



Publication of the Northern California Contest Club



Issue 473 October 2011

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California QSO Party

October 1-2, 2011
1600 UTC Oct 1 to 2200 UTC Oct 2

The California QSO Party (CQP) is the premier state QSO party held every year on the first weekend of October. The Northern California Contest Club (NCCC) has sponsored CQP since 1974. CQP has traditionally opened the annual contest season by providing an opportunity for contesters to prepare for the ARRL November Sweepstakes since the format is similar.

Stations outside of California, worldwide, work stations in California only. The 58 counties of CA are the multipliers. California stations work all stations in or out of CA. The 50 US states and 8 Canadian provinces are the multipliers. Stations outside of Canada and the US add to one's QSO total but do not count as multipliers. See the full set of CQP Rules for more details.

On this site you will find lots of information, so peruse the index above and learn all about the California QSO Party! Also, be sure to visit the NCCC website for the latest scoop on a super contest club.

Planning on operating in CQP ?

Sent your CQP activity reports and pictures to the JUG editors!

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

Monday, October 10, 2011

Program

- CQP Review—Rick N6RNO
- Sweepstakes 2011—How to have Fun—Hank WS6X
- Sweepstakes Propagation Forecast—Dean N6BV
- Contest Club of Finland—Seppo, OH1VR/AE6PP and Henri OH3JR

Date: Monday, 10th October

Time: 6:00pm schmooze, 7:00pm dinner, 7:30pm program

TechShop, Inc.

120 Independence Drive
Menlo Park, CA 94025





Northern California Contest Club

Excellence In Amateur Radio Contesting

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NS Ladder	Bill Haddon	N6ZFO	haddon.bill@gmail.com
Slow NS (SNS)	Chris Tate	N6WM	ctate@ewnetinc.com

NCCC Net

Thursday 8 PM
3610+/-

NCCC

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

Details [here](#)

NCCC Membership Information

If you wish to join NCCC, you must fill out an [application for membership](#), which will be read and voted upon at the next monthly meeting. ([PDF application form](#))

To join, you must reside within [club territory](#) 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).

From the President

Greetings KB'ers! It's Showtime!

Well, the summer has slipped by. As I write this, I am listening to dx stations working W's on 10 meters, as we roll into CQP we have all our bands back, and it looks to be a great contesting season, maybe one of the best in 7 years!

Thanks to the CQP Team

I would like to personally extend my thanks to the entire CQP team for doing a fantastic job preparing for CQP 2011! This group of folk's works tirelessly around the year, Soon they will be vetting and scoring logs, signifying our kickoff of the contest season.

Webinars and More, our VP/CC kicks into high gear

Our VP/CC W6SX has prepared a series of webinars and presentation's that should prove most valuable to team NCCC. Please take some time to attend, or review them after the fact on the NCCC website as they are posted.

It seems many of the bigger stations have seen some major upgrades and improvements, this should add to the dynamic of what will already be a fantastic contest year.

Pacificon 2011 - Spread the word

If you have not done so already, Please take a moment to go to the NCCC website, and sign up to help spread the word of the NCCC at Pacificon 2011! This is at a new venue in the Silicon Valley this year, and we have regained our booth position in the exhibit hall. Stop by and say hello, or, better yet give us a hand! We would love the assist, and look forward to many KB'er Eyeball QSO's at Pacificon!

SS is coming!

In just over a month, the annual Sweepstakes competition will ensue once again. Keep an eye out for lots of helpful tips and tricks from W6SX, Should you decide to compete, we have the upper bands, maybe we can take that gavel back!

I wish the entire club membership a happy, healthy and successful contest season. With the solar cycle finally kicking into gear, lots of new KB'ers and all of the Veteran contesters taking advantage of it, this should be a banner year!

Hope to C U all on the air and hand you your California multipliers.

73 es KB

Chris
N6WM
President, NCCC

VP/CC Corner

Hello Fellow Contesters!

Ready or not, Contest Season is here. Ready or not, now's when the RF hits the ionosphere. Now's when we see how those antenna and station improvements work out. Now's the time to have fun.

First up is the California QSO Party. CQP is THE NCCC contest. It's our chance to have fun with the rest of the world. It's our chance to be DX. It's our chance to put counties on the air. It's our chance, even for little-pistol and medium-gun stations to call CQ and Run, Run, Run. If we're mostly CW ops, it's our chance to get on and have some SSB fun, or vice versa. Expand your fun horizons by trying a mode you're not partial to. CQP is by far the biggest state QSO party in hamdom. It's our contest. Let's all get on and show the world how to have fun.

Sweepstakes comes in November. NCCC is known as the Sweepstakes club. We've won the club gavel seventeen times. This year, NCCC doesn't have Focus Contests, but that doesn't mean we don't want to win another gavel. We can win by as many of us as possible getting on the air, both modes, and maximizing our fun meters. Each of us will have our fun meter calibrated differently. All that matters is that each of us has fun. If we each have fun, we win, gavel or not.

Also coming us are CQWW SSB and CW. As I write, CQWW RTTY is in full swing. Conditions and activity on fifteen and ten are better than they've been in years. It was wonderful to have ten meters open almost all daylight hours even with my pipsqueak antenna. Get on for both CQWW SSB and CW and enjoy the sunspots.

The great conditions on fifteen and ten are going to make both CQP and SS a blast. If ten and fifteen are as good for Sweepstakes as they were for CQWW RTTY, NCCC has a real shot at winning another club gavel. All we have to do is get on and have fun.

For any contest, if we get on and have fun, we win.

The first rule of contesting is to have fun—Contest Exuberantly!

73,

Hank, W6SX

September 2011 – Meeting in Vallejo, CA

About 30 NCCC members met at the China Wok in Vallejo in September for the annual China Wok blow-out. The food was exception and plentiful.. Just as you thought you were finished, another plate-load came out.. Food reports were 599 all round!



Jack KF6T and Glen W6GJB sample the food.



Too busy eating and Schmoozing!

Chris N6WM started off the evenings events and after introductions Chris informed the members that next months meeting would discuss Sweepstakes and there will also be a webinar so if your not able to attend in person you can still participate in the meeting remotely. Chris also introduced Ian W6TCP one of the JUG co-editors along with Stu K6TU who took over the JUG in June.



The main event for the September presentation was CQP 2011 but unfortunately “The Rhino” N6RHO was not able to present due to work commitments so John K6MM AKA “The Wino” stepped in to rapturous applause from the NCCC attendees to take us through the material.

John K6MM, complemented Stu K6TU on all the hard work Stu has given to the CQP 2011. Stu has targeted over 100 clubs to promote CQP and provided the Presidents and newsletter editors with the material they need to communicate the California QSP Party within their local clubs.

Many of the clubs have included the CQP material in their newsletters in the hope that this will encourage other members to participate in 2011.

The CQP Public Relations Kit is available on the CQP web site at <http://www.cqp.org/Resources.html> Its still not to late to continue to spread the word.

All but three counties have activity planned in 2011 with four more weeks to go its expected that all counties will be presented in 2011.

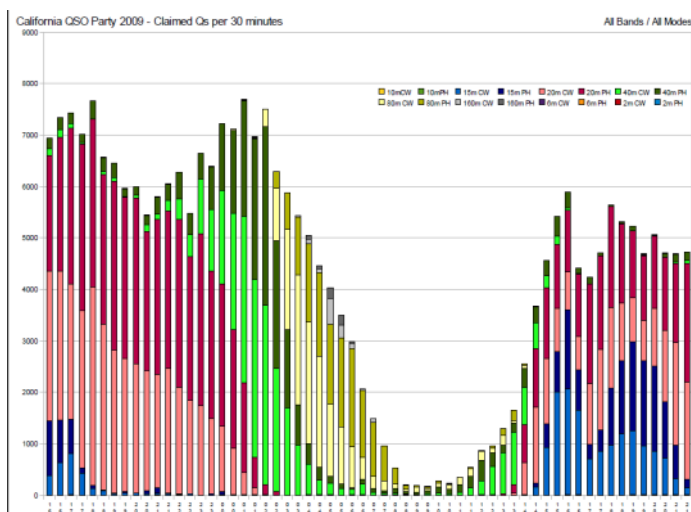
UPDATE: As of September all 58 counties will have activity for CQP although some counties have limited activity.

John also showed various metrics that had been pulled from the previous years logs.

These reports compared the number of QSO per band and per mode by hour of day.

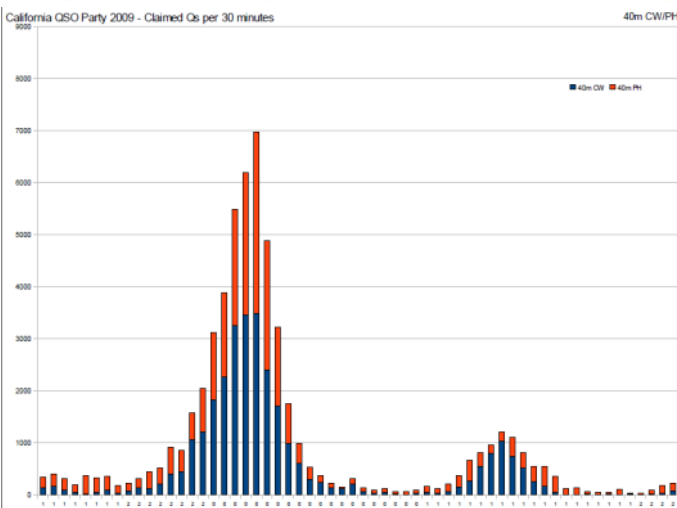
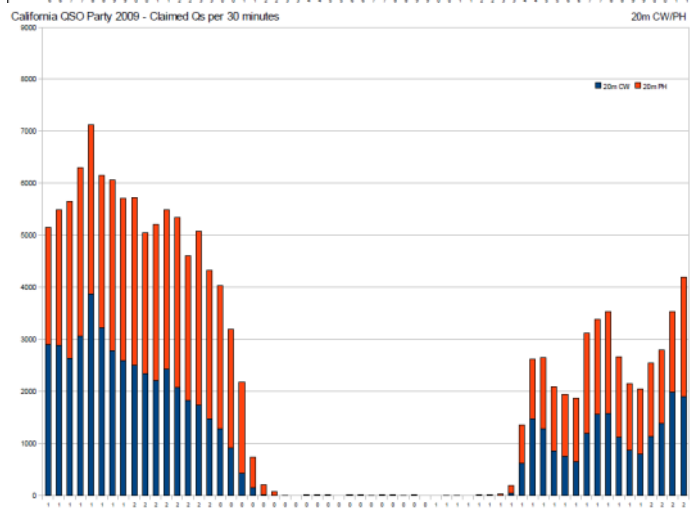


All of these metrics are make for interesting reading and are available on the CQP website [here](#).



Total By Band/Mode

Band	CW	Phone
2m	0	32
6m	1	29
10m	45	79
15m	17393	16856
20m	62405	79201
40m	29935	26654
80m	15908	14555
160m	1189	584



Remote Contesting

By Ron Lodewyck, N6EE

Remote Contesting – What is it?

The ability to participate in a radio contest while geographically separated from your radio.

Remote Contesting – Why?

There are many reasons one might want to operate a radio which is located at a significant distance away from the operator. Many Hams are faced with antenna limitations due to CC&Rs, zoning ordinances, small lots, or esthetics. RFI problems with neighbors often limit QRO. Building a station out in the countryside can often ameliorate these issues. In my case, I wanted to be able to participate in Sweepstakes so that I could contribute to the NCCC club score even though I would be visiting my daughter in northern New Jersey. After confirming with the ARRL that my score would count toward the NCCC total so long as all radio transmitters, receivers and antennae are all located at a single site within the NCCC circle, I decided to prepare my station in Turlock for remote control.

The Challenges

I wasn't sure that it was even feasible to operate a radio remotely from 3000 miles away. The two big issues were cost and communications. Recently retired, my budget wouldn't support costly solutions. I quickly ruled out communications via RF link and conventional telephone. That left the Internet as the most likely media, but raised the obvious question of latency. I was confident that I could control a radio remotely over the Internet since others had done so, but it was still very uncertain if response times would support rapid contest exchanges. After all, even a few second delay during a contest QSO would be awkward at best and most likely unacceptable. Since I was hoping to enter the CW Sweepstakes, I felt that latency was my biggest concern. Of course, I also had to figure out how to actually control my station via remote control.

Remote Control

Rather than bore you with the details of my long hours of trial and error research into how to pull this off, let me just describe the final solution that worked. Admittedly, this may not be the optimal solution or even one that would work for you, but it worked great for me. By "great" I mean that I was able to participate in SS CW and had a lot of fun doing it – exuberantly I might add!

Figure 1 is a block diagram of how I was able to operate my home station in Turlock in the SJV section while visiting my daughter in northern New Jersey. The diagram includes both my home station, referred to as the “base” station and the New Jersey station, referred to as the “client”. Note that my situation is the reverse of what some hams would desire; I want to operate my home station from a remote location while traveling, which is the opposite of setting up a remote station away from the home and operating it from home. However, the principles are still the same; only the labels might be a bit confusing. Figure 2 shows the client screen layout during an actual SS CW QSO.

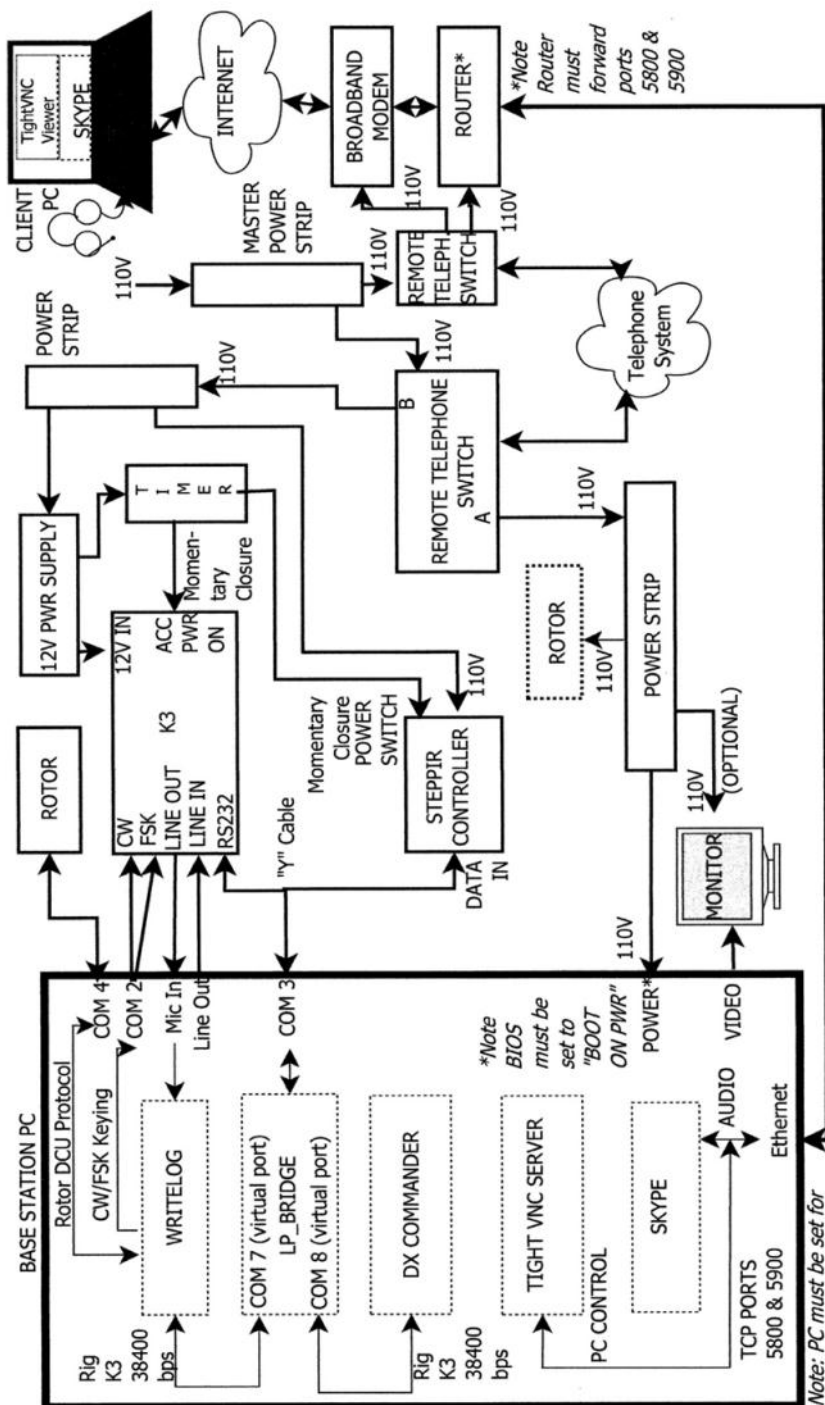
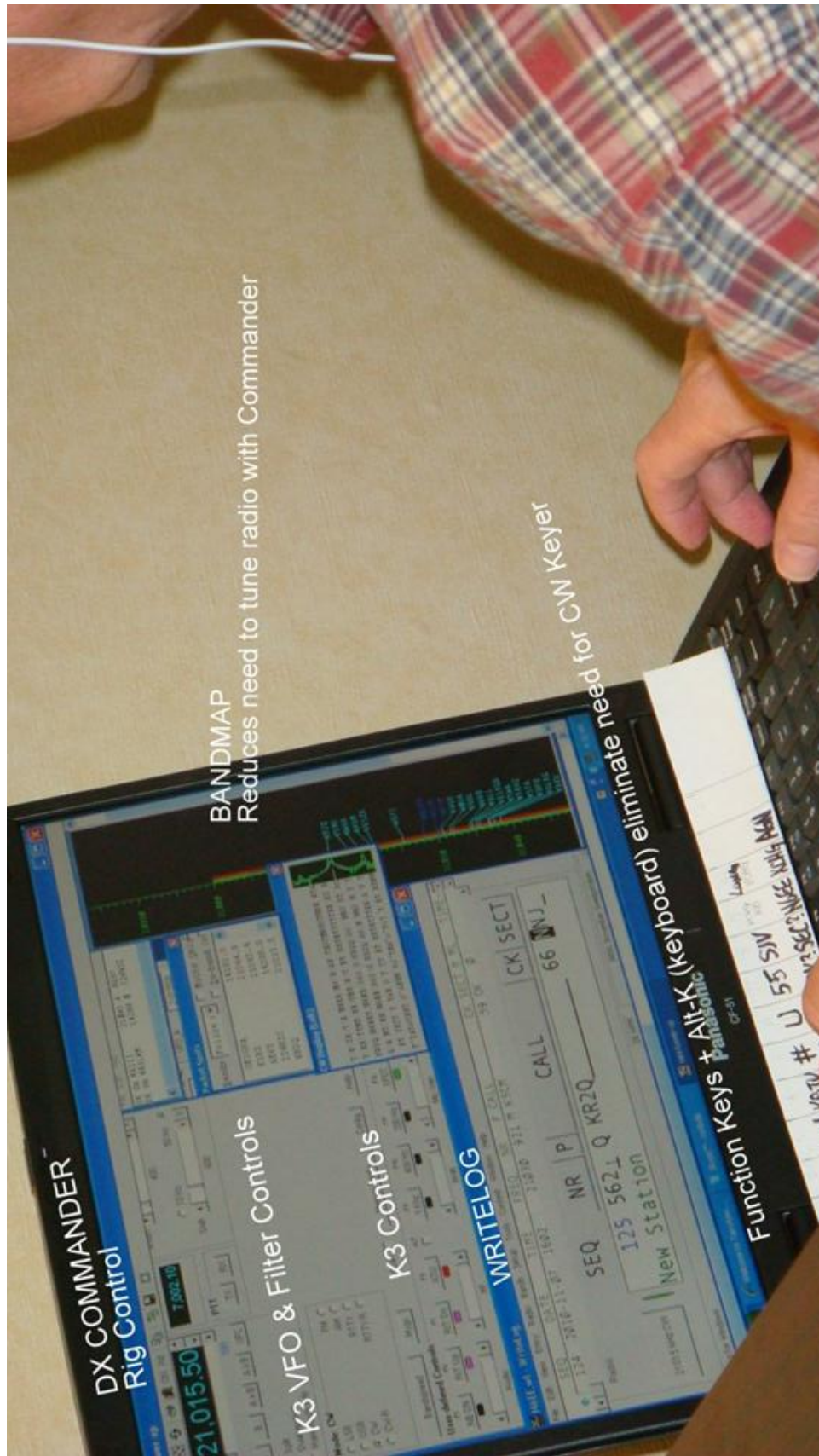


Figure 1. System Diagram including base and client configurations.

Note: PC must be set for Auto Logon



BANDMAP
Reduces need to tune radio with Commander

Function keys + Alt-K (keyboard) eliminate need for CW Keyer

Figure 2. Client screen layout during actual ISS CW QSO.

Base Station

The base station consists of these major components:

Radio	Elecraft K3/100 transceiver. Winford Engineering Breakout board connected to ACC connector allows easy connection to Power ON and FSK keying pins. Momentary ground of Power ON pin turns K3 on. Computer command turns off K3.
Antennae	SteppIR DB18E with three elements on all ham bands 10M through 30M and two elements on 40M on K3 Ant 1. Elements adjusted automatically via RS232 port on SteppIR SDA100 Controller. Controller requires momentary shorting of Power On switch contacts to turn it on, i.e. simply applying 110V to the power cord does NOT turn on the controller. 80M inverted Vee on K3 Ant 2.
Timer	Homebrew interval timer provides 1 second momentary closure of transistor for K3 Power ON and relay contacts for SteppIR controller power switch. I modified a Velleman MK111 Interval Timer kit. See Figure 2 in the Appendix for schematic diagram.
Rotator	Ham IV with Idiom Press RS232 option for digital control using DCU protocol.
Computer	PC running Windows XP – recently updated to Windows 7. Three COM ports: COM 2 (motherboard) for keying either CW or FSK RTTY via homebrew interface; COM 3 (USB) for K3 control; COM 4 (USB) for rotor control. BIOS set for “BOOT on Power” so it would turn on when 110v power is applied. Windows set to automatically log on, i.e. bypass the logon screen.
Logging Software	Writelog – in addition to usual logging functions, also provides: -CW and FSK keying via programmed function key messages and keyboard typing (Alt-K). -Voice keying via programmed messages either computer generated or commands to send K3 programmed messages. -rotor control. -rapid frequency shifting using bandmap, packet spots, and typing frequency in Entry Window.
Radio Control Software	DX Commander – Free program, part of the DX Labs Suite – in addition to allowing frequency tuning, also allows controlling the K3 via programmable buttons and sliders. Used to select filter bandwidth, power level, monitor level, CW Spot, Antenna tuner, Noise Blanker, Preselector, VOX, AF and RF levels, Mic and Compression levels, and turn the K3 off.
COM Port Sharing Software	LP Bridge by N8LP – Free program - allows Writelog and DX Commander to both connect to and control the K3 on COM 3 by creating two virtual COM ports (7 & 8).
Internet Connection	Broadband cable modem with 5 Mbps download / 1 Mbps upload
Router	Motorola Broadband Wireless Router – But wired Ethernet connection to base. Wireless connectivity had unacceptable intermittent delays.
Remote Control of PC	TightVNC Server – free program – allows a client PC to have virtually total control of the base computer. Requires TCP ports 5800 and 5900 to be forwarded by router to the base PC
Audio	Skype – free program – allows audio transfer between radio and client PC.
IP Address	DynDNS.COM - free service - assigned host name N6EE.xxx allows a client to “find” the base computer which has an IP address dynamically assigned by the router. DynDnsUpdater is installed on the base computer to ensure that the host name correctly addresses the base computer in the event the Internet Service Provider (ISP) allocates a different IP address to the router.
Telephone Power Switches	PowerStone – has one 110V outlet controlled via touchtone codes over telephone. Used to remotely reboot the modem and router. Shenzhen TR-002U Telephone Controlled Power Switch – has two independent 110V outlets controlled via touchtone codes. Used to remotely turn on computer and independently, the radio and SteppIR controller. Note: this was a prototype which was never marketed in the USA – I would now replace both the PowerStone and the Shenzhen with one Professional 4-Port Remote Power Switch Model IP-P3 (\$215) from ambery.com which has both Phone Control <u>and</u> Web Control.

Client

The client “station” is quite straightforward and consists of these major components:

Computer	Laptop running Windows XP – recently upgraded to Windows 7.
Internet	Broadband connection. Wired Ethernet connection to modem or router proved to be essential for steady, low latency connectivity. If only a Wi-Fi connection is available, I found the use of a Netgear Universal WiFi Internet Adapter to solve this problem. The adapter connects via WiFi to the hotspot and the laptop connects via Cat 5 cable to the adapter.
Remote Control Software	TightVNC Viewer – Free program. Connects to the DynDNS provided hostname. The client computer screen then looks exactly the same as the base computer and the client keyboard, pointing device (trackball, mouse, touchpad), microphone, and speaker output all interact directly with the base computer.
Audio	Skype – free program – allows audio transfer between radio and client PC. Quality was excellent on SSB and RTTY and acceptable on CW. I found it necessary to crank up the monitor level to maximum on the K3 in order to hear the CW I was sending. I used lightweight ear buds for receiving and borrowed my daughter’s Blue “Snowball” USB desktop microphone for SSB (since I hadn’t really planned on doing any phone operating on that trip). The ear buds and Snowball mike worked fine, but on my next trip I will bring my Yamaha CM500 headset for improved communication quality audio.

Performance

So how did this system work? In a word: great! Upon arriving at my daughter’s home in New Jersey, I called my home on the telephone and entered the appropriate commands via the keypad to first turn on the base computer. After allowing a few minutes for the base computer to boot and load all the software, I was able to connect using TightVNC. It was quite a thrill to see the home computer screen appear as if I were sitting at my desk at home. I then telephoned home again and entered the code to turn on the power strip to the radio and other equipment. Again, it was quite a kick to hear the K3 audio in my ear buds. I then used DX Commander to tune around the bands and confirm that all the programmed functions worked as expected on the K3. I had set the K3 power out level to zero before leaving home as a precaution in case the radio was accidentally keyed by the computer. So, one of the first slider functions I tested was the power output; it worked fine. Finally, I tuned in a signal on 20M CW and rotated the antenna to verify it was working correctly, which it was. My first CW QSO was a typical snappy 5NN report with a busy DX station. Hey Hey! Latency was not a problem! After working several CW stations I checked out SSB and worked a bunch of stations in the CQ WW Phone contest. It was rather awkward with the Snowball microphone but I found the audio reception quality and latency to be excellent. What did prove to be cumbersome was “turning” the K3 frequency dial using the DX Commander on-screen tuning buttons. What did work quite well, however, was utilizing packet spots by way of the Bandmap to simply click on spots and fine tune using the DX Commander buttons.

And how did the goal of operating in the SS CW contest work out? OK, but not great. Due to a series of unforeseen events and obligations I wound up traveling on SS CW weekend. Instead of staying at my daughter's in New Jersey as originally envisioned, I was in a motel in Tarrytown, New York. I did some online research and selected a motel which explicitly advertised the availability of both WiFi and wired Ethernet broadband connectivity in every room. Unfortunately, when I tested the Ethernet port I found it dead. The management confirmed that they had just recently disconnected it and now only WiFi service was available. I was able to connect easily via WiFi, but my previous experience at home with a wireless network connection happened again: Microsoft Windows periodically checks to see what wireless networks are available. This polling disrupts the remote connectivity and leads to several seconds of no response from the base station. After spending hours trying to find an acceptable solution, I decided to drive to the nearest store (about 30 miles away) with a WiFi Internet Adapter. See Photo 1. This took a bit of fooling around to hook up to the motel WiFi, but it worked! The laptop saw a solid, wired connection to the network and the O/S didn't disrupt the connection. By this time I had lost most of Saturday but was able to start making CW QSOs at a fairly rapid (considering) rate. Then the boom fell again: I noticed the latency was getting bad and approaching unacceptable levels. In fact, it got to the point that it took five MINUTES to bring up Google. A call to the management confirmed that others were complaining that the

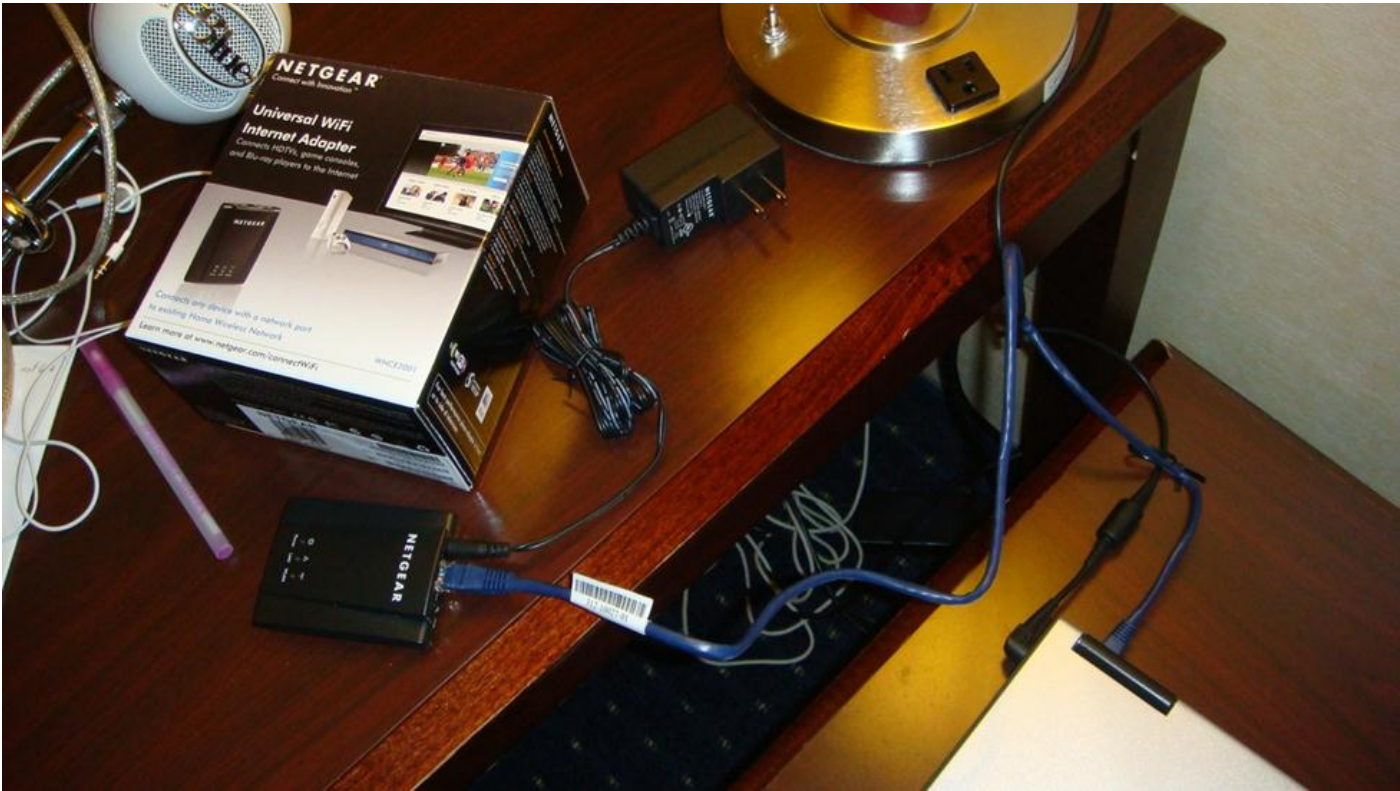


Photo 1. WiFi Internet Adapter connected to laptop with Cat 5 cable.

Internet service had come to a near halt after a bus load of college kids, all with their mobile devices and laptops in tow, had checked into the motel. I kept trying but could not get acceptable response times until after 3 AM. But the bands were pretty much devoid of SS contesters until about 8 AM. From that time on until the end of the contest, I had good connectivity and had a ball. It was especially fun working other KBers. A remote contesting QSO with N6RO during SS CW can be seen in Photo 2. Lesson learned: take a WiFi Internet Adapter whenever I travel.

Improvements

I consider my first effort at remote contesting to be a great success, but there is room for a lot of improvement. Here is a short list of some of the most urgent or desired changes:

1. Frequency Tuning – I have seen a few peripheral devices utilizing rotational knobs which I hope will allow me to control the radio frequency. Clicking on screen is cumbersome and slow.
2. SWR – I believe it is essential to check the SWR of the antenna, but the K3 has no control code to permit this. I intend to purchase a digital SWR / Wattmeter like the Elecraft W2 Wattmeter or the TelePost LP500 Wattmeter which provide continuous display on the computer screen.
3. CW Keyer – perhaps you are wondering how I operated a CW keyer at the client site. The answer is that I didn't use a hand operated keyer – I relied on function keys to send programmed messages and filled in spontaneous responses with typing from the keyboard (Alt-K in Writelog). This worked OK, but a hand operated keyer would be a nice (some would say *essential*) addition to the system. I believe WinKeyer or an interface like MicroHam would provide this capability and I am investigating this for inclusion in the system.
4. Watchdog Timer – It is imperative that the radio not be allowed to transmit in an uncontrolled manner. This could happen any number of ways; a computer crash for example. I have requested, and Wayne and Eric at Elecraft have promised, that a watchdog timer feature be added to the K3. Hopefully, this will be available in a firmware upgrade in the near future.
5. Security – I have added a couple of High Definition (HD) Web Cams which provide a wide angle view of the shack and the antennae/tower. These work very well with Skype locally; it remains to be seen if they have a detrimental impact on latency over long distances.
6. QRO – I plan to add an amplifier to the station in the near future. I am still uncertain if this will be a full legal limit auto-tune amp, like the Alpha or Acom, or a 500 watt solid state amp like the Elecraft KPA500. In either case, auto-band switching and auto-tuning make connectivity and control fairly simple. However, the presence of high levels of RF make it imperative that that all components in the base station, especially the computer, be very stable. Certainly this should be the case in any station, not just a remote base. One issue to consider is whether the telephone (or a comparable Internet) power switch can handle the high current draw of an amplifier.
7. Client foot switch – I very much prefer to use a foot switch for phone contesting but haven't yet figured out how to incorporate one at the client site. Any ideas?

Other Possibilities

Of course, there are many other possibilities for configuring a remote station for contesting. Several other NCCC members have been remote contesting for years. Rick, K6VVA, has given several presentations of his remote contesting projects and explained how he configured and successfully operated both line-of-sight (to a nearby hill) and DX location (KV4) remote stations using a variety of strategies. I know that there are other members in our club who have also put together remote contesting stations, some of which are very competitive.

If you are thinking about building a remote station yourself, I would suggest that you consider the interfaces manufactured by RemoteRig and sold through Ham Radio Outlet. They offer several configurations depending on your requirements. In addition to a PC based system, they offer a hardware solution for radios with a removable front panel, like the Kenwood TS480 for example, which allows tuning the radio at the client site exactly the same as you would at a fixed home station. That's cool.

Other popular PC based remote radio solutions include: Ham Radio Deluxe (HRD), TRX Manager, and N4PY Pegasus. I did try them all and each had advantages and disadvantages. I finally settled on DX Commander for its simplicity and intuitive design. For remote PC control I have successfully used Microsoft Windows Remote Desktop Connection, but it occasionally conflicted with Skype, so I switched to TightVNC which was recommended to me by Rick, K6VVA. For IP address resolution, many have reported success using LogMeIn.COM, but I had latency difficulties with it so I switched to DynDNS.COM. As for logging, I used Writelog primarily because I own it and am very familiar with it. I see no reason why almost any logging program wouldn't work instead of Writelog. Finally, I used the K3 because I own it, but it is a wonderful radio for remote operation. Certainly other radios ought to work just fine, but some will be easier to operate remotely than others. Not all radios have a robust set of software commands which provide full control of the radio. I also have no idea if there are other radios with an input pin which can switch the radio power on by remote control. This isn't essential, but it is a nice feature.

Another thing to consider is using either an Internet power switch, instead of a telephone power switch. The drawback is that you cannot reboot your modem and/or router if the Internet connection goes down. My Charter cable Internet service has been fairly reliable, but it has gone down maybe once or twice every few months. That's why I went with a telephone power switch. I recently discovered a product from Ambery.com which has both Internet and telephone control of the power switch. The Model IP-P3 Professional 4-Port Remote Power Switch sells for a reasonable \$215.

I have considered finding a partner in a desirable QTH outside the continental USA who would be willing to set up remote control of his or her station expressly for contesting. Wouldn't it be a kick to run contest pileups from a "rare" DX multiplier without the expense and hassle of actually traveling to the DX location?

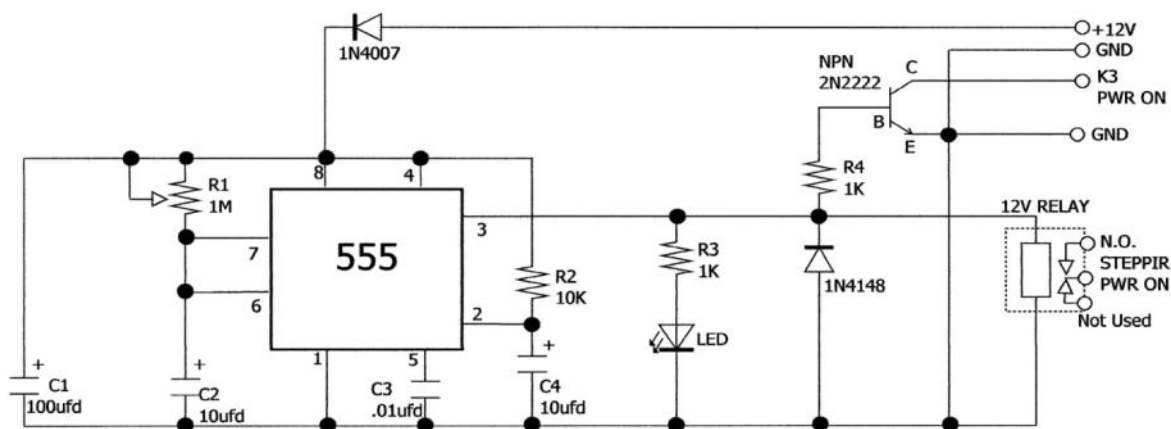
Unfortunately, most DX locations have marginal Internet service, if any at all, with unacceptable latency for reasonable contesting. I intend to continue the quest, however, and hope to find the right partner some day. Let me know if you have any leads .

Conclusion

Remote contesting was a challenge for me to configure and set up, but the result has been well worth the effort. I have been able to participate, contribute to our NCCC club score, and enjoy contesting while traveling many thousands of miles away from my home station. I highly recommend it as a viable option which can yield respectable rates and tons of fun.

Appendix

Figure 2. Circuit Diagram for Momentary Contact Interval Time



- TIME DELAY "BOOT" RELAY AND SWITCH**
1. apply +12V
 2. relay closes, transistor closes, LED lights
 3. after ~1 sec, relay opens, transistor opens, LED goes out
 4. all stay open as long as power is applied.

Note: Modified Velleman Kit MK111 since it had a PC board and most of the parts.

Farewell Barry, K6RM

NCCC members wished Barry K6RM best wishes at the NCCC meeting on Monday 12th September. Barry will be moving to W4 land around the time JUG is published.

Look for Barry on the air soon!



Tech Tips # 3

Another couple of tech tips from Stu K6TU. If you have any tips that you'd like to share, please send them to the Editors!

Getting that rope up in a tree

Love them or hate them, trees make great antenna supports... the love factor depends on the grief of trying to get a rope in just the right spot without the frustration of hanging weights, snagged lines etc.



While the ultimate solution is a pneumatic tennis ball launcher, there is a less expensive solution which with a little practice can make line placement much less frustrating - the Chuckit™ dog ball thrower.

You can find the Chuckit at most pet stores – they come in a range of sizes for small, medium or large dogs. The larger units will hold a standard tennis ball and let you throw it at least 100 feet with ease.

A weighted tennis ball works best – cut along one of the seams with a sharp pair of heavy duty scissors (CAUTION: you do this at your own risk!) and add 3-4 ounces of sand or lead shot. Close the slit with a couple of nylon tie wraps and in the process, make an attachment loop for a thin line.

You will need some practice in getting your aim with the Chuckit – here it helps to have a good assistant to keep bringing the ball back to you – enlist one of your kids, grand kids or better yet, your dog!

Use a thin line – most hardware stores sell a nice fluorescent colored nylon line that is pretty slippery, easy to see and cheap. Get a plastic bucket, tie one end of the line to the handle and now unroll a generous amount of line into the bucket – you can also use a line bag (also available at the hardware store) that clips on a belt. You want to make sure that there is PLENTY of line in the bucket so that it doesn't attempt to follow the ball!

Tie the other end of the line to the ball, clip the ball into the Chuckit and “chuck it” over the tree limb of your choice.

The weighted tennis ball should help overcome the drag of the line over the tree limbs and bring the line back to ground level.

SO239 “saver”

One of the most useful items of test gear is the antenna analyzer. If you dabble with antennas like I do, your analyzer gets a lot of use! That means lots of insertions and removal of the coax plug into the connector on the analyzer – most ham analyzers use an SO239 “UHF” connector.

The SO239 is not designed for a large number of insertion cycles – the weakness in the design is the split spring steel contacts for the center connector. As the cycles mount, the steel becomes less “springy” and can ultimately become intermittent. If you aren’t careful and keep this in mind, a lot of time can get wasted chasing “flaky” antennas instead of a flaky connector.

You can “repair” an intermittent connector by using a sharp point metal scribe or screwdriver to carefully push the two halves of the metal sleeve in towards the center or you can disassemble the unit and replace the connector.

An alternative is to use a simple “SO239 saver” made from a male-to-male connector and a female-to-female barrel connector.



Take the male-to-male and attach it into the SO239 on the antenna analyzer. Take the female-to-female barrel and attach it onto the other end of the male-to-male.

Now you have a female connector to attach to the PL259 on the end of your antenna coax.

When the barrel connector starts getting worn, throw it away and replace it with a new one!

If you buy the connectors at a surplus store, the SO239 saver will cost you less than \$5.

California QSO Party

October 1-2, 2011
1600 UTC Oct 1 to 2200 UTC Oct 2

The California QSO Party (CQP) is the premier state QSO party held every year on the first week-end of October. The Northern California Contest Club ([NCCC](#)) has sponsored CQP since 1974.



The 2011 LZ Field CW Open An Experience to Remember

By Rusty Epps, W6OAT

How's this for a contest? Conduct it only on 80m CW. Hold it in the middle of the summer and run it for four hours – from 11:00 a.m. until 3:00 p.m. local time (the absolute worst time for propagation). Limit the power to a maximum of 5 watts, and for an antenna require everybody to use a three meter long vertical whip without any ground system. Finally, employ a six digit exchange, where the first three digits are your consecutive serial number and the final three digits are the serial number you received from the last station you worked. Oh, and did I fail to mention that if you or the station you are working get anything wrong – and I mean anything – then BOTH of you lose the QSO?



Rusty, W6OAT and Krassy, K1LZ at LZ Open headquarters building

Welcome to the 2011 LZ Field CW Open held July 2nd at the Pirin Golf and Country Club near the town of Razlog in southwestern Bulgaria. And yes, those really ARE the rules, and yes, it is a hugely popular and well attended annual event. And how many QSOs do you think the leader claimed? Maybe five, maybe seven, or maybe even ten you say? Think again – how about 306!

Where do I even begin? The LZ Field CW Open has a history going back for decades. It was a major event for Bulgarians and other East Bloc nations during the Soviet era. The best CW ops would journey to Bulgaria each year for an on-site competition somewhat like present-day WRTC, but it was an individual competition rather than a team event. As the Soviet Union collapsed, so too did the Open because the political and economic uncertainties kept competitors away.

In the last few years, the Bulgarian Federation of Radio Amateurs (BFRA), the Bulgarian equivalent of the ARRL, has tried to revive the CW Open. Participants have come mostly from Bulgaria itself, with a few venturing from Serbia, Ukraine, and a couple of other nearby nations. Then, for this year, along comes Krassy Petkov, K1LZ, the indefatigable Bulgarian who now calls New England home. Krassy decided to invite a number of foreigners to participate in the 2011 Open. Their attendance would make it more fun for the Bulgarian locals. It also would give the Bulgarians an opportunity to show off their country as a possible venue for the 2018 WRTC. I was fortunate enough to receive one of Krassy's invitations. Other foreigners who attended were AI6V, AI6YL, VY2ZM, K1VR, W1UE, K3LP, JT1CO, PY5EG, PP5JR, PY2NDX, S50A, S56A, CT1ILT, CT1CJJ, DK6XZ, DJ6QT, E77DX, and a number UTs, YOs, UAs, and YUs.



The LZ Open is something of a cross between our USA Field Day and WRTC. Everybody is located on-site with callsigns and operating positions being determined by a random drawing prior to the start. Competitors learn their site locations right away, but nobody is permitted to open the envelope containing his callsign (LZ6 plus a two letter suffix) until 15 minutes prior to the start. The sites are spaced about 100 meters apart along a couple of roads winding through the woods surrounding the Pirin Golf Course.

W6OAT operating as LZ6AN in LZ Open contest. (Photo by K3LP)

The “locals” are required to bring everything they need for the competition. Usually, this means a small station set up inside a car or van and operating off the vehicle's 12 volt battery. The competition organizers supply the 3 meter high antenna and the coax needed to connect it to the radio. Locals just drive to their operating sites and hook up to the antennas. The “foreigners” who had to deal with airports, customs and excess baggage charges just to get there, got a break. The Organizing Committee went to their sites and set up a card table under a sun umbrella, and supplied a folding chair, transceiver, laptop computer and a bottle of water. ACOM, the amplifier company headquartered in Bulgaria, provided a device to each site which took up to 100 watts of RF power from the transceiver and limited it to 5 watts maximum output into the whip antenna.

About 70 contestants entered the competition, and as I would learn later, 66 of them actually finished. The dropouts experienced all those usual disasters associated with any Field Day! The rules of the CW Open limit a competitor to working only other competitors whose logs can be cross checked by the judging computers. As a practical matter, this means that you're working just others physically located at the Pirin Golf Course. And because there are not enough other competitors to fill up the entire four hour contest operating window, you are permitted to work dupes provided that at least 30 minutes have elapsed since your last QSO. All the competitors' computers were running custom contesting software which would alert you to when it was okay to re-work somebody with whom you already had prior QSOs.

I learned from the random draw that I would be operating from Site #14. It turned out to be a nice, woody spot with kind of squishy soil into which my operating table and chair sank only a few inches. If I needed to pee, there was a nice big pine tree nearby; if I needed to do anything else, I was out of luck! The Committee delivered me and all my equipment to the site about 45 minutes before start time and I quickly got to work assembling my station. But there was one problem. My power source, a small gas generator, had been stolen the night before! I learned later that I was not alone; generators had been stolen from several sites. "Not to worry" my Bulgarian hosts assured me. "We have spare generators."

I sat there anxiously awaiting their return. They reappeared, about ten minutes AFTER the four hour long contest had already started, with the sad news "Oops. We don't have THAT many spare generators. We must move you to a different site." So I frantically disassembled my station while my LZ friends loaded my card table, chair and antenna into the back of their truck. Next thing I know I've been relocated to the sidewalk of the main street which runs alongside the rental office back at the Pirin Golf Course. Naturally, there is no electric power here either, so while I set up my station again, the LZ boys tapped into the resort's power grid with a long extension chord and got 220 VAC for me. Fortunately, all my equipment could handle that, and the first CQ from LZ6AN finally rang forth at 11:40 a.m.

I must have been a strange sight for all the folks in those cars zipping past me at about 35 mph and just three feet away! There I am, sitting at a card table on a sidewalk next to a busy highway in broad daylight staring at a computer monitor which is completely unreadable because of the sun shining right on it. I will be forever grateful to my partner Bill Vinci, a non ham, who just happened to see me out there and who came to my aid with an umbrella which he held over me, the monitor and my operating position for the next three hours!

The contest itself was something like a Sprint except that there was no QSY rule. Stations nearby were quite loud; some farther away were barely audible. How I wished I were back at Site #14 which at least was closer to the middle of the chain. My actual site, at the Golf Course Headquarters building, was the first station in the chain so I was farther away from all the other competitors than anybody else except for the guy at the opposite end of the chain.

To say that my operating conditions were less than optimum would be an understatement. But it was at this time that I came to appreciate, and then to love, the rule that required both stations making a QSO to get the exchanges absolutely correct in order for either of them to count it. Most of the contestants in the Open easily could handle CW at 35 to 50 wpm, but to ensure that both parties correctly copied all the exchange, most of them slowed to 28 wpm or thereabouts. That made a huge difference in what I was able to copy from the weak stations who were right at my noise level and who were being pounded by closer, and thus much louder, guys.

The contest ended at 3:00 p.m. sharp. Now the beauty of my location near the headquarters building came into focus – I was able to get to the bar for a cold beer before anybody else even returned from the field. And, of course, the competition judges had set up their computers right there at the bar so we could easily hand them the flash memories containing our logs.

The judges' log checking software was brutal. It shredded our logs searching for even the most miniscule errors. The top three claimed scores had boasted 306, 304 and 300 QSOs respectively. After log checking, the confirmed numbers were 245, 281 and 269. When the smoke finally cleared, the locals had whipped the foreigners handily. First place was captured by LZ2PL with 284 valid contacts; second place went to LZ3YY with 281; and LZ2JR nailed third with 271. Rafael, PY2NDX, was the top foreigner with 269 and placed fifth overall. Krassy, K1LZ led the USA contingent with 241 QSOs which put him 26th in the pack. W6OAT ended up with 179 and 49th.

The LZ Open wrapped up that same evening with an awards banquet at which the victors were presented their gold, silver and bronze medals. We were treated to an amazing array of Bulgarian foods and wines, entertained by Bulgarian folk dancers and singers, and regaled by fellow competitors and visitors with great stories of their experiences during the contest.

As we headed out from Pirin the next morning on our way to tour the famous LZ9W contest station, I couldn't help but think back about the LZ Open and the last 24 hours. What a great opportunity to have fun in an unusual contest, to reunite with a lot of old friends and meet a bunch of new ones, and to see a beautiful country which I had never before visited.

Dave WJ6O (G3WGN) visits with NCCC

September 21, 2011 saw Dave Aslin WJ6O back in California on a short visit en-route to T32C as part of the DXpedition team (<http://www.t32c.com/>).

Dave was an active member of NCCC before moving back to the United Kingdom with his family in 2010.

Rusty W6OAT organized a re-union lunch for Dave and a number of NCCC members – pizza, a few beers and lots of ham tales were served up!



Dave is on the left, all other names and call signs deleted to protect the innocent but we're guessing you recognize the folks anyway!

Great to see you back Dave and good luck on T32C - listen out for all your NCCC friends!



Contest Calendar—October page 1

TARA PSK Rumble Contest	0000Z-2400Z, Oct 1
EPC Russia DX Contest	0400Z, Oct 1 to 0359Z, Oct 2
Oceania DX Contest, Phone	0800Z, Oct 1 to 0800Z, Oct 2
WAB HF Phone	1200Z, Oct 1 to 1200Z, Oct 2
California QSO Party	1600Z, Oct 1 to 2200Z, Oct 2
EU Autumn Sprint, SSB	1600Z-1959Z, Oct 1
UBA ON Contest, SSB	0600Z-1000Z, Oct 2
German Telegraphy Contest	0700Z-0959Z, Oct 3
ARS Spartan Sprint	0100Z-0300Z, Oct 4
432 MHz Fall Sprint	1900 local - 2300 local, Oct 5
SARL 80m QSO Party	1700Z-2000Z, Oct 6
YLRL DX/NA YL Anniversary Contest	1400Z, Oct 7 to 0200Z, Oct 9
Makrothen RTTY Contest	0000Z, Oct 8 to 1559Z, Oct 9
Oceania DX Contest, CW	0800Z, Oct 8 to 0800Z, Oct 9
Scandinavian Activity Contest, SSB	1200Z, Oct 8 to 1200Z, Oct 9
Pennsylvania QSO Party	1600Z, Oct 8 to 0500Z, Oct 9 and 1300Z-2200Z, Oct 9
Arizona QSO Party	1600Z, Oct 8 to 0600Z, Oct 9 and 1400Z-2359Z, Oct 9
EU Autumn Sprint, CW	1600Z-1959Z, Oct 8
FISTS Fall Sprint	1700Z-2100Z, Oct 8
North American Sprint, RTTY	0000Z-0400Z, Oct 9



Contest Calendar—October page 2

UBA ON Contest, CW	0600Z-1000Z, Oct 9
10-10 Int. 10-10 Day Sprint	0001Z-2359Z, Oct 10
NAQCC Straight Key/Bug Sprint	0030Z-0230Z, Oct 12
NAQCC-EU Monthly Sprint	1800Z-2000Z, Oct 12
RSGB 80m Club Sprint, CW	1900Z-2030Z, Oct 12
CQ SA SSB Contest	0000Z, Oct 15 to 2400Z, Oct 16
10-10 Int. Fall Contest, CW	0001Z, Oct 15 to 2359Z, Oct 16
ARCI Fall QSO Party	1200Z, Oct 15 to 2400Z, Oct 16
New York QSO Party	1400Z, Oct 15 to 0200Z, Oct 16
Worked All Germany Contest	1500Z, Oct 15 to 1459Z, Oct 16
Asia-Pacific Fall Sprint, CW	0000Z-0200Z, Oct 16
UBA ON Contest, 2m	0600Z-1000Z, Oct 16
Illinois QSO Party	1700Z, Oct 16 to 0100Z, Oct 17
Run for the Bacon QRP Contest	0100Z-0300Z, Oct 17
ARRL School Club Roundup	1300Z, Oct 17 to 2400Z, Oct 22
Araucaria VHF Contest	0000Z, Oct 22 to 1600Z, Oct 23
ARRL EME Contest	0000Z, Oct 22 to 2359Z, Oct 23
FOC QSO Party	0000Z-2359Z, Oct 22
Microwave Fall Sprint	0600 local - 1300 local, Oct 22
RSGB 80m Club Sprint, SSB	1900Z-2030Z, Oct 27
CQ Worldwide DX Contest, SSB	0000Z, Oct 29 to 2400Z, Oct 30
50 MHz Fall Sprint	2300Z, Oct 29 to 0300Z, Oct 30

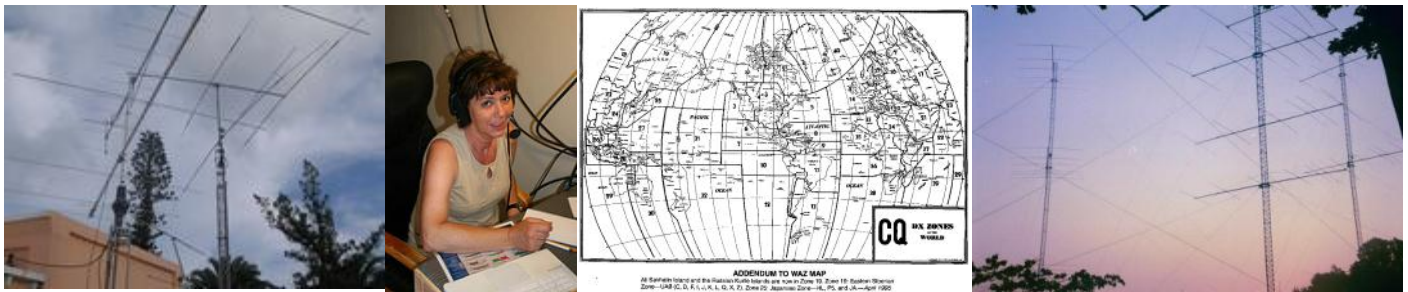


Please consider writing an article for JUG !

September Newsletter Deadline—October 28th

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 and Stu K6TU stu@ridgelif.com



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