But what really distinguishes this station is the antenna farm.

As you drive north on Sellers Avenue, after turning left off of Balfour, it's a good three miles or more of increasingly rural-looking road and homes. Then, all of a sudden, to your right, you spot one or more of the N6RO towers. There are four of them – looking just east from the house you see the 15-meter tower and monoband stack. North of it is the 10meter tower and stack. And north/west of that is the 20-meter tower and stack, plus a two element 40 fixed on South America. In each case, there are three monoband beams. Then, west of these three towers is the 40- meter tower and stack, with two imposing 4-element KLMs. We're talking 12 monoband beams and four towers, here!



The master discussing power-dump indicators used to monitor the health of the phase-switching and 4-square elements.

Just when you finish drooling over the aluminum forest, you notice the catenaries and wires stretching from tower-to-tower, and the nodal points hoisted up on PVC pipes to bring them higher than the rows of vines. Yep, the aluminum forest skirts a real vineyard, and the assortment of loops and 4-square arrays are immersed in that vineyard. Did I mention the three beverages for 160 meters that cover the paths to JA, EU, and SA? We are talking 2,000 feet of Dacron rope and a mile of coax and wire elements – maybe more.

Ken moved here from San Jose in 1977 from a well-endowed, small-lot, contest station, known to NCCC old-timers as the "Hotel DeMille." But with 10 acres versus a 75-by-100 city lot, there's a lot you can do with low-band antennas. So, beginning in 1978, with the help of many NCCCers, Ken began planting his towers. N6BV became involved in the early '80s.



The 20-meter stack at N6RO

For Dean this must be the ultimate antenna laboratory – and playground. Ken credits him with much of the success of the antenna farm. Also, Ken continues to experiment with different wire configurations, always looking for the extra couple of dB improvement. He recently moved a beverage that was perpetually noisy (aren't beverages supposed to be quiet?) and was underneath a power line. Now, says Ken, it isn't noisy anymore.

At N6RO, neatness doesn't count. You walk into the insulated but wallboardfree wooden shack and it always looks jury-rigged. Looking straight back from the door, you see Ken's SO2R set up featuring a pair of FT-1000 MPs, a DX Doubler switcher, two industrial-quality footswitches on the floor, and an assortment of switch boxes and rotator controls to handle the chores of stack switching and 4-square phase switching.

The labels on everything look like afterthoughts. Behind Ken's well-worn chair is Dean's SO2R station featuring his IC-765s. To its right is Michael's FT- 1000D, and according to Ken, you'll often find some of Steve's gear, there, too. "Steve just moves back and forth from Oakley to HC8," says Ken with a chuckle. Speaking of HC8, rumor has it that Ken is now known as "loop man," there, after his visit last year during CQ WW CW.

"I'm crazy," Ken admits. "I live here to do this, to have these antennas, to do contests more than 20 weekends per year, and I (almost) never get tired of it." Maintenance is no simple task, either. One or more TailTwister rotors are often in need of repair, and so is one or more of the four Alpha 76 amplifiers. "When they break, George (K6GT) fixes 'em," Ken says, smiling. Everything in this station takes a beating during contests. "I've worn out at least two rotary switches on the 4-squares," Ken says with a touch of pride.



The 40-meter stack at N6RO

Part of what drives Ken is ego, he admits, plus the unexpected. "I have two 80 meter delta loop arrays (two element!), and 80 meter 4-square, and it's interesting to see how one will hear much better than the other during one part of the contest, then the whole thing switches, as if the angle or the polarization suddenly changed." Ken likes loops. "I tend to favor them because they are quieter than 4-squares." It's nice to have the choice.



Rotator and stack-switching controls for the 10 and 20 meter stacks.

Clearly, certificates and plaques are not what drive him. "I've got a hundred plaques, in boxes, somewhere, and hundreds of certificates, but they're rarely on display," he points out. "My motivation comes from competing with others, and, a big part of it is competing with myself," he explains. Ken doesn't do a lot of contest preparation beyond setting up the computer-logging program. "I might have an informal band plan in my head, but the reality is I don't spend much time thinking about propagation," he revealed. Decisions to change bands, and from running to search-and-pounce, are more often visceral than analytical. Well, whatever he's doing, it seems to work for him.

Ken really likes his TR contest software. "It's great in SO2R mode," he explained, showing how it calls a station on radio one then automatically switches and injects a quick CQ on radio two. "It helps you protect your run frequency that way," he added.

It's the Monday before NAQP, and Ken is already thinking about how he's going to play it. "I'll most likely start off "CQ"- ing on 10 and doing S&P on 15. I'll probably already have 60 or 70 15 meter Qs before I start running that band and either S&P on 10 or 20." Ken thinks NAQP is the best contest to practice and perfect SO2R jockeying. "Everyone is switching between running and S&Ping, and it's not unusual to have 100+ rates for the full ten hours of the contest." So, now when you hear "N6RO" blasting into your headphones on any band, from 10 to 160, you'll have some idea of what's behind that signal. He's got stacked monoband beams on 10, 15, 20 and 40; a 4-square on 40 (in case he gets bored with the beams), two twoelement wire loop arrays and 4-square on 80; and a 4-square, dipole, and three beverages on 160. But I think the real secret is having a messy shack. That's it. My problem is my contest station is too neat. I'll have to fix that. (Thank you, Ken, for your time, patience, and hospitality. KB.)

### Getting Ready For The Contest ("the race to the race") Part I

#### Kurt Andress, K7NV

The word came out about Rusty's new idea to try and win back the Gavel. I didn't think too much about it...Ya, ok let's win it back. I figured I'd just be doing a SOABHP gig. Where in the hell would I ever find a decent station around here to try that crazy two-station thing.

Mid August, K5RC got a slot at the local club meeting to perform his magic and promote the NCCC effort. I went along for some comic relief. After the meeting, it occurred to me that the NV SM lives one mile down the road, and has a 72' crankup with a tribander & 40m beam, Perfect! I'll just get him to let me do a stint there for the second station. I contacted him about it, and learned that he would be gone during SS. Hmmmm.....bummer!

Fortunately (for me), K5RC had his antennas all torn up by a big storm last December, so, I got to see Tom more times this year. Late in August, we had another work party at K5RC. There were a couple of guys there that have stations. I posed the idea that I needed to find another station to use for the SS effort. Both said sure!

After talking about it a bit we decided to give it a try at WX7M, as his station was also pretty much destroyed by the same storm, and needed the help. He has an old bucket truck, which should make it easier. Then, or course, everyone got too busy trying to make a living.

Finally, Oct 11 we all had a Saturday open, and Tom and I went to Patrick's house, WX7M, to rebuild his KLM 4 el 40. That went well, as Tom has retained all the "voodoo" about setting up these things, although we all scratched our heads trying to figure it out. Tom said, "Just do this." Eureka! The antenna worked properly for the first time in its life. I got to rummage through the equipment, with Patrick's help, to setup a SO2R station. on one of the tables in the shack. I had severe brain fade, and didn't bring enough of TRLog or other stuff to actually try to get anything to work. Still, there were lots of things to do.

The next (and last weekend) chance to get things working was Oct 25. Patrick and I got the 5BA working and got all the coax runs and rotator cables straightened out. Also, we got the rotator working on the 40m beam. I got the operator position set up and had TR talking to the rigs; and the solidstate amps were working.

Patrick had built a 6-el 15-m beam on a 40' boom, to go on another crank-up tower that was yet to get moved and attached to its base. Several tries to get the tower moved didn't work. A big forklift couldn't do it, and got stuck in the sandy soil.. We were waiting for a guy down the road to bring over his big "hay squeeze" machine to move the tower. Still lots to do; got home after dark.

Sunday, Oct 26, Tom came down here to my place in the morning, and we took down my 45' mast by the garage and fixed the halvard that hoists the wire antennas. Got my small tribander pointing in the right direction, and spliced 10' of rotator cable in the 40m beam rotator line, and got the 40m beam up to 55'. Then, we ran up to his place (grabbing a drive-by burger on the way) and replaced the torn coax on his 40m beam, got the antennas on the 70' tower going the right way, and put additional clamping gear on the rotator to try and hold the thing. We made a similar modification on his 20m/10m tower. Last trip down the tower was well after sunset.

Friday, Oct 31, the guy with the "hay squeeze" got over to WX7M's place and got the tower on the base. I had to work half day, and got there in the afternoon.

The bucket truck was stuck in the sand (near the 40m tower), and had to be freed to get stuff done. We fooled around for an hour and got it rolling again.

The TH7 @ 30' was all goofed up and the rotator didn't work. Got that one fixed. It was snowing lightly during that project. Since, the new tower didn't have a mast in it, and the rotator was broken, we decided to take down the wrecked 4 el 30m beam and put the new 15 m beam on that tower. It was snowing very hard, now. I told Patrick, let's just get the 30m beam off the tower, and we'll put up the 15 tomorrow before the contest. That turned out to be a stupid idea.

It wasn't that easy, and I started to become a frozen dummy up on the tower trying to get the thing disconnected. Couldn't feel a thing with my hands (yes, they were gloved), and was shaking like a leaf. By the time we got the antenna on the ground, we were both laughing so hard about what knuckleheads we were, that it was hard to do anything else.

The next project was a pot of coffee, and a chance to enjoy that wonderful sensation when feeling starts to come back into those dead fingers. The normal one-hour trip home was close to two hours. It was snowing quite hard, and we were crawling along at 30 mph on hwy 395 thru the slush. Still, we made it in time for the Friday NCCC mini-SS! Then, we tore down my SO2R stuff for the morning.

#### The Contest

I got rolling at 8 am, stopped by the market to get provisions, and made it out to WX7M around 9:30 am. Patrick was up on the tower attaching the 15m beam! I finished setting up the operator position, and got things working.

By 12:30pm the antenna and rotator were connected, but the antenna wasn't tuned, and the tower was still cranked down. We decided I would just start with the other antennas and the big 15 would get done whenever Patrick got it done.

After listening, and working a bunch of guys, I decided to start on 10m. I mostly used the TH7 @ 30'. Sometimes the 3 el's on the 5BA @ 90' worked better. It seemed to be an ok start with 90 Q's the first hour.

Patrick was done, and the 15m beam was up @ 90' about a half-hour into the contest, and seemed to be working just fine. But, 10m kept producing, so I didn't use it too much until the third hour. I finally made friends with the IC781's and the antenna switching setup, which was pretty cool.

My first "aw sh\_t" came on QSO #23, when TR wouldn't take WCF as a section. I had to log the Q as NFL, then go and change it after it was logged. I'd grabbed the wrong (old) *arrlsect.dom* file and had to do the same thing every time I worked a WCF station. Fortunately, there weren't that many of them. I'd hate to have that happen with IL!

\_\_\_end of part I \_\_\_\_\_

#### **Member News**

Eric, K6VVA, will be renting KV4FZ's setup for the ARRL CW DX Contest in February. His goal is to qualify for the NCCC "5MEG" award in one fell swoop.

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New member, Jim, W6SC, is swapping transceivers. He sold his old Kenwood TS-440 and should receive the Ten-Tec Orion on Thursday, Jan. 8th. Assuming it doesn't take years to figure it out, he hopes to have it contesting very soon (ARRL CW).

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The Society of Broadcast Engineers (SBE) bestowed the honor of Fellow to Peter Onnigian, W6QEU, last month. . He was licensed in 1938 and worked first for Western Air Express as a CW operator- before the days of teletypes ! After VJ Day, he was in 9V1, operating as HS1SS. Three antenna patents bear his name, including one of the first wireless mikes, a highly balanced method of feeding dipoles, and a circularly polarized FM broadcasting antenna currently in use by more than 95% of all FM broadcasting stations around the world

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Fred, K6DGW is busily engaged in two projects. First, he's working on getting something vertical for the CQ and ARRL 160 CW tests. He thinks he'll go with a T because he can get the base capacitor at the bottom of the vertical wire up close to the house. He'll have to make do with a small handful of temporary radials, however, since they will spread out over the domesticated part of his five acres. Second, he plans to come up with some sort of switch box that will interconnect his TS-850, FT-847, the keyer, the logging computer (486SX/33 running "real" DOS and TR) for CW and Voice keying, the laptop (P3/550 running NT Server and MixW), the RigBlaster, and 3 keys (Bencher paddle, CT Delux hand key, and a 1945-era Vibroplex.

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News from P40Y/L: Recent contest operations: P40K (K6TA and K6KO) in CQWW CW, ARRL 10 and ARRL 160 ; P4/K6UFO in RTTY RU . Coming up: P40Y (AE6Y) in ARRL DX CW; P40L (W6LD) in ARRL DX SSB; P40Y (AE6Y) in WPX SSB; P40L (W6LD) in WPX CW. New 80/160m inverted vees installed by P40X (W0YK) in November. New FT-990 brought down by W0YK. AE6Y will start making station into an SO2R operation (with FT1000, FT990, Alpha 87A, and Alpha 86) in February. Website will be up and running shortly.

The Member News section is a new JUG column. Please send news about members, ephotos of interesting set ups, planned changes to stations, upcoming DXpeditions that members are participating in, and similar items of interest. Do not send scores!

Send any item to <u>k6rb@baymoon.com</u> and make the header read "member news." Thanks.

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