

# JUG

Publication of the Northern California Contest Club

December 2001

Issue 355

The NCCC 75 meter net  
meets on Thursdays at  
9PM,  
3830 approximately

## NCCC Meeting

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

**Holiday Banquet at Chef Wang's  
featuring "Santa" Tom with his annual cheer**

Monday, 10 December 2001

6:00pm socializing (no-host drinks)

7:00pm dinner, 8pm "Santa"

Chef Wang's, 5100 El Camino Real, Los Altos

Send reservations to W0YK with \$25/person  
by Friday, 7 December

## NCCC OFFICERS

### President

Rick Tavan, N6XI n6xi@arrl.net

### Vice President/CC

Andy Faber, AE6Y ae6y@aol.com

### Secretary/Treasurer and WEBmaster

Ed Muns, W0YK w0yk@arrl.net

### Directors

Bob Wolbert, K6XX k6xx@arrl.net

Ken Keeler, N6RO n6ro@arrl.net

Dean Wood, N6DE dwood@cisco.com

Dennis Motschenbacher, K7BV k7bv@arrl.net

### ARRL CAC member

Jim Pratt, N6IG n6ig@arrl.net

### JUG Editor

Mary Cherry, NA6E mary@na6e.com

## NCCC Sweepstakes 20001 by N6RO

Congratulations to all club sweepstakers. Our reported scores have exceeded any previous total by any club, and nearly met my ambitious goal. There are no good indications of how our competition did at this writing, and of course, nothing is final until the ARRL log-checkers do their thing. I'm proud of some of our newer members who made very large increases in scores, as well as regulars who turned in higher totals. We had three KB-3000 achievers K7BV, N6IG, and N6BV. There were about 20 KB-2000 achievers, up from 12 last year and dozens more KB-1000 qualifiers. Please review the scores listed on the members website, and let W0YK know of any corrections. Several operator groups optimized multi-transmitter capabilities to produce some giant scores: K6IDX (W6OAT, WJ6O, W1SRD, K0BEE) - 5382 QSOs, 861,120 points, W6YX (N7MH, W6LD, N6DE, W7SW, W6KNS) - 5100 QSOs, 814,332 points, N6RO (N6RO, N6BV) - 3860 QSOs, 614,232 points, KA6BIM (KA6BIM, NT6K) - 2963 QSOs, 333,560 points. There is still another important step we all must take in the SS campaign - submitting logs to ARRL. The preferred method is by attaching your Cabrillo formatted log to SSCW@arrl.org or SSPhone@arrl.org. The CW deadline is Dec. 5th, and the SSB deadline is Dec. 19th. Handwritten logs must be postmarked on/before those dates. Save your acknowledgement emails from ARRL, and when they announce that claimed scores are posted on the League website, please go there and make sure your entries are included. If you have problems with the Cabrillo format ask for help on the NCCC reflector. Thanks again to all operators, station hosts, and the leadership team- N6XI, AE6Y, W0YK, K6GT, K6XX and his telephone troopers, for a fine job.

## Contest Calendar

### December Contests

Tennessee QSO Party

Dec 2 - 3

ARRL 160-Meter Contest

Dec 7 - 9

ARRL 10-Meter Contest

Dec 15 - 16

RAC Winter Contest

Dec 29

Stew Perry Topband Challenge

Dec 29 - 30

### January Contests

SARTG New Year RTTY

Jan 1

ARRL RTTY Roundup

Jan 5 - 6

Japan Int. DX 160-40m

Jan 11 - 13

North American QSO Party, CW

Jan 12 - 13

DARC 10-Meter Contest

Jan 13

North American QSO Party, SSB

Jan 19 - 20

ARRL VHF Sweepstakes

Jan 19 - 21

CQ 160-Meter Contest, CW

Jan 25 - 27

REF Contest, CW

Jan 26 - 27

BARTG RTTY Sprint

Jan 26 - 27

UBA DX Contest, SSB

Jan 26 - 27

# XI-ting Times

## **SS Recap**

Whew! It's over except for that final SS sacrament – sending in the logs. Do that NOW!

Congratulations gang, this was a magnificent effort by our club. Breaking the former all-time record and proving once again that NCCC is The Force in SS. Whether it was enough to bring back the gavel is now up to the contest gods. There were a lot of IL stations out there. I worked 111 but most had low to moderate scores. Shortly before the start of the contest, ever-coy K9PG told me that SMC was just in it for fun this year, no big effort. Riiiiight! I told him to be careful not to break his back hauling those bags of sand.

NI6T, W0YK and others made some cogent observations on the reflector. Contesting is “challenging.” That is a metaphor for “sometimes hard, sometimes not even fun.” However, determination to succeed and the desire to be a part of something bigger than ourselves keeps us going. Lots of people would have preferred to do something else some or all of the time, but for the sake of the club effort they persevered and eked out every last QSO. Hats off to you all! Also, club participation is a great motivator to station enhancement and many of you have made big improvements for the cause. Thanks again.

## **Dreams of CQWW**

As I write this column in a tryptophan-induced stupor I am reminded of CQWW's past and note with excitement, that CQWW is this (i.e. Thanksgiving) weekend. Like many in the club I will be making a casual appearance, checking out some recent station improvements on CW, possibly visiting a nearby superstation for inspiration and dual instruction. Others will be going all-out to win a country, a region, a category or a personal best. All will have fun in this third big event of November. By the time you read this, the contest will be history. Did you join in?

CQWW is hard. To win a competitive single-op category or locale you have to operate most of the 48 hours. Physical and mental conditioning, strategic planning and intense attention to detail are critical to success. Some of our brethren in NCCC do it repeatedly and they have my awed admiration. I did it only once, way back in 1983 as N6XI/4X, SOABHP, and the experience humbled me forever. The contest started at 2am local time. Still suffering from heavy jet lag, I had been awake for 19 hours at the START and took off only an hour and a half on Saturday afternoon. By Sunday evening, I was getting punchy. The high bands were gone, 40 was fished out and 80 was wall-to-wall. The QRM was so intense I thought I was listening to an angry beehive. There was no discipline, no holds were barred, frequency stealing was rampant and every third station was a 597 Bulgarian with a 5 KHz wide signal

and no spaces between words. I knew I had to find a clear spot to get my run going again. There were simply no clear frequencies on the layer of the band I was using but I knew that the QRM would be less on the other layers of the three-dimensional frequency space. I tuned around looking for them for a while before I realized that the main tuning knob on a TS-930 only goes up and down...duuh! I needed to go in or out. But where was the level control? I could not find it! I was stuck on the QRM level and just had to get out. But I couldn't even get my @#/\*& keyer to stop sending my call! What was going wrong? Why wouldn't it stop? Where was the inside of the band? Finally it dawned on me – that was my call coming out of the headphones. It was an answer! I worked it. Then another. Then more. Somehow I must have escaped the QRM layer because my run was reestablished! I was euphoric, ecstatic, re-energized. I made a few dozen Q's before the LZ's came after me again and I took a five-minute break for caffeine and fresh air. Only to return and repeat the cycle until finally, at 2am Monday morning, it was over. I slept until noon, ate lunch, packed the station and headed for the airport. The hallucinations had stopped, the ringing in my ears had moderated and my first contest expedition was over. By the time my three-leg 20-hour trip home was ended, I had manually duped my hand-written log. Many months later the results showed that I had come in seventh, winning 4X and Asia. It only took 3300 Q's back then! This weekend, that will not win a mug of beer at an NCCC meeting. Progress, my friends, progress.

## **Clarification**

In my last column I noted with satisfaction my 79 band changes in CQP, claiming that my prematurely-born SO2R setup helped inform those allegedly beneficial moves. Well, the second radio certainly helped me decide when to change bands. But I definitely did not move 79 times! That number, reported proudly by trlog, is the number of times I pressed Alt-B, which does, indeed, change bands. But to move, say, from 20 to 10, you press Alt-B twice. And to move from 10 to 20, you press Alt-V twice, but since I had not learned that, I pressed Alt-B four times instead to do the same thing. Therefore, I really changed bands far fewer times. But I still think the second rig was helpful in timing that.

73 & KB.....Rick N6XI

## **Andy's Dandies**

### The SS Story

Well, the contests are over and the scores are in. Don't know if we won or lost, but we sure gave it a heck of a run for the money. I'm really proud of the way the club came together and how we got more

participation than ever before. Both in terms of members making a real effort to get on, and also in terms of a willingness just to spend more time in the chair on Sundays when things get slow, to push each score up an agonizing bit higher. A huge "Thank You!" to Ken, N6RO, and Bob, K6XX, for mobilizing the troops.

Did you ever notice how you can CQ for awhile on CW and get no reply, so you tune around looking for a better frequency. Then when you find it and send QRL?, there's always some guy who immediately starts sending CQ on that frequency (come on guys, admit it, sometimes when you hear a QRL you assume the frequency is clear and jump on it). Anyway, here's a poem about that (with apologies not only to the usual gods of rhyme and meter, but also to W6ISQ and anyone else out there named Jack):

#### **"How to get a response in SS"**

No matter how hard you yell,  
One thing you surely can tell:  
Though CQs may yield jack,  
You will ALWAYS get back  
A reply to a quick QRL!

I enjoyed CW SS, though my score ended up about 20 QSOs less than last year. I was ahead of last year's pace until I went to 40 and 80 in the evening. Both bands seemed to be in good shape with reasonable noise levels and strong signals, for some reason 40 just did not produce as well as last year. I had no trouble working all across the country, but just could not get anything going. The result was I fell behind the pace Saturday night and just could never recover. Phone SS was a similar story. Got off to a really slow start for some reason (last year, first hours of 119 and 89, this year, ouch, 81 and 79). At one point I was a full 100 qso's off last year's pace, but ended up with only 17 fewer contacts than last year due to a solid four hours on 20 meters at the end of the contest on Sunday. I did decide to make a New Year's resolution regarding phone SS. Next year, I am going to skip 40 meters entirely, and maybe skip 80. 40 is just a rate disaster, not to mention being impossibly harsh on the ears, while 80 sounds a bit better, but also is no picnic. I used to think I had to battle it out Saturday evening on the low bands, but now think there is no point to it. I only made about 150 q's on 40 and 80, and while I worked a local mult or two, I later repeated them on 20. Furthermore, most of the guys

worked on 40/80 would probably be worked the next day on the high bands anyway. In addition, getting a few hours of extra sleep will make me feel much more like slugging it out on Sunday. So here's a poem about my resolution:

#### **"The SS Phone New Year's Resolution"**

My plan now for SS phone:  
Leave 40 and 80 alone.  
When 20 goes dead  
It's time then for bed.  
So rate doesn't sink like a stone.

#### **November Meeting**

To those of you who have not been to a recent meeting, all I can say is you do not know what you are missing. Meetings this year have been full of good cheer and ham socializing, and are educational to boot. November was no exception. Held in the cafeteria of our presidents company, Tibco, it was attended by some 54 enthusiasts. The program, after the obligatory "SS CW Lies and Phone-y Predictions," featured a slide show by Kenny, K2KW, on the upcoming Team Vertical trip to Jamaica. Next up was Eric, WA6HHQ, one of the two Mr. Elecrafts himself. His subject was receiver design. Of course, the amazing thing is that their little K2, weighing just a few pounds, and built by the user as a kit, has one of the best receivers you can buy on any piece of ham gear. Eric explained many of the principles of design, and made it sound so simple and clear, that you wonder why not all receivers are as good. He also had a prototype of the long-awaited 100-watt K2, which looks like a dynamite radio, still in the same small package.

#### **Don't Forget WPX**

This is my monthly reminder that we are going all out in WPX for a club victory in 2002. Start planning those mini-vacations around the contest dates: the end of March (Phone) and the end of May (CW). We will talk more about them at future meetings and in future columns. For now, just start planning the commitment. It is going to be an exciting run at another victory. If you have limited time, then the Phone contest will produce more 'bang' for the buck. Activity, and thus scores, is higher than in the CW event.

See you all at the December holiday banquet.

73, Andy, AE6Y

## Notes from Recent Meetings

### Joint Meeting with RCC/MLDXCC October 16

Ken N6RO reported: The joint meeting of River City Contesters, NCCC, and the Motherlode Club was a cordial gathering of contesters at the home of Randy W6UT, VP of RCC, in Sacramento. About 25 contesters were there, including 14 NCCCs, from the faraway reaches of our territory, Yankee Hill, Manteca and the foothills. It was nice to see some old-time former NCCC members K6SG and K7FF there. We shared highlights and scores from CQP, and I [N6RO] attempted a summary of the SS presentation from the last NCCC meeting. The subject of score submission for both the regional and local categories was discussed. We concluded that we ALL need to encourage the CAC (in writing), enlist the help of the other small clubs (Hudson, etc) and the big east coast clubs, to get the league to make the change. N6IG can probably best guide us in renewing this campaign. We welcomed two new members into NCCC: Ginny N6RER (xyl of K6KM), and Tom W6EO, friend of Jack N6EM. N6RO offered non-members the use of some NCCC resources: meeting programs by N6BV, K2KW...; NCCC website [www.nccc.cc](http://www.nccc.cc) - SS handbook (members only), propagation, antenna info, and the 3830 Thursday net. Maybe we'll attract a few more RCC members into NCCC down the road. All were enthusiastic about doing this at least annually. Thanks again to Randy Sue, and RCC Pres. Dave K6RC for hosting the meeting.

### Meeting-go-Round October 24

The first ever NCCC Meeting-go-Round took place on October 24. Ed W0YK, Al AD6E and Rick N6XI used the miracle of general aviation to conduct a breakfast meeting in Petaluma, a lunch meeting in Visalia and a dinner meeting in Watsonville, all on schedule as advertised. And then N6XI made it to a 7:30pm non-radio meeting only 15 minutes late! Total attendance at the three meetings was 19 and we added six members to our ranks.



(L to R) John KE6ZSN (new member), Chuck N6OJ, Bill KH6GJV (new member), Dave W8NF (new member), Doug WW6D, Ed W0YK, Al AD6E, and Rick N6XI.

Both local members and new recruits welcomed the traveling contingent, invited us to do contesting presentations at local radio clubs and mused about establishing local

“chapters” of NCCC in the same spirit as the notorious Sierra Chapter. Please welcome newcomers Bill Hillendahl KH6GJV of Santa Rosa, John Tagliaferri KE6ZSN of Napa, Dave Haupt W8NF of Santa Rosa, former member Chuck Ternes N6OJ of Petaluma, Tom Guyer KG6AO of Boulder Creek and Mark Ziegler W6ZZZ of Los Gatos.

### Regular Meeting November 12

The November meeting at TIBCO Software in Palo Alto found about 50 NCCCs enjoying pizza, programs, socializing and show-and-tell. Andreas N6NU and Russ K6KLY were on-hand to help out with DXCC and VUCC QSL card field-checking – Thanks, guys! VP/CC Andy AE6Y launched the formal portion of the meeting with a rousing contesting song from the Seek You CD. The club gave a hearty ovation to George K6GT in recognition of his six years of service as our Jughead. Conan the Grammarian bowed respectfully to his awed audience and distributed, Free For Nothing, a variety of memorabilia accumulated during his tenure. During introductions it became clear that NCCC had been out in force for SS CW, with an impressive score available on the Members Only portion of the Website. Carl AI6V distributed a lot of WRTC caps to the higher scoring members present. SSmeister Ken N6RO led strategy discussions and we concluded that an even stronger effort will be needed on SSB to return the gavel to our deserving hands...but it is well within our reach. A tip to consider: Big stations can contribute maximum scores by running separate stations. It is OK to share antennas so long as no transmitter is used with more than one call sign. Each op sacrifices some personal potential but the total can be far more than the ops could accumulate individually from lesser stations. Past Presidents Andy AE6Y and Ed K6CTA received impressive plaques in recognition of their service to the club. We welcomed new members Ben W6FDU of Campbell and Eric WA6HHQ of Aptos. (Eric’s application, like the K2 PA, was just a bit late, but arrived just prior to formal adjournment and was approved by the quorum still in attendance. If anyone who left early wishes to register an objection, send an email to [UR1DRM/R@outerspace.net](mailto:UR1DRM/R@outerspace.net).) Eric was also our guest speaker, presenting an inspiring analysis of tradeoffs in modern receiver design. The actual lab numbers of some of our hobby’s most revered radios were enlightening to many. Kenny K2KW has organized a Team Vertical expedition to field test Eric’s (Elecraft’s) K2 in competition from 6Y in the upcoming CQWW CW. Look for them with different calls on each band, seeking new single-band QRP records. They will be running rate.

73 & KB.....Rick N6XI

## QRP is!

(Confessions of a QRO op gone QRP) by Ed, W0YK

Wow ... what a blast! Operating QRP from 6Y during the CQWW CW Contest may be the highlight of my 40-year Ham experience so far. Imagine breaking 10 records on a weekend where the A-index was 95 and the K was 7. K2KW, N6BT, N6XG, KE7X and W0YK operated 6 single-op QRP entries (K2KW did two!) to surpass all 6 North American QRP SO single-band records as well as 4 of the 6 world records.

One month ago, I'd never operated QRP and had no desire to torture myself in that manner. Then, a few weeks before CQWW CW I was on the phone with Tom, N6BT, about some Force 12 antennas he was designing for my rather windy ridge top location in the Santa Cruz Mountains. He asked if I would like to join "Team Vertical" for the upcoming CQWW with their QRP caper. The 160 single-op position was open and 80 might open up depending on how Bill's, K6KM, health shapes up in the next few days. Bill had just returned from South America and was fighting something picked up from that trip. I was instantly skeptical about a QRP operation, then quickly became a believer because neither Tom nor team leader K2KW would go to this effort without there being a big opportunity ... or, just a heck of a lot of fun. Either way, I knew I'd enjoy myself. Little did I know how much I'd enjoy myself.

My first (dumb) move was to exhibit a bit too much excitement to my partner Mary ... and, communicate in a typical male fashion, totally ignoring all my "Mars-Venus" training. It went something like this.

*(Ed) Team Vertical's invited me to Jamaica for CQWW.*

*(Mary) Neat. When is it?*

*(Ed) The weekend following Thanksgiving. It's really cool—we're going to operate QRP with the big Team Vertical antenna farm. We could break some North American and World records.*

*(Mary) Neat. When do you leave?*

*(Ed) Huh? Oh, the Monday before Thanksgiving.*

*(Mary) The Monday BEFORE Thanksgiving?*

*(Ed) Uh ... yeah, why?*

*(Mary) Well, I guess you won't be spending Thanksgiving with me and at this late date I'll have little chance to make other plans. How could you do this on Thanksgiving?*

*(Ed) That's when CQWW CW is ... every year. Thanksgiving is just a time marker pegging the annual occurrence of this important event. When I think of CQWW CW, I locate it in time relative to "Thanksgiving", but I don't actually think of the social aspects of "Thanksgiving" itself ... turkey, family, etc. I really hadn't thought of that angle until you brought it up just now.*

*(Mary) How could you do this?*

*(Ed) Do what?*

*(Mary) How could you leave me on Thanksgiving and not even discuss it.*

*(Ed) We ARE discussing it. You can go if you want. If you*

*don't want me to go, then I'll tell Kenny and Tom that I can't make it.*

*(Mary) Of course you're going to go. I want you to go. It's just that its Thanksgiving and I wasn't included in the decision.*

*(Ed) Decision? I'm asking you ... we're "discussing" it.*

*(Mary) Well, it sure doesn't feel like it to me. But, don't misunderstand. I really do want you to go. I'm just hurt that I wasn't more a part of the decision.*

*(Ed) [Totally confused] Let me get this again. You're hurt that I'm leaving you over Thanksgiving. Yet, you want me to go and are fully supportive?*

*(Mary) Sure. This isn't about your going or not. It's about how you aren't including me in the decision.*

*(Ed) I don't get it, but I really do want to go and you do seem to be saying that you want me to go but I have a feeling that you're not happy about something. (Etc., etc. for the next 2 weeks.)*

*(Later, down in Jamaica, I'm lamenting to Walt, N6XG, about this pre-flight domestic discussion and he tells me it was a snap for him. How so, I ask. Simple, he says, "I told my wife about the trip, but that since it would be over Thanksgiving, of course I wouldn't be going." She immediately says, "Oh no, you must go. It gives me the opportunity to go out to New York and visit our daughter. What a great coincidence." This sounded somewhat like my spousal conversation except his partner seemed happy. Then it hit me. Mars vs. Venus. We're focused on the facts; they're focused on the interaction. And, Walt, the old pro, deftly remembered his Mars-Venus education.)*

OK, back to CQWW. I am off to a shaky start, but with only two weeks left, I need to prepare. Plane tickets ... no problem Mon ... 5 minutes on the Internet and I'm all booked. Radio? Ah, I have a TS-50 I took to Damascus for the YK0A operation back in '94 so I proudly announce to Kenny that I'm all set in the rig department. "Nope", he says, "not allowed." "What?" I exclaim. "Unacceptable receiver characteristics ... won't handle the pileups." "OK, what IS acceptable?" I ask. So, he explains the various radios that are fine, such as one of my TS950s, but the rest of the crew is taking Elecraft K2s. Not ever having experience with a K2, he is taking his JRC, also partly because he wants to work 6 meters. Tom is also taking his TS850 ... "just in case the K2s don't work out." So far as we know, no K2s have been tested in big multi-station expedition with potentially huge pileups. But, theoretically, the K2 should perform great.

Well, this was music to my ears. I love building stuff and it had been over 30 years since I built my last Heathkit or anything homebrew of any significance. So, this offered a great excuse to build a K2 which I had been coveting ever since Eric, WA6HHQ, of Elecraft had given a presentation at an NCCC meeting last year. At the time, my only concern was ... "What in the world would I DO with a QRP rig once I enjoyed the construction phase?" Elecraft is located just down the hill from me in Aptos, so I arranged to pick up my kit, along with all the various accessory kits, the next day.

With everything else going on in my life, including SS participation for the club, I didn't get started on the K2 until a week before departure ... not a lot of margin for issues. Well, other than an un-programmed IOC chip (which controls all the relays and other internal K2 devices), the kit went together flawlessly. The basic kit took me 36 hours and I got the audio filter and computer interface modules completed as well. That was all I really needed. Just as I had ordered the K2, we had learned that K6KM wouldn't be able to make the trip, so I was moved into the 80-meter position. Thus, I didn't need the 160-meter module and since we weren't operating SSB, I didn't need that one either. However, I just barely finished the rig before leaving and had no opportunity to operate it ... not a way to "prepare" for the trip.

I met up with the other 4 guys at LAX where our non-stop Air Jamaica flight originated. While I knew most of the guys, this was the first time I had met Fred, KE7X. Fred is a really cool EE professor at Bozeman University in Montana, and has been going on expeditions with Kenny for 10 years. Our flight was a red-eye arriving at 6:30am Tuesday morning before the contest. Two drivers filled their cars with our gear and antennas (with barely enough room for ourselves) and we headed for the villa, 35 miles away on the North coast of Jamaica, just West of Discovery Bay. The groundskeeper and 3 household staff greeted us



with a pristine tropical abode. Within minutes of arriving, we pushed the furniture out of the way, set up two large operating tables and soon

the living room was a nerd's paradise. Power cables were run from the breaker box and duct-taped to the floor.



Kenny, K2KW, by the 2-element Sigma-6 array. Behind him are the 4 element 10M European array, 4 element 15M European array, 2 element 80M array, and 160M inverted L.

Kenny unpacked his JRC and Acom 1000 Amplifier on 6 meters in 5 minutes! The 2-element Sigma-6 vertical array was erected on the coral with waves lapping at their bases and then the 150' of LMR-400 I brought down was connected. Kenny had 6 meters on the air roughly 30 minutes after arrival and worked the US and European openings as they appeared the rest of the day, interspersed with serious antenna construction.



Fred KE7X, Tom N6BT and Walt N6XG building vertical elements on the lawn

Ultimately, we built 23 vertical elements, configured into 4 basic antenna types:

1. SVDA (Switchable Vertical Dipole Array)--full-size center-fed vertical dipoles in a 2-element set of driver and parasitic reflector. The reflector is switchable to a director, but we didn't use that feature. All directivity was northward to our main running directions: Northwest (US) to Northeast (Europe). On 10m & 15m, 2 of these pairs were phased to create a 4-element array on Europe.
2. Sigma Vertical--shortened center-fed vertical dipoles with "T-bar" capacity end-loading. Also, configured in 2element parasitic driver/reflector pairs for 6 and 40.
3. ¼ wave vertical—bottom loaded with a coil, two elevated tuned radials.
4. Inverted-L—compliments of a local 50' tree, two elevated tuned radials.

Here's the band by band antenna complement:

6m: 2-element Sigma manually "rotated" by moving the reflector to favor US or Europe depending on openings.

10m: 2-element SVDA on US/JA, 4-element on Europe.

15m: same as 10.

20m: 2-element SVDA pointed at 20 degrees.

40m: 2-element Sigma on US and a second array on Europe.

80m: 2-element base-loaded 35' tall vertical array pointed at 20 degrees.

160m: 50' tall wire inverted-L

By Tuesday evening all elements were constructed and 10/15/20 were operational. Wednesday, the 40's and 80's were erected and tuned.



Never operating from the Caribbean before, I wanted to get as much airtime as possible on the band before the contest, so I operated 80 through the night Wednesday, from about 5pm until 7am the next morning. For the first half of Wednesday night, the band sounded like 20 meters – no noise, and lots of loud Europeans. Then, the band noise rose up and stayed that way for the rest of our stay. Kenny and Tom say it's unusual to have such band noise at this location based on previous experience – usu-

ally the low bands are as quiet as a mouse. Thursday we constructed the 160-meter inverted-L and it played wonderfully Thursday night. The plan was for me to do both 80 and 160 as single-band efforts ... that is, until Tom came down with a severe case of the flu. On Friday, he began to get better close to contest time, but was worried that he wouldn't have the stamina to battle his 40-meter assignment all night. So, we decided that I would do 40, Tom would do 80 as best he could, and Kenny would put in a few hours on 160 after 10 died.

I had to quickly adjust my mind from 80 meters to 40 meters as we reconfigured stations just a few hours before the contest by moving coax lines, coax switches, and building new CT Bin files. On 40 prior to the contest, I could clearly and loudly hear all over Europe, but no one would come back to my calls. I was enlightened that in 6Y, you can hear Europe on 40 and 80 a couple hours before being able to work anything there, even with a kilowatt. Eventually, my QRP signal was heard and I began running stations. I couldn't believe how well 5 watts was playing. My excitement and anticipation for the contest was quickly squelched when the contest bell went off. I couldn't find a running spot anywhere in the lower 80KHz of 40 meters! In the first 8 minutes, while everyone else was wildly running, I managed only one W8 in the log. Experimentally, I discovered two things. First, I had to add "CQ" to my CQ message ... the 6Y4A call (sans kilowatt) wasn't enough in the initial bedlam. Second, I had to "Search and CQ" because holding a frequency longer than a few minutes proved futile and pouncing just as much so. While trying to run, I squeezed



Team Vertical: (L to R) Fred KE7X (6Y9A), Walt N6XG (6Y2A), Kenny K2KW (6Y1A & 6Y0A), Tom N6BT (6Y8A), Ed W0YK (6Y4A).

between two loud stations and was constantly moving my TX VFO 50-100Hz back and forth to optimize my running frequency. Eventually, the band settled down and I settled into my techniques that began the run. Then, I had the opposite problem ... the pileups are HUGE. Kenny & Tom warned me about them, but you have to hear them to believe it. Fortunately, the K2 RX handled them quite well. For those of you who heard Eric's RX presentation at the November meeting, everything he said proved out. The RX really handled the signal overload. My problem then became my own personal ability to pull out the calls from the bedlam. The next 14 hours were incredible. What a high to be running Europe, USA, JA and the Pacific around 10z. This was what all the preparation was for and I thoroughly enjoyed it.

However, my excitement kept me from sleeping enough during the day, and Saturday night was a bit more difficult. It was also a series of ups and downs. A JA called in at 0700Z, uncharacteristically early and actually prior to his sunset, so I thought I was in for a very hot band that night. Then, quickly, the band died, even the US stations were hard to hear and got watery and fluttery like a polar path during a disturbance. Somewhat later the band peaked again and I started running JA's (along with the US and some Western Europeans). But, suddenly, "poof", no pileup again.

The net result was that my QSO total dropped way below my anticipated rate and overall goal. It was a constant battle to hold a CQ frequency. Right in the middle of my CQ some European and an occasional W would just start CQing on my frequency. I had previously determined that fighting it out was futile, but by now I was feeling more confident, so I pushed back and guess what? I was able to chase stations off my run frequency. Not all the time but more than I would have thought possible. Then, VQ9X starts CQing beneath my CQ's. He obviously couldn't

hear me, and I missed a new zone and country. A 4X called me but didn't confirm my report, so I had to scratch him from the log. There were many mults like this that slipped through my fingertips. I feel that my mults (22 zones and 72 countries) were lower than they could have been. Looking at other 40 meter results today, convinced me of this. I also felt I could have gotten more out of the pileups, so more practice in that department is planned this coming year. However, 23 hours into the contest (with solar indexes of A=95, and a K=7), I surpassed the 40-meter QRP world record!

All and all, I was learning a whole new kind of operation ... QRP with atypically high antenna gain and a great location for running the USA, EU, and JA. As Kenny explained at the meeting last month, 5 watts is "only" 4 S units down from full legal power. And if your antennas/location are optimized, as ours were, for a S9++ signal advantage over the typical expedition Yagi, then ta daa ... it is very much possible to "rock 'n roll" with QRP. This tiny 3lb K2, that is mostly air inside anyway, was commanding the world. What a thrill indeed.

The net result is that I have a completely new perspective on "QRP". Transmitter power is just one element of the total system, and not nearly as important as other elements, like location and antennas that are matched for that location. This is not about verticals being better than Yagis. It's about verticals exploiting a saltwater location in a way no Yagis could ever do. Even the 23 vertical elements on our oceanfront didn't look that impressive compared to how they performed. Moreover, the analysis supports the operating experience.

Yes, indeed, "QRP is!"

Thanks again to Force 12 for the loan of the antennas, and to Elecraft for technical support.

**Final Results by Band:**

Band	Call Used	Op	QSOs (duped)	Z	C	Claimed Score	NA Record	World <sup>1</sup> Record	# Of CQs <sup>2</sup>
10	6Y1A	K2KW	2,578	31	99	843,700	242,686	431,060	5,523
15	6Y9A	KE7X	2,166	28	93	637,670	186,102	364,344	4,819
20	6Y2A	N6XG	1,209	23	64	238,728	208,392	230,528	3,706
40	6Y4A	W0YK	1,337	22	72	298,168	90,240	117,262	5,632
80	6Y8A	N6BT	588	14	55	86,763	6,389	105,595	937
160	6Y0A	K2KW	162	6	17	7,567	2,232	28,670	198

<sup>1</sup>Note that none of the previous World Records came from NA, so if our claimed scores hold (and are not surpassed), we will have brought 4 World Records to the region.

<sup>2</sup>Does not include multiple CQ's from the CT "Repeat" function, only the initial CQ button push! Looks like W0YK holds the CQ record!

## 8P5A CQWW SSB (part one)

By Tom Georgens, W2SC

I was having dinner several months back with a pair of experienced Caribbean contesters and they remarked about how painful it was to read my last contest write-up about CQWW SSB 2000. The combination of fixing antennas for days in the broiling sun and then running out of energy during the contest was a scenario they both had dealt with first hand. For me, this was the second time it had happened. While I had won North America each time and had my plaques, neither time did I feel the satisfaction of doing my best and I felt like I had been defeated. Beyond simply putting in my best effort, my goal was to break the North American record, which I felt was legitimately within my reach. Falling short was going to gnaw at me until I had my next chance. After the last WW SSB, the current North American record holder (CT1BOH at KP2A) wrote me a very classy note and Jose indicated that he also had two disappointments before he set the record. However, standing in front of my quest was the fact that the station owner in Barbados was shutting down the station in May after about a decade of building and rebuilding. The thought of seeing the station close down seemed to be a shame but the thought of not getting another shot at CQWW was starting to bother me. I returned to the station for ARRL CW and was fortunate to win for a second time, but it did little to soothe my disappointment over my difficulties in the CQWW. With my wife Kathy's concurrence, we took over the station from the previous owners and extended the



lease on the property. By far, the biggest headache of owning a contest station in the Caribbean is the relentless effects of a very corrosive environment. Although there was a great deal of hardware down there, more and more of it was broken. The tall tower is 90 feet and held a non-functional 3 element 40 meter beam and a 5 element 10 with a broken director above it. A balky Taitwister turned

these antennas. The first priority was to get this antenna set working but I could not do it by myself. After six months of needling, I got K5ZD to volunteer and I got an unsolicited offer from N5KO at Dayton who, in turn, volunteered K6AW. The four of us took a trip down in August and spent three grueling days in brutal heat and humidity doing a number of jobs. The 40 and 10 were completely taken down, rebuilt and had new feedlines installed. The rotor was replaced as was the 160 meter inverted Vee. We also replaced a feedline, rotor, and



crankup cable for a TH7 on another tower and painted a third tower that was very rusty. It was a very productive three days and I am very grateful for the help of Randy, Trey, and Steve. One of the things not accomplished on the maintenance trip to Barbados was the replacement of the bandswitch in the AL1200 amp. Trey and Steve quite astutely recommended taking the amp home and repairing it under more relaxing and comfortable circumstances. This worked out well as I was also building and testing a super SO2R box that would control all station operation, including automatic antenna selection, headphone switching, beverage control, and miscellaneous interlocking.

*(Editor's note: the remainder of this fantastic story and more pics will be in the January issue of the Jug...NA6E)*

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