



Publication of the
Northern California
Contest Club



Issue 476

January 2012

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

Monday, January 9th, 2012

Program

**ARRL 10m contest DXpedition to V2
- Dan Levin, K6IF**

Date:

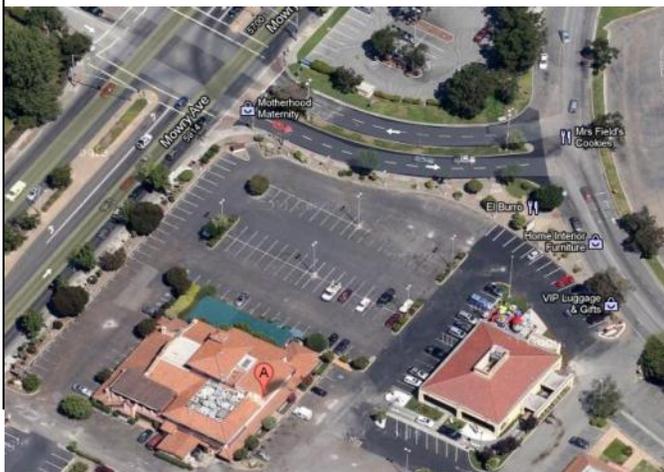
Monday, 9th January

Time:

6:00pm schmooze, 6:30pm dinner, 7:15pm program

El Burro Restaurant
3100 Newpark Mall,
Newark, CA 94560
Phone: (510) 797-3030

Please RSVP to Tom N3ZZ BY 5:00 PM, Friday,
January 6th, 2012



From the President

What mode of contesting do you think is great?

With our imminent participation in a new club goal, I took a moment to reflect on my participation in amateur contesting over the last several years, what I find interesting and what modes I prefer to operate, and was hoping maybe you would do so as well.

In the past, it was easy to simply grab onto the mode I was the most comfortable in, and call that my preferred mode of contesting.

As time went by, I learned more about the different modes of operating (contestng). I also was exposed to some rather extreme opinions from other NCCC members on their preferred operating mode, some saying that is the only mode they will operate in.

Over the years, I cycled through SSB, RTTY, then CW, eventually achieving at least a fair proficiency in them all. I have worked in VHF/UHF/Weak signal as well as more traditional HF contesting. Now I wonder.. what mode is my preference?

I think the answer to my question lies in my favorite contests, as well as wisdom from some of my contesting Elmers.

"How so?" you say... Well, it seems my favorite contests offer mixed modes. Usually combinations of SSB and CW, they have single mode categories, but the mixed modes really light my fire.

I also realize that I truly enjoy RTTY contesting. It can be fast paced, and low frustration factor competition.

And finally, the wisdom from my Elmer in contesting...



Northern California Contest Club

Excellence In Amateur Radio Contesting

Officers:

President	Chris Tate	N6WM	ctate@ewnetinc.com
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Director	Bob Vallio	W6RGG	rbvallio@gmail.com

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	Stu Phillips	K6TU	stu@ridgelif.com

Thursday Night Contesting:

NCCC—Sprint	Ken Keeler	N6RO	kenkeeler@jazznut.com
NS Ladder	Bill Haddon	N6ZFO	haddon.bill@gmail.com
Slow NS (SNS)	Chris Tate	N6WM	ctate@ewnetinc.com

NCCC Net

Thursday 8 PM

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).

who has been quoted as saying, “who cares what mode? It’s a contest!”

So for me, I think I can safely say my favorite operating “Mode” so to speak is the contesting mode! In other words, SSB/CW/RTTY and whatever is coming down the pipe, it doesn’t really matter. Its the contest itself that we enjoy!

For those of you who haven’t tried a new mode, now is the time! You may find it is more fun, and the competition just as exciting!

73 and a happy and prosperous 2012

Chris
N6WM
President

VP/CC Corner

So who’s the competition anyway?

Perhaps this seems a strange title as this edition of the JUG is published just a few short days before the 2012 ARRL RTTY Roundup? After all, we’re aiming for a full NCCC effort in this contest – we really hope to see as many of you in the contest as possible!

In the RTTY Roundup 2012 we are aiming to enter the Unlimited Club category where clearly we are competing against other contest clubs. But there’s also another competitor we are taking on if we can get enough NCCC members on the air... OURSLEVES, as we target beating our own record set back in 2009.

Competing in contests is a tangible way of measuring progress:

- Station improvements
- Skill enhancement
- Exploring new modes, propagation, equipment...

It’s also a journey of goals and milestones:

- Personal – how did I do versus this contest last year?
- Intra-club – how did I do versus other similarly equipped/experienced stations?
- Team – how did NCCC do versus our competition

Whether you set your sights on competing in WRTC 2014, helping the club set a new record or setting a personal best, contesting is about taking part and seeing how you do versus the competition – club, other members, yourself.

Hopefully you know that NCCC is sponsoring a new set of intra-club awards around the upcoming RTTY RU – the full details can be found in the December 2011 issue of the JUG. These awards focus on team (if we can set a new record), intra-club competition (category awards within NCCC), and individual effort.

We put these awards in place to encourage the spirit of completion within the club and encourage participation in contests for more than “just the points”.

Take a moment and think about your own competition and your goals for an upcoming contest. Write them down on paper, email yourself – just create a record of the goals. You don’t need to publish them on the NCCC reflector, contest sign up sheet or tell anyone. Do this a few days before the contest or as much time as you can spare to think ahead.

A few days after the contest, pull up the record you made and see how you did against the goal. A personal review of how you did – now think why. Take a moment to reflect and either bask in the glory of meeting/beating your goal or ponder what you could have done differently (and don’t be hard on yourself – this is a hobby!!).

As testers, our takeaway from contesting is a wealth of learning and feedback on how we can do better and compete... regardless of the identity of the competition!

Stu K6TU
VP/CC

Nominations for 2012-2013 NCCC Board

The following nominations/volunteers have been received as of our JUG print deadline:

Position	Name	Nominated/Volunteered
President	Stu Phillips, K6TU	Nominated by Rusty Epps, W6OAT
VP/CC	Dean Wood, N6DE	Nominated by Stu Phillips, K6TU

As a reminder, we hope that members will consider volunteering or nominating other members for either general roles on the board or specific positions. If you thinking of nominating someone other than yourself, please check with that person to establish their willingness to serve before putting their name forward.

Please send your nominations/volunteer to Tom N3ZZ, NCCC Secretary/Treasurer.

If any candidate/nominee would like to share their opinions, goals or objectives for their potential term of office, first send your nomination to Tom and then write a short article for publication in future issues of the JUG that will be published before the April election (February and March editions). Please send your article to JUG co-editors Ian W6TCP or Stu K6TU.

Tech Tips—Stu K6TU

Please send your technical tips and ideas to Stu for publication in the JUG.

Tools for developing a contest strategy

Maximizing your score in a contest involves many different factors – antennas, equipment, butt-in-chair time and optimizing QSO rate to mention just three. Here are some tools that can help with rate optimization and working out an operating strategy ahead of the contest.

N6BV's web cast – Tactical use of Propagation Predictions for HF Contesting

Dean N6BV gave a great web cast in June 2010 on using propagation predictions to develop a contest strategy. You can find the full webinar record on the NCCC web site at:

<http://nccc.cc/misc/N6BV-2010JUN07-PVRC-Propagation.wmv>

A PDF of Dean's presentation is also available at:

<http://nccc.cc/misc/N6BV-2010JUN07-PVRC-Propagation.pdf>

Dean's preferred method of building a strategy uses the summarized propagation prediction tables he developed while editor of the ARRL Antenna Handbook. If you have a reasonably recent edition, you can find the original prediction tables on the CDROM in the back of the book.

Dean updated these tables in 2010 to include more station locations and also to include additional long path predictions not included in the original tables. The latest version of these tables can be purchased for \$30 from <http://www.radio-ware.com/>.

VOACAP Area Prediction charts

Thanks to Jari OH6BG/OG6G you no longer have to be a VOACAP wizard to quickly generate your own area prediction charts. This dramatically lowers the learning curve of producing propagation predictions for your location and station configuration.

Visit Jari's web site at:

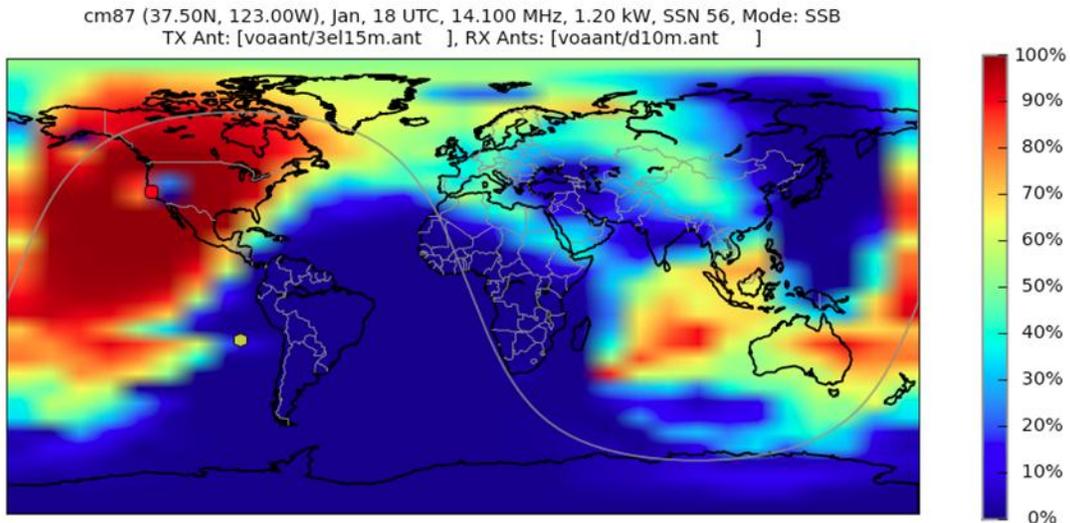
<http://www.voacap.com>

You can find the links to online predictions for both point-to-point and area predictions generated using the VOACAP engine just below the top of the page in the section labeled **VOACAP Online Prediction Services**.

If you click on the [area prediction link](#) you will see a page that looks like this:

You can see that I've set the parameters to locate the transmitter at my approximate QTH in the Bay Area and set the antenna/power parameters for each end of the prediction. I've been conservative about the capabilities of the receiving stations antenna but you make a different choice.

If I run the prediction, I'll see the following map of the world:

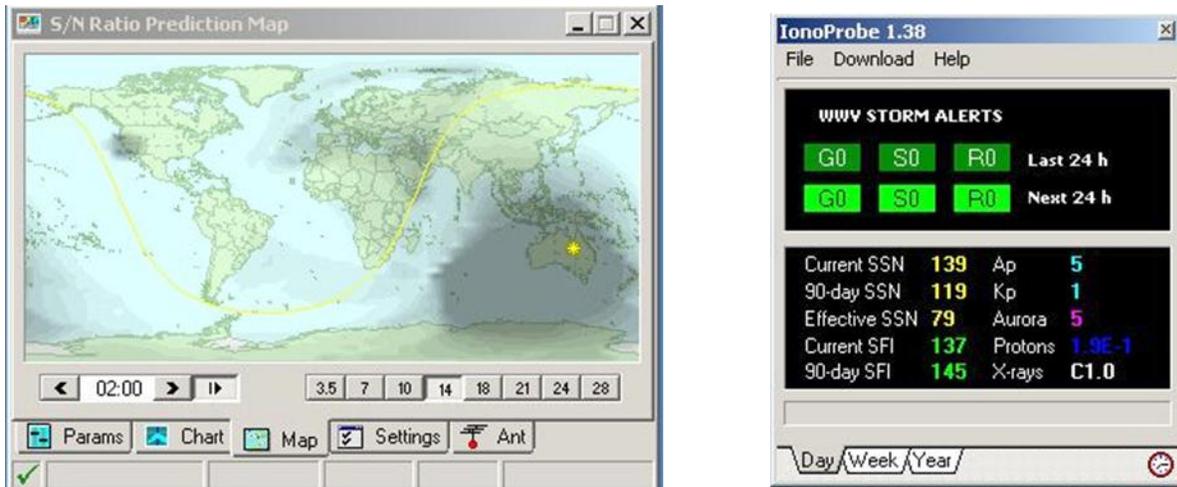


The map shows you the probability of being able to achieve the “required grade of service” for the mode you selected. One of the weak points of this prediction is it is based on a fixed signal to noise ratio of 24 dB (CW) or 38 dB (SSB) – note these are in a 1 Hz bandwidth so you have to adjust by the log of your filter bandwidth for what you would hear.

DXAtlas with HAMCAP/Ionoprobe

I'm sure many of you are familiar with Alex VE3NEA's DXAtlas program but did you know that in conjunction with Alex's HAMCAP (free download) and Ionoprobe (\$20) programs you can see regularly updated propagation predictions?

You do need to install the VOACAP software (also a free download) but after that, HAMCAP takes care of all the parameter selection using easy to understand configuration dialogs.



HAMCAP (on the left) allows you to select the band and the UTC hour for the prediction generation while Ionoprobe (on the right) automatically updates the current solar weather values and automatically feeds them into HAMCAP.

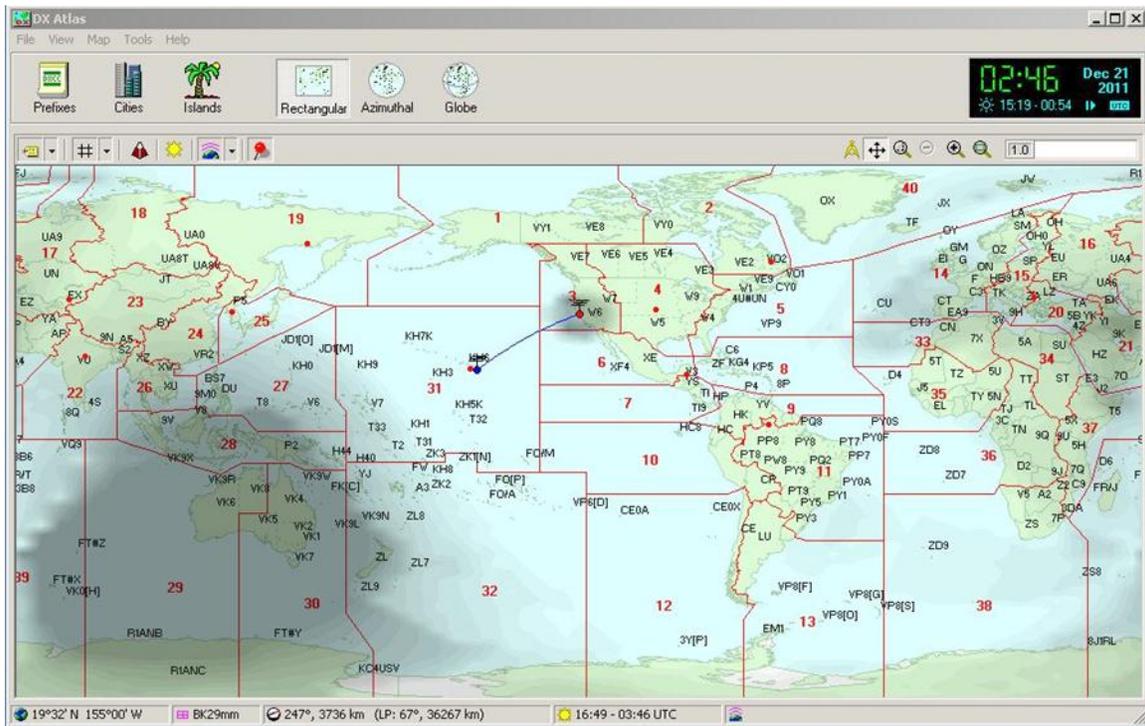
By selecting the "Play" arrow on the right hand side of the hour window, you can tell HAMCAP to update the prediction at the top of every hour.

On its own, the HAMCAP map window is very small but when used in conjunction with DxAtlas, you can configure the prediction to be overlaid on the much larger DxAtlas window.

A limitation of DxAtlas is that it will not handle pseudo color (i.e. mapping different values to color choice). Instead, the less gray shading, the larger the Signal to Noise ratio of your signal at the location on the map.

Like the online predictions on the VOACAP web site, HAMCAP generates predicted SNR values – if you place the mouse over the DxAtlas window on a particular location, you will see the predicted SNR value on the status bar at the bottom right of the window. Again these values are in a 1 Hz bandwidth so some mental arithmetic is needed or a rule of thumb memorized.

Selecting a new band in HAMCAP causes a new prediction to be generated on the fly – it only takes 10-15 seconds on a reasonably modern PC. I find the DxAtlas/HAMCAP combination a useful tool for looking at the big picture especially when thinking about band changes or which direction to aim the antenna for best rate. Using this combination has also helped me find openings on 10m that I wouldn't otherwise have con-



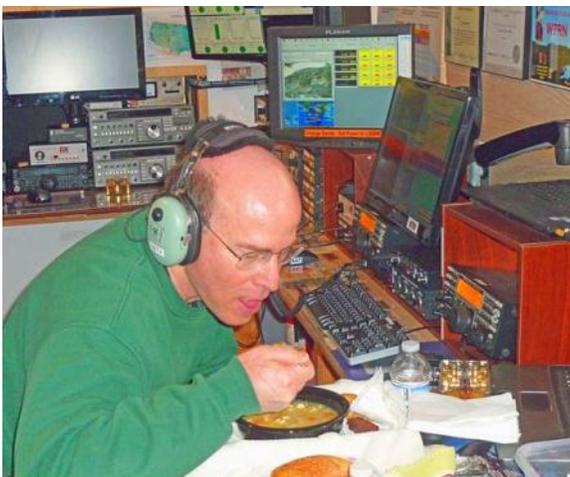
Screenshot: DxAtlas with HAMCAP data overlaid

Limitations

Like N6BV, I prefer predictions that give me a view of received signal **STRENGTH** rather than Signal to Noise ratio. For this you either have to master using VOAAREA to generate your own area predictions (worth the effort!) or use N6BV's summary charts.

Consider using multiple tools in combination; N6BV's summary tables to prepare an upfront strategy and perhaps DxAtlas/HAMCAP to see how the propagation is shifting without having to manually run predictions all the time.

Bob N6TV - Operating at W7RN for CW SS 2011



Picture from Tom K5RC
Vital sustenance courtesy of Midge K6AFO!!!!

SR2O at P40L – Partnering in the CQWW CW

Ed Muns W0YK and Rick Tavan N6XI

Contesting from the Caribbean is exhilarating, rewarding ... and hard. The pileups never stop so rate depends on how quickly you can pull calls out of the thundering hoard and how well you avoid repeats and CQs. Ideally, you get a call out of the pile immediately after acknowledging a prior QSO but in practice it's hard to avoid delays. It is exciting but also tiring and error-prone, especially with a small team in a long contest. A group of NCCC members has operated CQWW CW Multi-Single sporadically over the years from P40L, always trying to find ways to do it better, go faster and increase score. Staffing changes slowly from year to year. Sometimes we win. We always do well. We want to do better. This article describes our latest effort in 2011 to optimize run rate using two concurrent operators on the single Run transmitter to achieve a team-best result of 8800 QSOs (>180/hour for 48 hours) and almost 24M points.

Station co-owner John Fore W6LD has long been an avid proponent of Run rig partner operation, also known as SR2O, "Single Radio, Two Operator," always pushing the team to improve efficiency and rate. Rick Tavan N6XI had been skeptical, rarely observing clear improvement in rate despite a near doubling of operator effort. Mike Heideman N7MH is always ready to try new techniques. Ed Muns W0YK had achieved impressive results both single- and multi-op, especially on RTTY where multiple decoders often provide good calls when a single decoder would not. He rose to John's challenge to design a configuration that allowed two K3s to have independent tuning and antenna selection, with only one rig able to transmit ... commanded by either of two operators. Although Writelog has a "Last One Wins" software lockout capability that works on RTTY, we couldn't get the "First One Wins" mode to work reliably in our CW configuration. Therefore, Ed built an external keyer lockout circuit to let two nearly independent operators run the same CW pileup and achieve some of the improvements that multiple decoders provide on RTTY.

Objectives

We wanted to improve run rate by getting two pairs of ears and hands involved in the pileups. Even when listening to the same frequency, different operators tend to focus on the different tones of separate stations, something we'll call tonal diversity. But this benefit has degraded in recent years because of the tendency of spotting networks, skimmers, point and shoot logging programs and highly accurate, digital VFOs to direct hundreds of seekers to the exact same frequency. A savvy run operator can harvest an edge of the pileup but we wanted two operators to listen to slightly different frequencies, hearing different sides of the pileup. We also wanted to take advantage of the multiple receive antennas at the station, using antenna diversity to listen in multiple directions for clear call signs and needed mults. Finally, we sought to reduce fatigue and error rates.

Earlier Attempts

In the past, we had experimented with a second operator eavesdropping on a single Run radio. This is fine for tonal diversity, but that has become a minor benefit. We had tried the Win-Test partner-mode window in the past without achieving unanimity about its effectiveness. In the Nov/Dec 2005 issue of NCJ, Hal N4GG had described a partner operator using the (low-performance) sub-receiver of an FT-1000MP. This had worked reasonably well for us using the full performance second receiver of a K3. It enabled effective use of frequency diversity and some antenna diversity. Although the K3 has two excellent, identical, full-performance receivers, its VFO knobs are even closer than those of the MP, so the two operators' hands got in each other's way. Also, the Partner operator had no effective access to left-side controls like AF and RF gain. We wanted a way for the Partner operator to use his own, fully independent radio, with unencumbered access to its controls and

better access to the array of antennas available at the station. Some of the large multi-multi stations do this and our multi-single competitors probably do, too. Our challenge was to do it in a very small room with a modest but effective collection of antennas.

Station Configuration

The P40L/P49Y station has a small ham shack, about 8x10', ample for a single operator running SO2R but tight for multi-single, especially with three operator seats. The three rigs and two amplifiers are against the short wall. We put the Run position on the left and the Multiplier position on the right. The Partner operator sat between the Run and Mult operators with easy access to the rotors, Six Pak and receive antenna switches for all three operators. Run and Partner ops each had a K3 but only the Run operator's K3 could transmit. Either operator could operate that transmitter from their keyboard or paddle. The Partner rig had transmit inhibited via the K3's TX TEST mode, with nothing connected to the transmit antenna jacks and power dialed down to zero just in case. See Figures 1a and 1b.

Fig. 1a - CQ WW CW 2011 Multi-Single K3 Setup at P40L

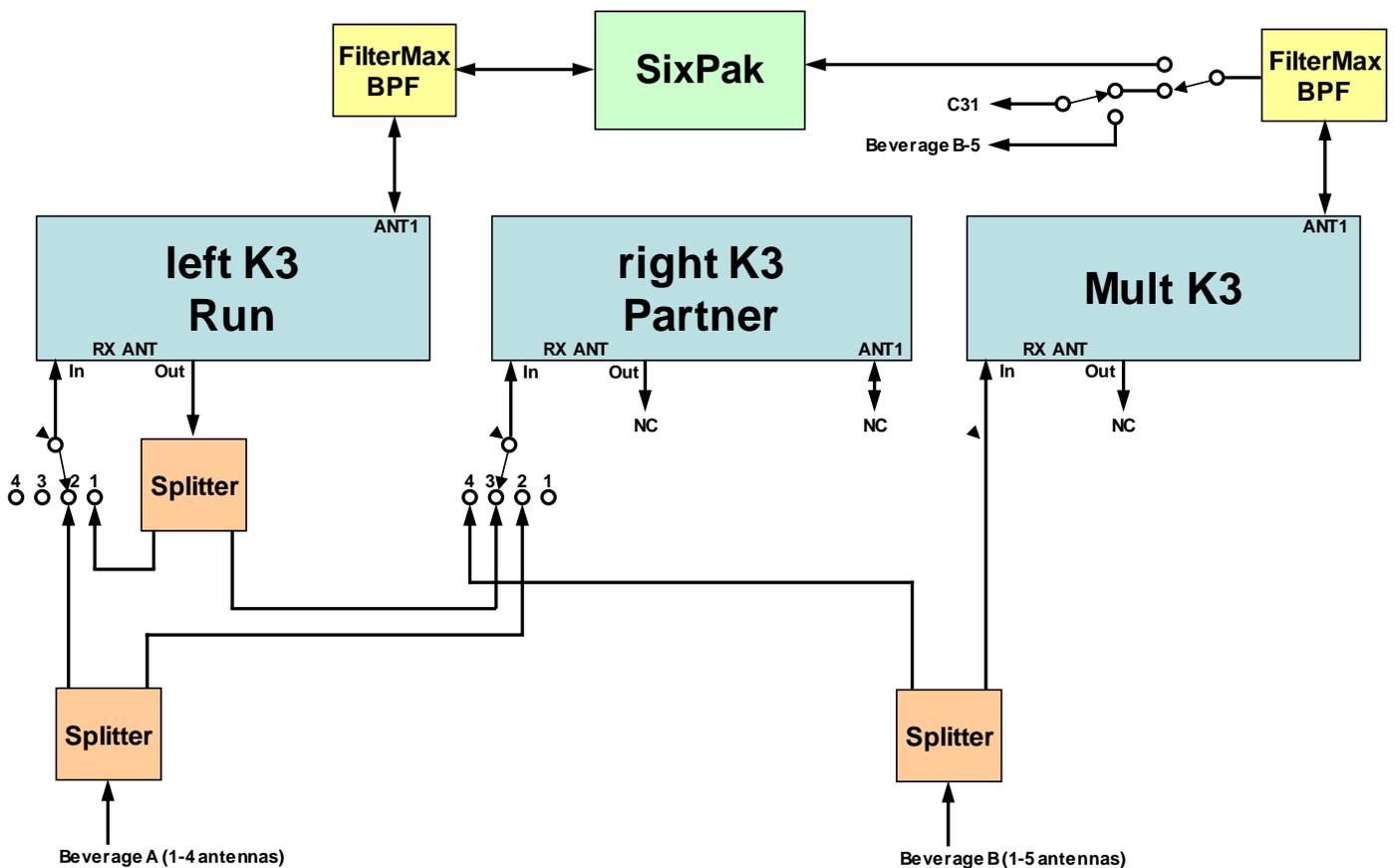
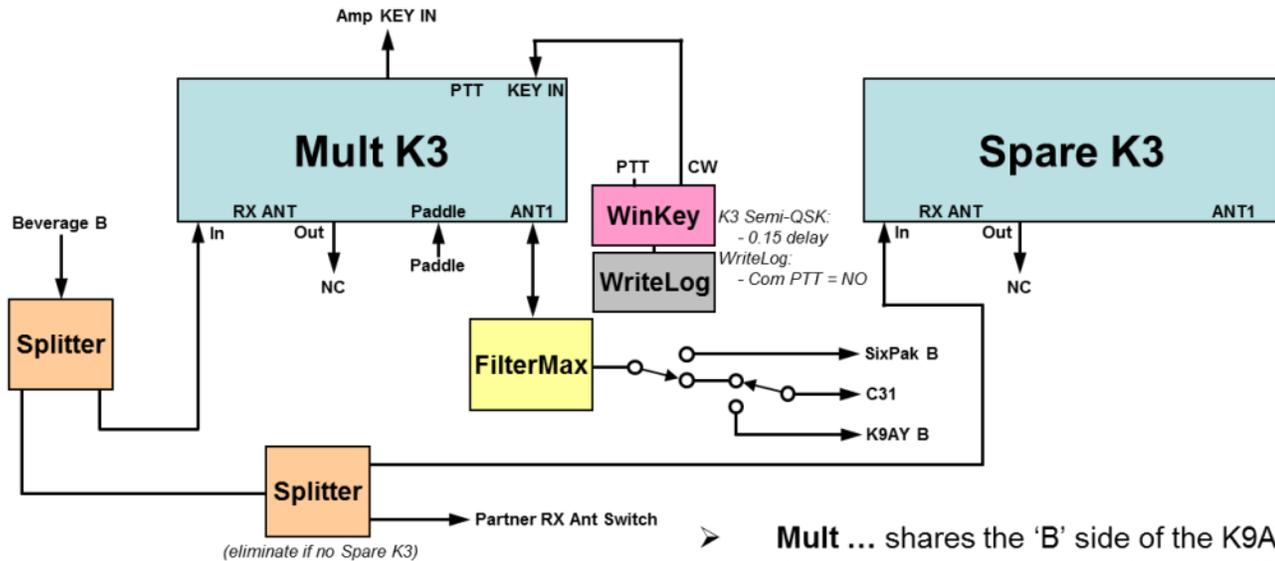


Fig. 1b – Multiplier and Spare Positions



- **Mult ...** shares the 'B' side of the K9AY Beverage switch with the Back-Up K3
 - Needs to be nimble for mult passing
- **Spare ...** RX only (TX TEST mode and POWER=0)
 - Can check competition, PJ2T on other bands, etc.
 - Probably best PC to do Telnet connection so it can be reset without disturbing an operating station

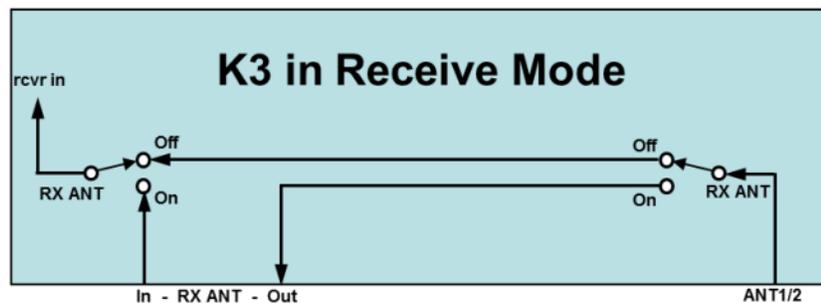
Antennas

The station enjoys three towers on a small lot plus ample uninhabited jungle (the "cunucu") for temporary receive antennas. There are mono-band beams for 10-40 plus dipoles for 80 and 160, switched by a WX0B Six Pak. A C31 provides a second, directional, high-band antenna. This year we could switch the C31 between transmit use on the Mult rig or receive use on the Partner and Mult radios. The receive-only antennas were three 400-500' Beverages (JA/US-West, US-East and Europe) and a high-band vertical about 800' from the transmit antennas in an attempt to mitigate some pesky inter-station interference. Independent K9AY Receive Antenna Switch consoles at the Run and Mult positions selected receive antennas. The K9AY Receive Antenna switch allowed both positions to use the same receive antenna and/or multiple receive antennas if desired. Filtermax bandpass filters protected the rigs.

The Run K3 transmitted through its ANT1 antenna jack on the primary antenna for each band as selected by the Six Pak. It usually used the Rx Ant IN and OUT capability of the K3 (Fig. 2), routing its main antenna to Rx Ant OUT where external switching routed it back to Rx Ant IN. This provided transmit-antenna reception. Another switch position fed the receive antenna system to Rx Ant IN. A splitter on Rx Ant OUT allowed the Partner K3 to share whatever antenna the Transmit K3 was listening on. The Partner K3 also had external switching that let it use either of the two receive antenna systems, regardless of what the Run operator was listening to, plus the Mult K3 receive antennas. The Partner op could reach either receive antenna switch box but usually ceded to the Run operator sole control over his receive antenna selection and used the Mult position receive antenna selector. Thus, for example, the Run operator might transmit on the 160M dipole and

listen on the JA Beverage while the Partner operator listened on the EU Beverage. Meanwhile, the Mult operator might be transmitting on the 80M fixed rotary dipole and listening on the EU Beverage. Since the Mult operator was never particularly busy, this sharing worked smoothly, without conflict. The splitters in the external switching network cost us 3 dB when engaged, but signals were strong, we had preamps for the receive-antennas and the loss was not a problem.

Fig. 2 - K3 Rx Antenna Switching

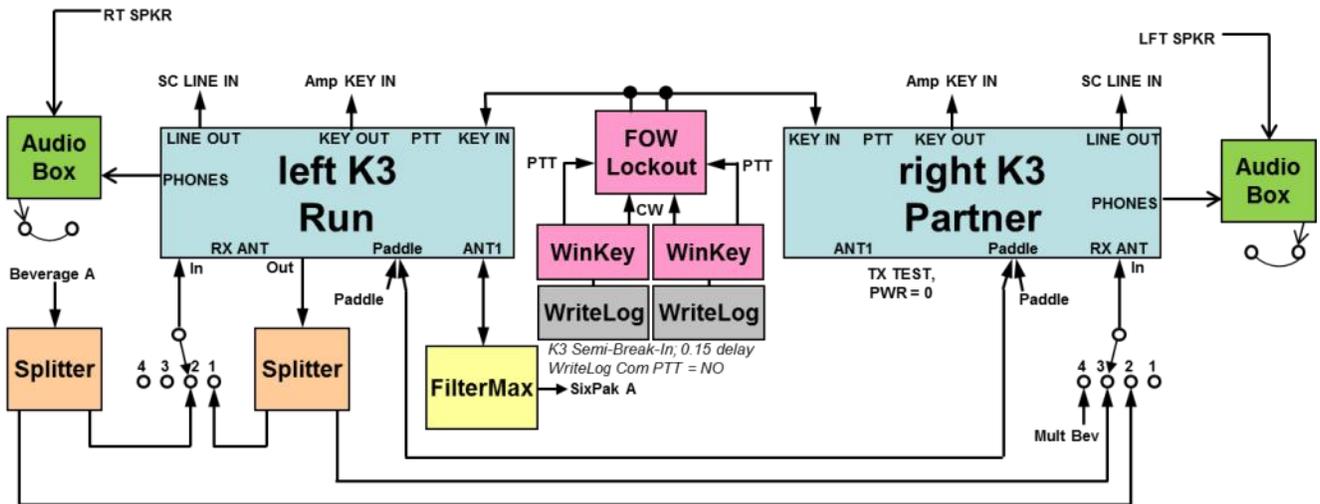


Logging and Keying

The key to the SR2O setup at the Run position was the way the Run and Partner operators worked together to key the transmit rig. See Figure 3. Each operator had his own computer, external WinKeyer and paddle. Four computers (one a supervisory console with a spare K3) ran networked copies of Writelog, so any contact logged by any operator would show up immediately on all computers. The Run and Partner operators sat side by side and could easily see each other's large-font QSO entry windows. Writelog-generated messages from either computer drove one of two dedicated WinKeyer external keyers. The Key Out lines from both keyers (tied together) drove the Key In circuits of the Transmit and Partner K3s through W0YK's lockout box which ensured that only one computer's message could get through at a time. The two paddles were OR'ed together and drove the internal keyer of the Transmit K3. Thus, a message from either computer or paddle input from either operator would key the Transmit K3. The Key Out line of the Transmit K3 drove the amplifier. Both Writelogs and K3s were set up for Semi-QSK and the lockout box keyed both K3 Key In lines when sending a computer message, ensuring that both receivers were muted during transmit, whether computer-generated or paddle-sent.

The lockout logic was simple and effective. See Figure 4. The PTT Out lines from the two keyers drove a flip-flop latch and a pair of gates to implement a first-one-wins algorithm. The gates would pass the Key Out line from only the "winning" keyer to both K3s. We used the Transmit K3 internal keyer in order to have separate speed control for hand sending. A side effect of this was that paddle sending did not interrupt message sending and either operator could screw up a message by sending on top of it. In practice, this was not a problem because hand sending was rare and the two operators always heard the machine sending.

Fig. 3 – Run and Partner Rigs



Switch Positions:

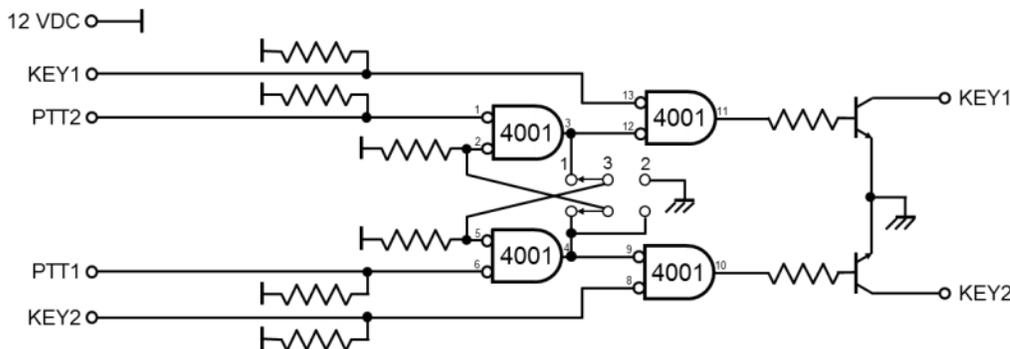
- 1 Run K3 ANT1
- 2 Run K3 Beverage
- 3 Run K3 RX antenna
- 4 Mult K3 Beverage

Note: RX ANT usually engaged on each radio; disengage to bypass Splitter and get back 3 dB on ANT1 for Run K3 if Partner on own Beverage or absent.

Operating Modes:

- **Run ...** selects 1 for ANT1 or 2 for Beverage, leaving the RX ANT engaged so the Run K3 ANT1 is available to Partner.
- **Partner ...** RX only (TX TEST mode and POWER=0)
 - Selects 2 for Beverage or 3 for Run RX antenna
 - Selects RX ANT to engage PR10
- Either Run or Partner can key Run K3
 - "first one wins" lockout.

Fig. 4 - Dual WinKey Latch
"First One Wins"



- 1 – First One Wins**
- 2 – KEY1 Wins**
- 3 – Independent**

•Quad NOR Gate: 4001
 •NPN Transistors: 2N3904
 •Resistors:
 - Pull-Ups – 10K
 - Base – 2K

Audio

Audio routing at the Run position used switches originally developed by K6XX and N6XI for WRTC 2010. The Run and Partner operators each plugged their headset into small boxes that offered three switch positions – My Rig, Other Rig and Both (one rig in each ear). There was a volume control for the Other rig. The boxes took advantage of the independent, rear panel, audio outputs that the K3 offers for Phones and Speaker. Thus, each operator had independent volume control over his own receiver via his AF gain control and the other receiver via this external “Other” pot. In practice, we (Rick and Ed) listened almost exclusively to our own radio when we were the Run op and sometimes to both radios when we were the Partner op.

Operating Technique

Either operator could initiate, continue, complete or correct a QSO, tuning and listening on his own rig, typing on his own computer, manipulating his own paddle, but always transmitting only on the Run op’s rig. The designation of Run and Partner rig was baked into the cabling and could not change on the fly. There truly was only one Run transmitter and it was impossible to put two signals on the air at the same time from the Run position. Of course, the Mult rig was authorized to transmit concurrently on another band so long as it obeyed the ten-minute rule and worked only new multipliers. We tried (some of us more than others) to synchronize the Writelog CW speeds between the Run and Partner computers in order to make our dual-operator transmissions sound like the seamless output of a single operator. It would have been nice to automate this.

The Run operator had “moral authority” – putative priority over the Partner operator for transmitting. The Run op initiated almost all CQs. If he copied a call out of the pile first, he would respond normally. However, if the Partner got a call first, and saw that the Run operator was still listening or had only typed a character or two, he could respond via his own computer. In case of ties or near ties, the Partner op was supposed to yield to the Run op unless he had a good mult in the callsign field and the Run op did not. Some of us were more aggressive than others in asserting Partner op privileges. One Partner op used his “itchy trigger finger” to prod Run ops to go faster, but there were no material conflicts. Each possible pairing of Run and Partner ops quickly worked out slightly different styles of cooperation. It was clear in a large majority of cases who should proceed and in the marginal cases the operators used hand signals to encourage one or the other to act. It worked out at least as well as baseball fielders yelling “I’ve got it!”

The Partner op could be as focused as the Run op, concentrating intensely on every QSO. However, he also could divide his attention between the current QSO and other things happening in the station. Often the Partner would turn a beam or switch a receive-only antenna that the Run op had forgotten or chosen not to deal with. He could also get or get rid of a drink or snack without disrupting the run. The Run op could do these things, too, by temporarily turning over Run op responsibility to the Partner. This was a welcome luxury that reduced stress and fatigue.

Conclusion

Everyone took equal shifts as Run, Partner and Mult operator. Although the Run rig was always the left one and the assignments were static based on chair, either operator could perform as Run op or as Partner. We all enjoyed the Run and Partner assignments and the way we interacted. It was much more effective and less annoying than other techniques we had used in the past. Thanks to tone, frequency and antenna diversity, Run and Partner ops often heard different calls and responded faster than would have been possible with a single operator. The most effective technique seemed to be frequency diversity, with the two operators listening both high and low in the pileup. Run and Partner occasionally corrected each other quietly, after completion of a QSO, by making post-facto log corrections, something that is highly disruptive to a single operator but easy to handle while someone else continues the run. When either operator got confused or fumbled or needed to correct an error, the other operator would pick up in stride to complete the Q or make the next one. We believe this eliminated many errors and pauses and significantly reduced stress and fatigue. As an added bonus, it became a trivial matter to change operators without skipping a beat – either operator could continue the run while the other got up and briefed the incoming operator. The new op could then sit

down calmly, plug in his phones and pick up the rhythm of the pileup before assuming the primary duties of his seat. Unlike forms of partnering we had tried before, this technique was easier, smoother and faster than pure single-op running. Although staffing three operating positions for about 40 of the 48 hours with only four operators on board cost us some sleep, we believe it was a strong, net positive factor in our 1,000 QSO increase over 2010. (W6LD, N7MH and W0YK participated in both 2010 and 2011. KX7M missed 2011 and N6XI missed 2010.) With this operating configuration, we feel that five operators would be more effective than the four we had this time. Improved conditions contributed mightily to multiplier counts but this operating style probably enabled much of the QSO increase. We all agreed that SR2O done this way is an effective and enjoyable tool.

Roger N3RC - QTH & New SteppIR DB-36



Can Any Contest Club Top This?

Hank Garretson, W6SX

NCCC is a great club by any measure. Here's another angle.

Over the years, many contests have come and gone. The good contests, the keepers are the ones that have a great concept, a good calendar date, and good sponsors. Here's what NCCC members have done over the years.

W6OAT (then K4BVD) founded the Georgia QSO party, and it's still going strong fifty years later. Rusty also played a big part in transitioning the California QSO Party from Southern California to the NCCC, and, we all know CQP is by far the best of the state QSO parties. Rusty also started the North American Sprints.

K5RC conceived and started the North American QSO Parties.

N6RO and N6ZFO started the NCCC Sprints.

AD6E and K6RB founded both the CWops Test and the CWops Open.

And, now, it gets even better. December fourth was the first running of the 10-Meter RTTY Contest conceived and sponsored by W0YK and AA5AU. It was a blast and is a keeper. I'm glad that thirty years from now, I'll be able to say I was in the first one.

NCCC members don't just create contests because it feels good to stroke their egos. They create contests which are now on every contester's favorites list. Thanks Gentlemen. Bravo!

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

73,

Hank, W6SX



Contest Calendar—January page 1

AGB New Year Snowball Contest	0000Z-0100Z, Jan 1
SARTG New Year RTTY Contest	0800Z-1100Z, Jan 1
AGCW Happy New Year Contest	0900Z-1200Z, Jan 1
AGCW VHF/UHF Contest	1400Z-1659Z, Jan 1 (144) and 1700Z-1759Z, Jan 1 (432)
ARS Spartan Sprint	0200Z-0400Z, Jan 3
QRP Fox Hunt	0200Z-0330Z, Jan 4
QRP Fox Hunt	0200Z-0330Z, Jan 6
NCCC Sprint Ladder	0230Z-0300Z, Jan 6
PODXS 070 Club PSKFest	0000Z-2400Z, Jan 7
CWops Mini-CWT Test	1300Z-1400Z, Jan 7 and 1900Z-2000Z, Jan 7 and 0300Z-0400Z, Jan 8
Original QRP Contest	1500Z, Jan 7 to 1500Z, Jan 8
QRP ARCI Pet Rock Celebration	1500Z-1800Z, Jan 7
ARRL RTTY Roundup	1800Z, Jan 7 to 2400Z, Jan 8
EUCW 160m Contest	2000Z-2300Z, Jan 7 and 0400Z-0700Z, Jan 8
SKCC Weekend Sprint	0000Z-2400Z, Jan 8
DARC 10-Meter Contest	0900Z-1059Z, Jan 8
Midwinter Contest	1000Z-1400Z, Jan 8
Kid's Day Contest	1800Z-2359Z, Jan 8
NAQCC-EU Monthly Sprint	1800Z-2000Z, Jan 9
QRP Fox Hunt	0200Z-0330Z, Jan 11
CWops Mini-CWT Test	1300Z-1400Z, Jan 11 and 1900Z-2000Z, Jan 11 and 0300Z-0400Z, Jan 12
QRP Fox Hunt	0200Z-0330Z, Jan 13
NCCC Sprint Ladder	0230Z-0300Z, Jan 13
Hunting Lions in the Air Contest	0000Z, Jan 14 to 2400Z, Jan 15
WW PMC Contest	1200Z, Jan 14 to 1200Z, Jan 15
MI QRP January CW Contest	1200Z, Jan 14 to 2359Z, Jan 15



Contest Calendar—January page 2

North American QSO Party, CW	1800Z, Jan 14 to 0600Z, Jan 15
NRAU-Baltic Contest, CW	0630Z-0830Z, Jan 15
NRAU-Baltic Contest, SSB	0900Z-1100Z, Jan 15
Run for the Bacon QRP Contest	0200Z-0400Z, Jan 16
QRP Fox Hunt	0200Z-0330Z, Jan 18
AWA Linc Cundall Memorial CW Contest	2300Z, Jan 18 to 2300Z, Jan 19 and 2300Z, Jan 21 to 2300Z, Jan 22
NAQCC Straight Key/Bug Sprint	0130Z-0330Z, Jan 19
QRP Fox Hunt	0200Z-0330Z, Jan 20
NCCC Sprint Ladder	0230Z-0300Z, Jan 20
YL-ISSB QSO Party, SSB	0000Z, Jan 21 to 2359Z, Jan 22
LZ Open Contest	0000Z-0400Z, Jan 21
Hungarian DX Contest	1200Z, Jan 21 to 1159Z, Jan 22
Feld Hell Sprint	1600Z-1800Z, Jan 21
North American QSO Party, SSB	1800Z, Jan 21 to 0600Z, Jan 22
ARRL January VHF Sweepstakes	1900Z, Jan 21 to 0359Z, Jan 23
SKCC Sprint	0000Z-0200Z, Jan 25
QRP Fox Hunt	0200Z-0330Z, Jan 25
CWops Mini-CWT Test	1300Z-1400Z, Jan 25 and 1900Z-2000Z, Jan 25 and 0300Z-0400Z, Jan 26
NAQCC Straight Key/Bug Sprint	0130Z-0330Z, Jan 27
QRP Fox Hunt	0200Z-0330Z, Jan 27
NCCC Sprint Ladder	0230Z-0300Z, Jan 27
CQ 160-Meter Contest, CW	2200Z, Jan 27 to 2200Z, Jan 29
REF Contest, CW	0600Z, Jan 28 to 1800Z, Jan 29
BARTG RTTY Sprint	1200Z, Jan 28 to 1200Z, Jan 29
UBA DX Contest, SSB	1300Z, Jan 28 to 1300Z, Jan 29
SPAR Winter Field Day	1700Z, Jan 28 to 1700Z, Jan 29
WAB 1.8 MHz Phone	1900Z-2300Z, Jan 28
Classic Exchange, CW	1400Z, Jan 29 to 0800Z, Jan 30
QRP ARCI Fireside SSB Sprint	2000Z-2359Z, Jan 29

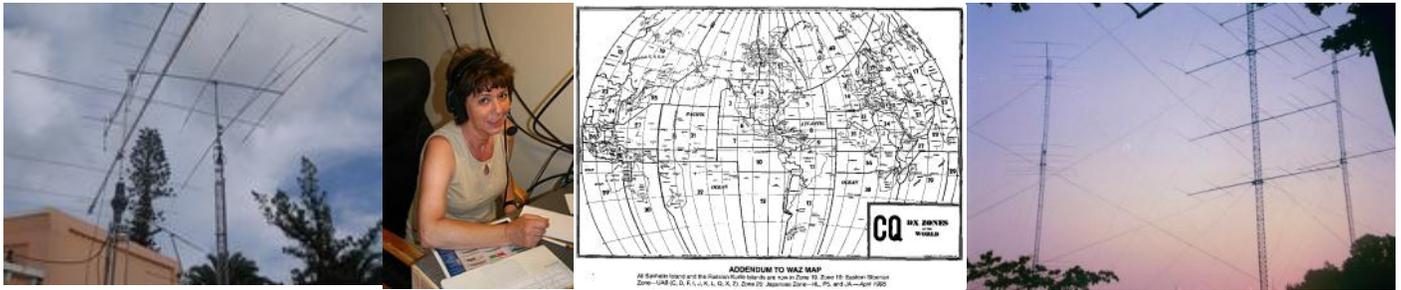


Please consider writing an article for JUG !

February 2012 Newsletter Deadline—January 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@ridgelift.com



12 STORE BUYING POWER



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