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Movin on Up—by Chris N6WM, page 10

President's Report

Hello KB'ers, and Happy New Year!

If you missed our holiday party, you truly missed a good time. Although, the NCCC holiday gathering had been an annual event for several years and, for one reason or another, we have not had a party in the last few years. For me, it was my first. It was so nice to see so many significant others among the 50 or so in attendance.

I want to thank Ian, W6TCP, John, K6MM, and Dick, K6LRN, for their efforts in organizing the Holiday Party at Michaels, in Mountain View.

Ian was not able to make the party. Seems it was his wedding weekend! I do suppose that's as good excuse as any for not making the party. Congratulations to Ian and Serina (K6SYL)!!!

John, K6MM, was spot-on with his presentation on the lighter side of contesting. He wanted to do something that would appeal to everyone and, indeed, everyone loved it, including the spouses. Funny stuff, John! Many of our members who were not there did have their picture up in one way or another in John's presentation. My wife, Karen, thought it was hilarious.

Bob, W6RGG and the ARRL Pacific Division Director, presented the 2016 RTTY Unlimited Club gavel to me at the dinner. It gets to live with me until the end of my term. Sweet!

Officers:

President	Bob Hess	W1RH	w1rh@yahoo.com
Vice President /Contest Chair	Steve Dyer	W1SRD	w1srd@arrl.net
Treasurer	Dick Wilson	K6LRN	treasurer.nccc@gmail.com
Secretary	Ian Parker	W6TCP	secretary.nccc@gmail.com
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Director:	Rich Cutler	WC6H	wc6h@yahoo.com
Director:	Ron Castro	N6IE	ronc@sonic.net

Volunteers:

New Member Mentor	Al Rendon	WT6K	wt6k@arrl.net
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Awards Chair	Gary Johnson	NA6O	gwj@wb9jps.com
CQP Chair	Kevin Rowett	K6TD	k6td@arrl.net
CQP Certificates	John Miller	K6MM	k6mm@arrl.net
K6ZM QSL Manager	George Daughters	K6GT	k6gt@arrl.net
K6CQP,N6CQP,W6CQP QSL Mgr	Ed Muns	W0YK	w0yk@arrl.net
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jug@nccc.cc			

NCCC Net
Thursday 8 PM

Freq: 3.610 +/-

NCCC
Visit the meetings page of the NCCC website here for details of the next meeting

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).

As I was about to bid everyone a safe trip home, several attendees reminded me that Bob, N6TV, does this Christmas carol thing with his hands. I think I was the only one there who was not aware of this. He entertained us with Sleigh Ride and one other song. Absolutely awesome, Bob! I never got this kind of entertainment in my YCCC days! We are, indeed, a unique contest club.

We are going for that RTTY RU gavel again this year, by the way. Last year, we had a very successful conference call, hosted by W0YK, with several new RTTY contesters on-line. The newbies asked questions and Ed gave the answers. We're up for doing it again this year. Contact me if you're interested.

We had several KB individual efforts in CQWW. How about these numbers?

W2SC @ 8P5A – 14,590,224
W6NV @ ZD8W – 10,739,386
N6GQ @ KH6LC – 6,601,476
N6KT @ D4E – 2,609,028
K6XX @ K6XX – 1,161,270 hard earned points

Great job, guys!

Stu, K6TU, sent me his unofficial tally of claimed-point club scores for the November Sweepstakes. As usual, PVRC had the Unlimited Category all wrapped up, with 256 logs submitted. SMC gave it a good effort, with 166 logs, but didn't even come close. As a monster club, with three times the membership of SMC or NCCC, PVRC would seem to own this category. Congratulations to PVRC.

It was a different story in the Medium Club category, with the Mother Lode DX/Contest Club (full of NCCC members) in first place with 49 logs in a very tight competition with SCCC, AOCC, FCG, DFW, and MRRC. It's fun to compete – and win - when there is real competition.

Likewise, in the Local Club category, it looks like Pizza Lovers 259 (also a club with many NCCC members) will get their third gavel. This club organized a very serious mostly M/S effort to maximize points and beat the New Mexico Big River Contesters.

Congratulations to both clubs and to all of those who helped bring wins to these clubs.

The 2016-2017 NCCC KB Competition is well under way. We may have a more official name for this, but I'm going to let our Awards Manager, Gary, NA6O, pick it. In looking at the current standings, posted elsewhere in this copy of the Jug, I see that Alan, K6SRZ, is leading the pack. Awesome, Alan, but look over your shoulder. The way this competition is designed, it's easy for someone to overtake you. Since each contest in the competition is a multiplier, the more contests you work, the quicker you advance in the rankings. It's doesn't hurt to have a few big scores, however. I'll give you a hint that a few KB'ers have already figured out……you can get two multipliers by participating in a NCCC Sprint and a NCCC RTTY Sprint. My rank is currently 23 and I want to be in the top 20. I'm going to use this trick myself to increase my own standing in the competition. I've never done a Sprint, so this is a good excuse to get my feet wet. Remember – All scores are mined from the 3830 site. If you don't post there, you won't get credit for your score in the Club Competition.

In looking down the list, I want to note Bob, KR6N, who is currently sitting at #35. Bob is a fairly new contester. He took K6RB's CW class and has been rapidly increasing his scores. He's participated in many CW, SSB, and RTTY contests this year, and has managed to place himself at #35 out of 176. Not bad! Also, Tyler, K6TLR, not yet a CW operator and someone who got his license less than a year ago, is currently sitting at #48 out of 176. How did he do this? A little contesting from his own small station but, more importantly, participating in some multi-operator efforts where the total score is split equally between all participants.   Gary, NA6O, currently sitting at #13, has been a frequent participant in the N6RO multi-op contest teams. He's been in 16 of the Club Com-

petition contests and, as a result, is way up the list with the big guys…..like WX5S, W1SRD, N6TV, N7MH, WC6H, W6SX, KA6BM, and N6IE.

A few months ago, Craig, K9CT, brought up the issue of leveling the playing field in the NAQP Three-Club Challenge. Craig is on the Board of the Society of Midwest Contesters. All of this took place in an email thread between officers of all three clubs (NCCC, SMC, PVRC). Some changes have been made that will hopefully encourage our club to work harder for the traveling trophy in the six 2017 NAQP's. We came in a distant third in 2016. NAQP is right around the corner and you can expect to hear a lot more about this on the NCCC Reflector. More details on the Three Club Challenge can be found elsewhere in this copy of the Jug.

2016 has been a great year for the best contest club in the world. We won the Unlimited Gavel in the RTTY Round Up. We won the CQ WPX RTTY Club Competition. We had a fantastic summer BBQ at N6RO's super station. We had a nice, relaxing holiday party. We've had some terrific meeting presentations. Most importantly, we've had fun. Let's do the same in 2017!

Bob W1RH

2016 RTTY Unlimited Club

Presented to NCCC by Bob, W6RGG

NAQP 3-Club Challenge Rules Change
Bob W1RH

For some time now, there has been an email thread involving the clubs participating in the NAQP 3-Club Challenge.

For those who are unaware, the NAQP Three Club Challenge was originated primarily by Dean, N6DE, as a way to create a club competition for NAQP. The three clubs, PVRC, NCCC, and SMC, agreed to rules that would give a traveling trophy to the club who scores the highest point total over the six NAQP contests in one calendar year. Two SSB, two CW, and two RTTY.

A few months ago, and after a runaway win by PVRC, SMC president Craig, K9CT, raised the question of leveling the playing field. On paper, PVRC has about 900 members as opposed to about 300 for NCCC and SMC. The actual participation in NAQP has certainly not involved all of the members of each club, but with the current scoring system, sum-of-scores multiplied by the number of participants, it becomes obvious that it is nearly impossible for SMC or NCCC to win the Challenge. A key point in the original rules was to encourage club members to at least get on the air and make one contact as a way of increasing the multiplier.

Needless to say, PVRC is not going to handicap themselves, but they did propose a change in the rules. Instead of a cumulative score over all six contests, the existing point system will only apply to the individual contests:

For each contest, the club with the highest club score is assigned 100 NAQPC points, the second place club is assigned 75 points, and the third place club is assigned 65 points. Add the NAQPC points together for each club for the six contests; the club with the highest NAQPC point total will be the 2017 NAQP club winner. In the event of a tie, the club with the highest score total from all club logs for all six contests will be the winner.

The sum-of-scores multiplied by the number of participants scoring system will still apply for each contest, but the actual scores will not be cumulative over all six contests. The total number of points available is 600 - 100 points for each NAQP.   If you think about this, a club like NCCC - strong in RTTY - could get 200 points by winning both RTTY NAQP's, giving us some motivation to work a bit harder in the CW and SSB NAQP's.

There are some other changes, including in the definition of the Multi-Two category.

See pages 7 & 8 for the new rules:

NAQP 2017: A 3-way club competition between NCCC, PVRC and SMC

Reference: http://ncjweb.com/naqp/

A. Dates
       Includes all 6 NAQPs in 2017
            Winter
                  January 14: NAQP CW
                  January 21: NAQP SSB
                  February 25: NAQP RTTY
            Summer
                  July 15: NAQP RTTY
                  August 5: NAQP CW
                  August 19: NAQP SSB

B. Scoring
       A score is calculated for each club for each NAQP event as:
            Log Scores * Multipliers:
            (Sum of scores of all club logs) * (Number of club participants)

       Single operators: A club member with at least one QSO in the contest as a single operator will count as one participant and receive credit for his/her score. Club members who submit additional single operator logs using different callsigns will receive credit for the additional scores but will not count as additional participants.

       Multi-Two: Score and participant contribution is calculated on a percentage member basis. Example: if a M2 entry scores 200,000 and 3 out of 4 of the operators in that M2 are club members, then the score contribution to the club is 75% of 200,000 or 150,000, and a score of 50,000 is assigned to each of the three club members. A M2 operation can only generate a single participant counter and, in the example above, the participant count of 1 will also be split between the three club members (0.33 participants per club member). M2 members who also submit a log as a single operator will receive credit for their second score and an additional, fractional participant counter sufficient to increase their total participant counter for that NAQP event to 1.

       Those submitting multiple logs should keep in mind the NAQP rule that states, "Operators must use only one call sign per station operated."

       In no case will any operator contribute a participant count greater than 1 for a given NAQP event.

Any participant who runs high power in NAQP as a check-log station will be counted in the club participant multiplier total, but will contribute a score of 0.

NAQPC Points: For each contest, the club with the highest club score is assigned 100 NAQPC points, the second place club is assigned 75 points, and the third place club is assigned 65 points. Add the NAQPC points together for each club for the six contests; the club with the highest NAQPC point total will be the 2017 NAQP club winner. In the event of a tie, the club with the highest score total from all club logs for all six contests will be the winner.

Score and NAQPC point tracking will be done using a spreadsheet shared between club leadership. Log scores used will be either "Preliminary Scores" on ncjweb.com, forwarded file of scores from NCJ administration, or published scores in the NCJ results article, whichever is obtained soonest.

C. Eligibility

Any club member in good standing is eligible to contribute a score to his/her club total. The participant must be a club member at the time the contest takes place. Scores are not calculated retroactively if a participant joins a club after having participated in a contest, but can contribute a score for future NAQP's.

There is no club circle rule like ARRL or CQ contests. Any club member in good standing located anywhere in the world can contribute their score to their club, as long as they appear on their club's roster. If a participant is a member of more than one of the clubs in the NAQP Club Challenge, then that participant's score will be given to only one of the clubs. The deciding factors will be what club he/she most associates with currently, and/or to which he/she resides closest.

Participants must submit a log to the NCJ in order to be eligible to contribute a score to his/her club.

D. Rewards

Winning club gets possession of the traveling NAQPC trophy.

E. Misc

This club competition between SMC, PVRC, and NCCC does not interfere with or replace the normal NCJ 5-person NAQP teams. It runs in parallel with those teams, and all participants may continue to submit their own 5-person teams on the NCJ web site independent of this club challenge.

NS Ladder XXVI - Starts January 13

The NCCC Sprint Team is pleased to announce:

The 26th NCCC Sprint Ladder competition, NSL XXVI . . . .
Contesting on the Edge

Start Date: Jan 13 for Seven Weeks
Jan 13, 20, 27, Feb 3, 10, 17, 24. (Thursday evening in NA)

Time: 0230-0300Z (Friday, Zulu, Thursday evening in NA)

Bands: 15, 20, 40, 80 and 160

A station's top four scores are counted in the final compilation -- ops can miss 3 weeks and still compete fully in one of the ladder's 5 divisions.

See below for additional details.

Summary of Rules:

    -- 0230-0300 UTC exactly (please set time accurately)
  -- 15, 20, 40, 80 and 160m 38-44 KHz up from band edge, 1813-1818 on 160m.
   -- 100 watts max.
   -- Sprint QSY format, NAQP-style mults per band
   -- 1 KHz minimum QSY, 2-3 KHz encouraged.
   -- Contact stations once per band.
   -- Score = #QSO's x sum of band-mults
   -- Score reports to 3830scores.com (Tks, WA7BNM)
   -- In final rankings, only the top 4 scores count.

Rules: http://www.ncccsprint.com/ladder.html
Schedule: http://www.ncccsprint.com/next_ns.html
Divisions . . see map at http://www.ncccsprint.com/ladder.html
Weekly results: "GO" button at www.ncccsprint.com
Operating tips: http://ncccsprint.com/operating.html

nccc-blue reflector: Join our low-volume reflector to discuss NS and NS Ladder topics.
Sign up at http://www.kkn.net/mailman/listinfo/nccc-blue.

73 Bill N6ZFO
Director,
NCCC Thursday Night Contesting

Movin on up..
Using Enhanced SO2V on Flex 6000 or other SDR based transceivers to up the game of your contest operations
by Chris N6WM

As most of you are aware, as of late I have been working with Flex radio on enhancing their platform for contest use. It's kind of amusing how titles are assigned to folks, and some have started to call me "Mr. Flex". Let me assure you that is not the case. I am actually rather platform agnostic. I like experimenting with newer technologies that can enhance contesting. I still use K3's in contests, along with my Flex 6700 and even other platforms as the need arises.

One of the things I demand of my rigs is that they are competition grade. I originally gravitated toward the flex platform In my quest to bring the real time pan adapter experience to my remote shack operation. In that process I have discovered some additional unique advantages to this architecture above and beyond the "performance statistics" (mostly top of class btw) that are worth sharing with the contesting community. One of those advantages became uniquely apparent to me with the ability to open multiple virtual radio instances.

Many operators avoid SO2R operations because they think its too much. Either information overload, station integration woes, cost of implementation, etc. But along with RTTY as a platform used as a stepping stone to SO2R, I have discovered another way to incrementally move to this goal. Enter what I call enhanced SO2V, or technically, 2 Virtual radios, on the Same band configured for OTSRP SO2R, but not using full duplex. Essentially a visually enhanced SO2V using SO2R workflow. Best of all this can be used on all flex 6000 platforms, not just the fully SO2R ready flex 6700.

Why do this?
The simple answer is to put more QSO's in your log. Regardless of your station size and regardless of mode, or even dual mode. That's right, the HOA restricted BB gun, to the little pistol TB wires, to the Big gun single op, as well as the Operating position at a multi-op. This method can enhance them all and at the same time begin to introduce the operator to SO2R workflow. Result.. Bigger scores across the board.

How do we do this?
My experience with this is with the Flex 6000 series platform. It is a client/server architecture that is currently unique in the SDR field. (in other words, the computing power is not on a separate PC, rather built into the transceiver itself and is attached to by functional clients to control it, taking the compute duties of SDR off of the Windows or other OS based computer.) Other platforms may be able to accomplish this or may soon, as long as 2 virtual radios can be created, on the same band, and associated virtual CAT ports can be assigned to each radio instance as well as a virtual OTSPR interface to facilitate quick and efficient switching between radios.

What do we need?
For our experiment we will use the mid range offering from flex. The 6500 has contest band preselectors and a single spectral capture unit. This direct sampling rig has more than sufficient bandwith to cover an entire band with a couple virtual radios, leaving that bands preselectors in use to maintain out of band signal rejection capability. You could also use the lower end flex 6300, but you will need a band pass filter, and in either case I would recommend it.

Lets get started with a basic inventory of hardware and software using the flex 6000 series.

- A flex 6000 series radio of any level
- A band pass filter for your operating band (Optional but highly recommended particularly for a 6300)
- A computer of moderate means (you don't need to break the bank and what you have will probably work)
- A radio control interface for your Flex, such as SmartSDR for windows or a Maestro control console. Whatever suits your needs and style.
- SmartSDR cat interface, a free application included as part of SmartSDR for windows. You will need this even if you use a Maestro.
- N1MM logger + or other OTSRP enabled contest logging program
- An antenna suitable for the band/bands you will take on in your competition

Now lets put the pieces together so you can get started. First you will need your computer, up and running and on the same network as your flex radio. If you dont have it yet, download and update to the latest version of N1MM logger +

Now download and install the latest version of SmartSDR for windows. This will be required even if you use a Maestro control interface, as you will need the crown jewel that will make all of this possible, the SmartSDR CAT application that comes as part of SmartSDR for windows. This application makes the ports available to accomplish CAT and OTSRP interfacing with your logger.
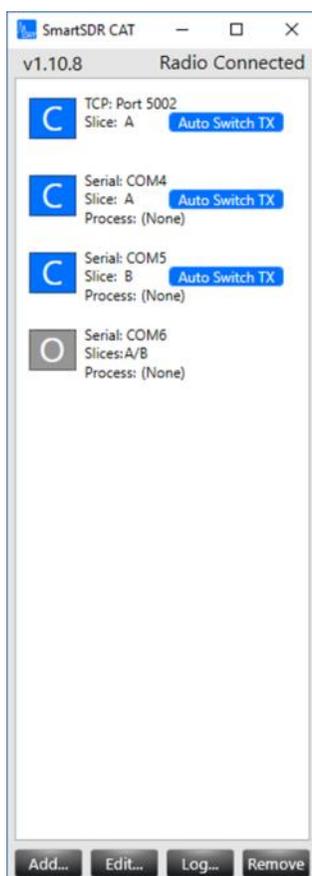

SmartSDR CAT interfaces with com ports and OTSRP ports configured. Remember these are virtual port instances, so there is no wires or breakout boxes. Just the application and its virtual ports setup in the background.

Now you will need to set up your 2 CAT ports to support your 2 radio instances in SmartSDR CAT. Assign the first port to Radio 1 and the second one for Radio 2.
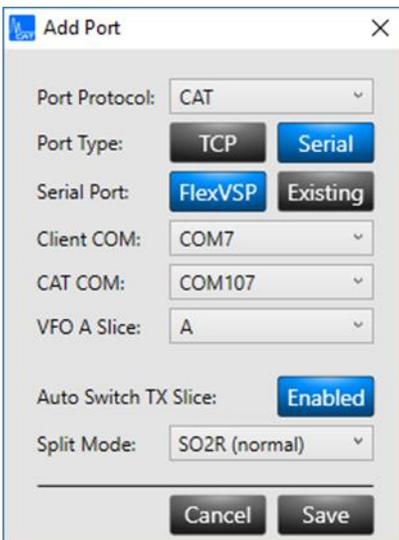
Here is the setup screen for setting up one of the cat port instances. Notice this one will be assigned slice A. for setting up the instance for slice B, select B from the pull down menu.

Next we will need to setup an OTSRP port, this will be associated with both radios A and B.
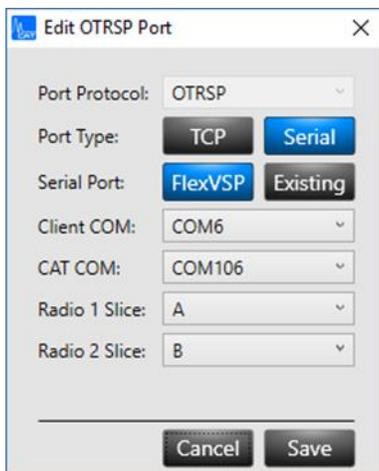
OTSRP port setup window. Notice the Radio 1 and Radio 2 Slice assignments. Remember, all virtual no boxes or cables!

Now we have our interfaces setup and ready to go, lets go ahead and start SmartSDR (or your Maestro). Open up 2 radio instances (called slices) in 2 separate pan adapters on THE SAME BAND** *its important to do this in SSDR as N1MM will not allow it to be done from within the logger.* .
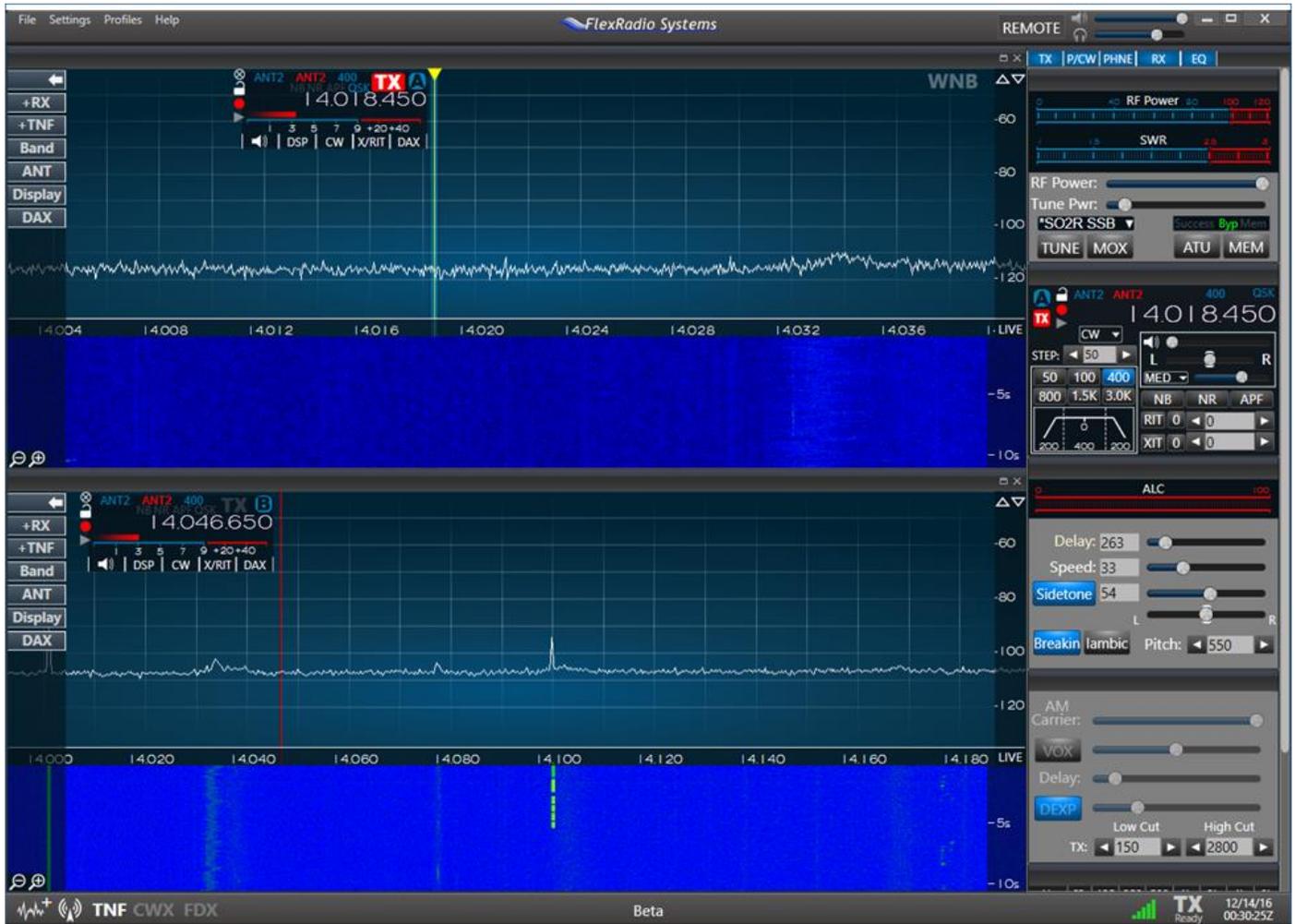
SmartSDR for windows setup with 2 radio instances, Same band. (you can tell it was after dark when I did this shot, glad we have the NCDXF beacon to let us know everything is working!)

Here is the exact same radio setup as seen on a Maestro.. this will work also. The choice of client is yours, just make sure the SmartSDR CAT program is running on your N1MM logging computer.

And now we can configure N1MM to support this. We will be choosing SO2R mode *Important, there is an SO2V option but we don't want to choose that for this exercise. We will be essentially using SO2R and OTSRP.

Open the radio configuration interface for N1MM logger +. Select the SO2R option. Set up each radio instance in accordance with the virtual COM ports that you setup in SmartSDR Cat. Then set-up an OTSRP Port that is assigned to both radios in accordance with the OTSRP port you setup in SmartSDR cat. You can also setup a keyer here if needed.
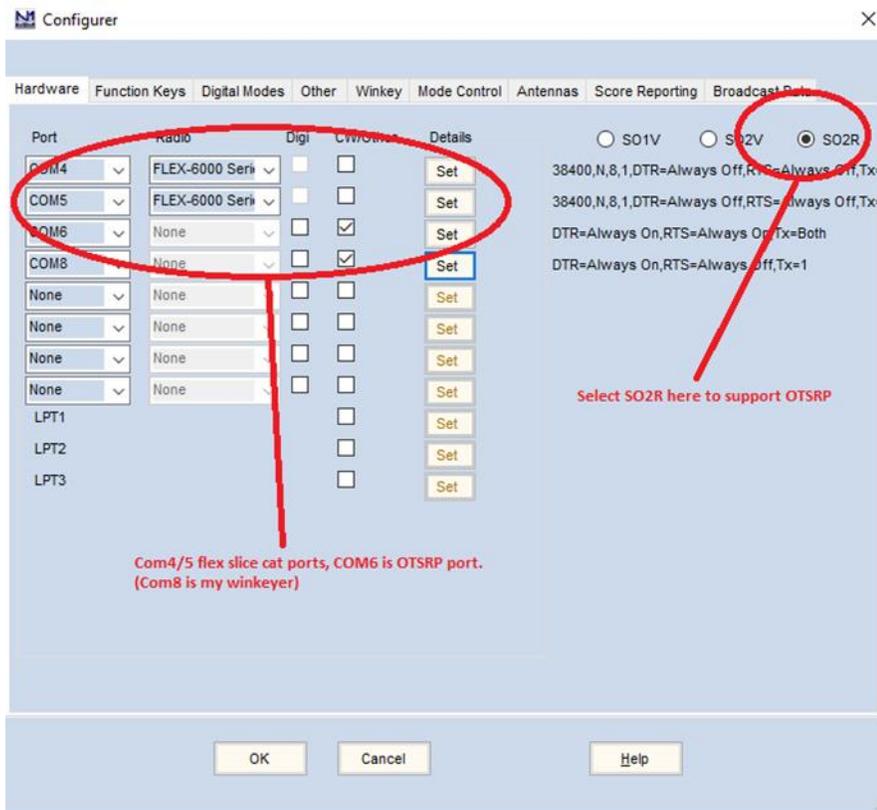
N1MM port configure correctly setup.
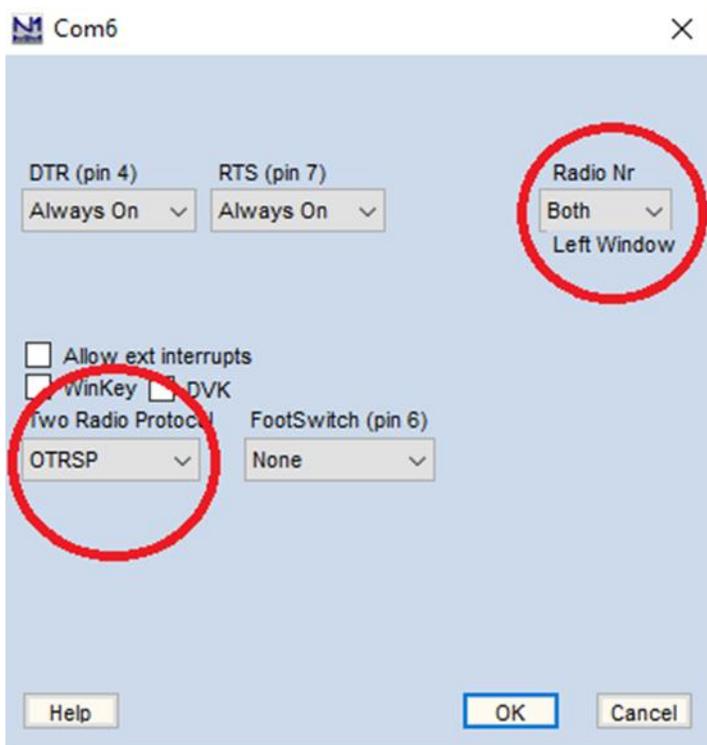
If you have never set it up before, here is the OTSRP setup screen just to give you a peek. This activates the OTSRP specific hot keys for band changes.

Save your settings and connect to your flex. If all was setup correctly your logger should open up 2 log window instances, one on each virtual radio instance, and the correct QRG showing on each. If you would like you can open band maps for both and any other windows you desire.
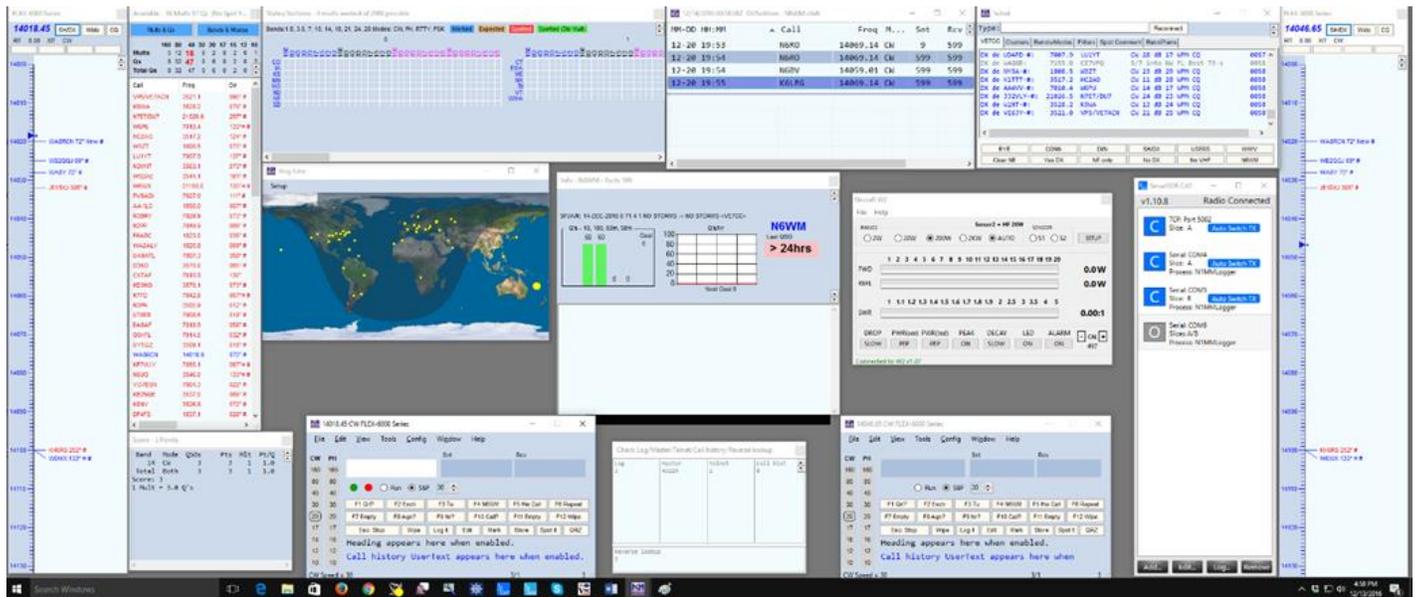
N1MM properly setup in SO2R mode, both log windows available, both on the same band with OTSRP focus switching enabled.. ready for action!

That takes care of the setup, and now let's see what we can do! Let's start easy with a first example.

Single Band, same mode.. CQ and S&P

You are going to do a single band effort in CQWW. Go to radio slice A and start CQ and establish a fictional run frequency. Notice as you transmit, both waterfalls are suppressed, that's ok. We are not full duplex nor full SO2R, we are just using the functions to enhance your single band operation. While Cqing, start tuning up the band on slice b.. you find a juicy mult. Hit the Pause/Break button. Notice that your TX focus has switched onto radio slice b. You can now work your mult on the second log window. Hit pause/break again and continue cqing on your run frequency. SO2R.. Not really. Chance of loosing run frequency.. maybe? Depends on how fast and aware you are defending it while switching back and forth. You get the idea. You can now hold a run frequency while simultaneously going up band working mults. Or even clicking the band map to get 'em. Pretty cool huh? You have already upped your game, ** note, you could try dueling CQ's but in this case since you are not full duplex it could get tough. I do know some operators who have won SSB sprints by cqing on 2 qrg's on same band.

now lets look at another possibility...

The Single Band multi-mode contest.. ARRL 10m or IARU HF world championships. Now things get a little interesting.

Configure Slice A for 10m cw and Slice B For 10M SSB. BAM! You are now active on both band/ Mode segments simultaneously! Start CQ ing on 10m cw. On Slice B start tracking a sideband mult to work.. when you have a free opportunity hit pause/break and change focus, call the station, get him in the log and pause/break again to resume your cq's.. and.. when things get slow on 10... start alternating CQ's between CW and SSB. It will take time and practice but no more CW on the half hour stuff.. you are go on both modes at the same time.
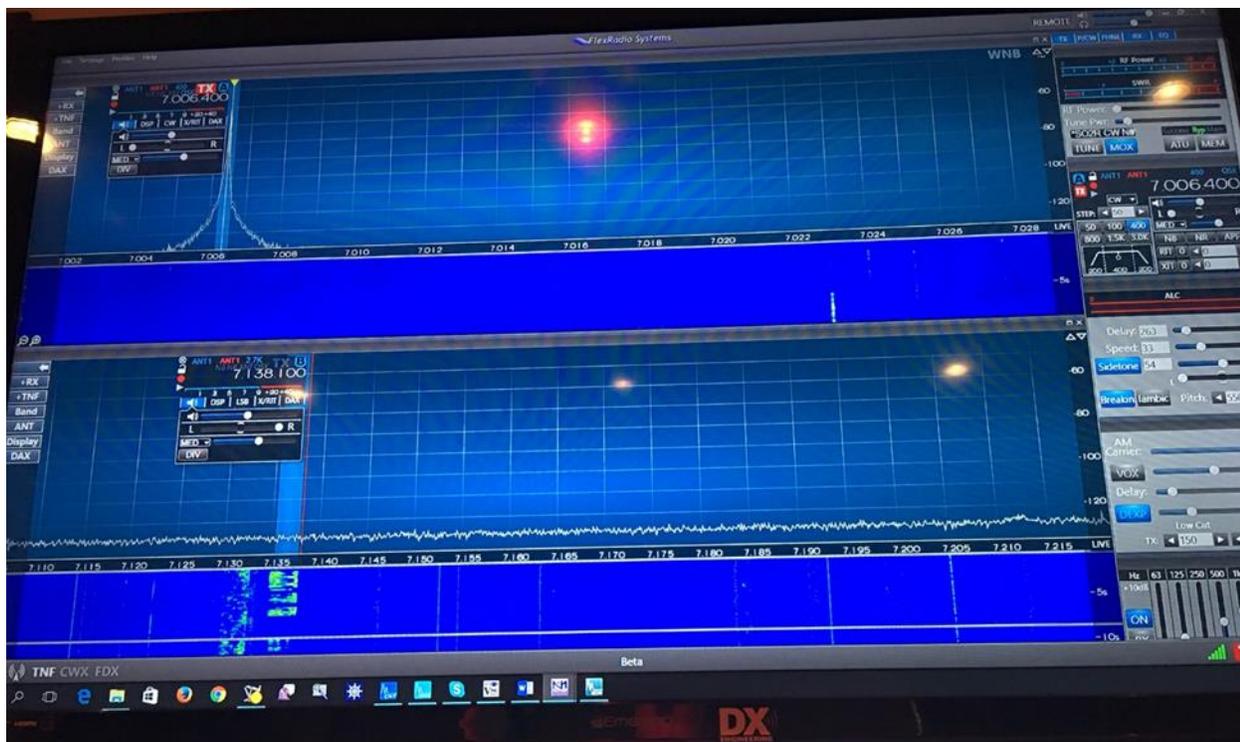
Active cw CQ on slice (a) while getting ready to pounce on an LSB station on slice (b). when my cq is done, one button and I am sending my call on the SSB qrg. I set this up on 40 meters because there were some sigs, but you could do this in any dual mode contest like the HF world championship or ARRL 10 to up your game.

None of this is full duplex, so you will need to be hyper aware of your run rates, and whats going on, but since you are just moving fast and not multi-tasking per say, you start getting a good exposure to the methods used in full SO2R in full duplex on 2 bands.   You can see in the photo that plenty of valuable information is available even while not in full duplex thanks to the pan displays. You can also use this tool on multiple bands with suitable antennas, but you will sacrifice your preselectors (flex 6300/6500) so its a bit more sub optimal unless you are using the full duplex dual antenna/ Spectral Capture Unit SO2R enabled flex 6700.

This demonstration is very basic and there are more items that can be customized to fit your shack needs, like per virtual radio instance transmit profiles/power levers, amp triggers, etc. but hopefully you get the picture. A more comprehensive setup doc for using so2r on the flex platform is here.

http://www.flexradio.com/downloads/so2r-mode-with-n1mm-for-the-flex-6700-how-to-guide-pdf/

SO2R keyboard assignments are available here in section 12 of the N1MM docs.

http://n1mm.hamdocs.com/tiki-index.php?page=Key+Assignments+-
+Keyboard+Shortcuts#SO2R_Key_Assignments
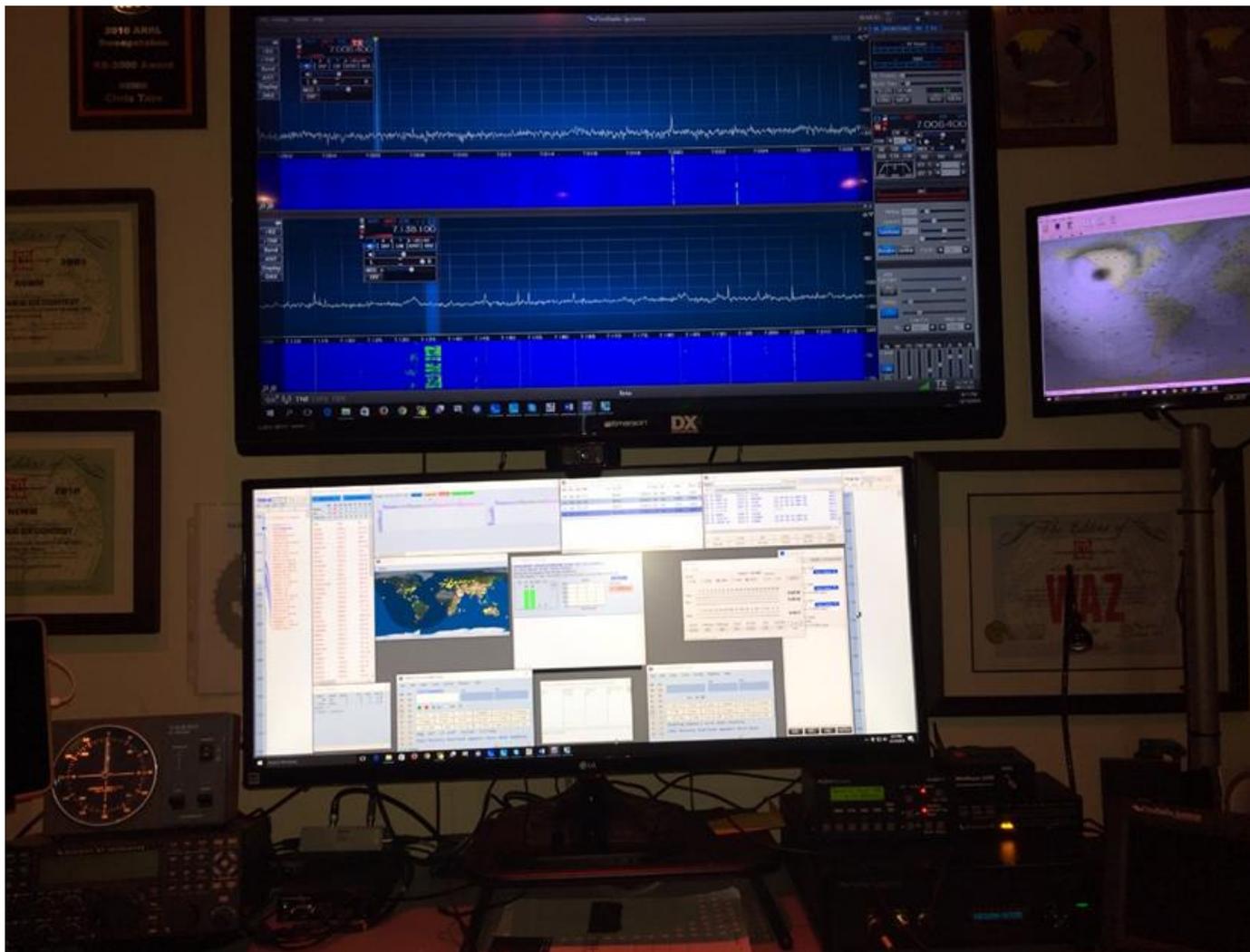
The entire setup of my flex and N1MM ready to operate.. now that's what I call a birds eye view of the band!

In summary:

This little primer shows just one of many advantages this architecture brings to the table and facilitated my interest in working with the manufacturer to enable contest functions on all levels. Using the power of the flex radio platform and its integrated tools, you can up your game even with the most basic single band antenna to operate in a Modified SO2V/limited SO2R configuration using the Open two radio switching protocol on a single transceiver with 2 virtual radio instances, to make your contest score higher, put more mults in the log or maximize slow periods on the bands by increasing your QSO potential.

Whether a small single station operator, power operator or superstation single band operating position, using these tools can help increase your score and help you to the top 10 box. We are in just the beginning of the cycle for these Direct Sampling platforms, and their power is just beginning to be realized. Can you feel the game start to change? I can! Now you know why I am hanging out with these guys right now.

Chris
N6WM

Chris has been designated Flex Radio Systems Contesting "Champion" and is a member of their Alpha test team . He has been advising flex on the needs of the contesting community to enhance and shape the flex 6000 series for suitability as a top tier contesting platform. If you would like assistance in setting up the above functionality or if you have any other platform questions, He is "one of us" and will give you the straight talking information needed to be successful contesting with the flex 6000 series Direct Sampling SDR. feel free to contact him at n6wm@largeradio.org.

2016 NCCC Holiday Banquet
photos by Bob N6TV

THE NCCC KB CLUB COMPETITION
Bob, W1RH

Since I have been with the club, the club focus has been on the domestic contests, such as NAQP and Sweepstakes. The club has also focused on those DX contests which include the states and provinces, such as RTTY Round Up and CQ WPX. There has been no focus on the DX contests (CQWW, ARRL DX, etc.) since I have been with the club.

As President, last year I took a detailed look at just who participated in what contests. I was really surprised to see the number of members, and non-members who live within our sphere of influence, who did not participate much or at all in the domestic contests but kicked butt in the DX contests. We also have some members who only do VHF contests. It was at this point that I decided to pro-pose a competition within the club to the Board, which would give credit to members for points scored in all of the major contests.

To keep the playing field as level as we could, each contest was assigned a multiplier, with Focus Contests, given extra consideration.

The contests in this year's competition are listed below. Focus contests are highlighted in yellow.

CONTEST	MULTIPLIER
CQ WPX - RTTY / CW / SSB	X2
ARRL JUNE VHF	X200
ALL ASIAN CW	X10
IARU	X5
NAQP SUMMER/WINTER - RTTY / CW / SSB	X50
CQWW - RTTY / CW / SSB	X1
CQP	X20
ARRL SWEEPSTAKES – CW / SSB	X20
ARRL 160 METER CONTEST	X50
ARRL 10 METER CONTEST	X10
ARRL RTTY ROUND UP	X50
ARRL DX CONTEST – CW / SSB	X5
NCCC RTTY SPRINT	X100
NCCC CW SPRINT	X100
NA SPRINT – CW / SSB – SPRING / FALL	X100
10 METER RTTY CONTEST	X100
JARTS RTTY CONTEST	X5

The scoring is based on the total points scored multiplied by the number of contests participated in. Scores are claimed points, and not final scores. Final scores may considered if rankings are very close in the top 20 or so.

Those participating in the NCCC Sprints are given credit for one contest, although all Sprint scores are added to the total number of points.

I have been keeping a spreadsheet to track the scores. Points have been mined from the 3830 site.

Awards will be given out at the NCCC Awards Banquet.

It is very tedious to keep track of all of these points, so I asked Matt, WX5S, if he could automate the process. Matt (thankfully) agreed and is well on his way. I hope next year's competition will be automated. If you suspect that your score was not accounted for in a particular contest, please contact me.

So far, as of the ARRL 10 meter contest, 176 contesters in our circle have posted points. A few of these are not NCCC members. The final rankings, and awards, will be based only on dues paying NCCC members.

Below are the top 100 current rankings, as of December 29th.

TOTAL CONTESTS	KB POINTS	CALL	RANK
15	497,711,850	K6SRZ	1
11	444,499,814	N7MH	2
15	413,962,245	K6MR	3
10	344,939,150	N6TV	4
12	283,956,425	W1SRD	5
9	272,366,455	WC6H	6
17	262,202,571	N6RO	7
12	247,476,564	N6ZFO	8
16	237,460,848	W6SX	9
11	230,185,055	WX5S	10
9	188,993,808	KA6BIM	11
9	188,497,125	N6IE	12
16	183,322,583	NA6O	13
3	178,107,006	W2SC	14
14	176,536,808	W6OAT	15
15	173,219,520	K6LRN	16
5	164,191,380	W6NV	17
12	157,484,036	N6WM	18
7	155,256,934	K6XX	19
7	151,228,182	AE6Y	20

TOTAL CONTESTS	KB POINTS	CALL	RANK
11	133,881,348	K5RC	21
10	133,737,860	K2RD	22
10	129,092,495	W1RH	23
9	124,263,252	K6IJ	24
11	114,756,609	K6GHA	25
12	112,375,524	K6MM	26
7	109,035,636	K9YC	27
5	96,540,750	WK6I	28
9	92,143,824	K6NV	29
8	87,410,281	K3EST	30
3	86,674,638	W6LD	31
6	72,543,960	N6JV	32
5	70,579,607	W0YK	33
5	70,303,710	AD6E	34
12	67,396,212	KR6N	35
5	64,718,750	N6RK	36
8	60,769,384	K7XC	37
8	58,591,168	W6FA	38
15	55,057,448	N2NS	39
5	49,619,211	WA6O	40
5	46,573,771	N6XI	41
14	42,634,438	N0KQ	42
6	42,060,318	K6JS	43
10	39,877,770	KM6I	44
6	39,813,168	WX6V	45
8	37,901,932	ND2T	46
6	35,797,668	K6RIM	46
6	35,644,593	K6TLR	48
6	34,416,258	W6JTI	49
6	30,715,842	W6SR	50
4	30,593,867	N6NU	51
8	30,224,960	K6UFO	52
8	30,217,403	NW6P	53
5	30,192,460	K6SCA	54
3	26,242,920	NR6Q	55
5	25,830,617	K6EU	56
5	25,294,700	K6DGW	57
4	24,671,692	N3ZZ	58
4	22,246,149	K7GK	59
4	21,656,848	N6PN	60
3	20,474,880	W6DR	61

TOTAL CONTESTS	KB POINTS	CALL	RANK
2	20,077,900	W6NL	62
8	19,676,064	K6YK	63
5	17,999,875	K6JEB	64
5	17,976,650	AJ6V	65
6	16,454,286	KD6WKY	66
5	14,957,350	AF6SA	67
3	14,529,632	N6BV	68
3	11,761,800	N6YEU	69
6	11,738,532	K6KNS	70
2	11,471,520	KX7M	71
2	11,332,080	KU6F	72
3	11,146,334	K6AW	73
2	10,659,040	N6NZ	74
5	10,575,300	W6RKC	75
8	9,367,728	K6CSL	76
1	8,986,600	W6UQZ	77
5	8,865,310	W6EU	78
2	8,743,708	N6TU	79
4	8,507,520	K6XV	80
3	7,789,152	N6NUL	81
1	7,296,000	K6HS	82
3	7,098,570	KH2TJ	83
2	7,071,800	KG6N	84
6	6,913,920	WB6JJJ	85
3	6,637,440	N5KO	86
3	6,626,622	K6TA	87
2	6,613,200	N6JS	88
1	6,601,476	N6GQ	89
4	6,357,720	K6XN	90
6	6,282,816	N3RC	91
3	6,154,728	W6RGG	92
3	5,947,368	K6RB	93
2	5,919,280	K6KLY	94
5	5,827,830	NJ6G	95
3	5,607,273	N6EE	96
2	5,500,080	K6RC	97
4	5,093,240	N6AJS	98
4	4,933,600	K6MI	99
2	4,686,080	K9JM	100

California QSO Party

Tyler K6TLR Alpine County

CQP has come and gone. Alpine county got activated and the 125 or so QSOs got to log it into their books. Activating Alpine was an eye opener. The weather conditions were terrible. The wind was violent. A storm rolled in. And we were only able to log about 125-150 QSOs for all of our efforts for the weekend...

But what happened in the following months has now made it well worth it...

Roughly 3-4 weeks after CQP finalized, a couple of QSL cards came rolling in. This was exciting enough by itself, because, being new to ham radio, QSL cards are exciting! It's like finding spare UHF connectors when you thought you were all out! And, I have heard that when you live in California, no one really sends you QSL cards... because everyone has already contacted California. We just aren't a hot commodity! So getting a few QSL cards was pretty cool, but one of them really stuck out.

K4PBX had included with his card, a full page, typed request of how he was trying to get the Worked All Counties award, and that Alpine County was the last one he needed. He had also included a response card in case I didn't have a QSL card... which I don't. I put his letter on my desk as a reminder to send him a QSL card once I get some made... and there it sat. Roughly a month later, I get an email from K4PBX asking if I had received his letter. Again he reiterated that he was working on the Worked All Counties award. Because I was thinking so California centered, I was thinking there were only 58 counties, hold your horses, I will get a QSL card to you once I get some made. Well, it turns out, he was on a whole new level. He made mention of 3,076 counties that he has already confirmed and just needed the very last #3077. Then it dawned on me that I was immensely underestimating this kind stranger, and that something else WAY WAY more amazing than working all of California's Counties was going on. K4PBX was intentionally collecting every single county in the United States of America... all 3077 of them! I don't know how long he has been attempting it, but I immediately apologized for my laziness and sent his response confirmation card back.

December 7th rolls around and I get a package on my doorstep. Upon opening it, I find a nice hand written thank you card, and a wooden plaque from K4PBX; a huge thank you gesture for helping him confirm his final county in the USA. This is my first "wallpaper" from being in the hobby. I hope it won't be my last. It is, so far, by far, the coolest thing I have gotten to do in ham radio. Thank you K4PBX!

Our way to 2018

Having been elected to host the WRTC 2018 in Germany is a great honor, a thrill, and a big challenge for us. The critical tasks have been clearly defined. Dedicated and highly motivated teams are addressing the challenges. For the competition itself we have chosen the Jessen area south of Berlin for its flatness providing level playing fields for all competitors. Jessen is strategically situated between the German capital of Berlin and such fascinating historic cities like Dresden and Leipzig.

Nearby you find important cultural attractions, e.g. the historic city of Wittenberg where Martin Luther launched the Protestant Reformation in 1517. Additionally, the scenic countryside and a lot of entertainment will make the WRTC an exciting experience for families and friends as well.

*Martin Luther Monument**
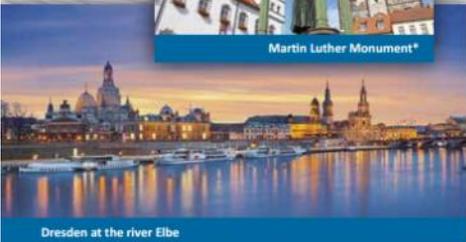
Dresden at the river Elbe

* Source: Lutherstadt Wittenberg Marketing GmbH ©

We need your support!

You need deep pockets to finance such a huge event. Our preliminary cost estimates add up to close to half a million US Dollars and cannot be shouldered by the German contesting fraternity alone. We need substantial financial support of contesters from all over the world, from contest clubs, individuals and business. Any amount is welcome! We will do our level best to translate this support into an event that is wort to take part in - be it as a competitor or spectator, either on the spot or remotely via Internet. You are welcome to donate via PayPal to:

spende@wrtc2018.de

or to use wire transfer (see Web Page for details).

For US taxpayers

The World Wide Radio Operators Foundation (WWROF) is recognized by the IRS as a tax-exempt public charity. In order to be eligible for Income Tax treatment of your donation to WRTC 2018 just contribute to WRTC2018 in one of the following ways, either via PayPal to:

WRTC2018@wwrof.org

or by check - remit and mail to:

WWROF Inc. - WRTC2018 Fund
P O Box 10424
Midland, TX 79702

WWROF

Note: It is important that mailed contributions include notification that the donation is specifically for WRTC2018.

Contact the WRTC Team

www.wrtc2018.de
contact@wrtc2018.de

E-Mail:contact@wrtc2018.de | Web: www.wrtc2018.de | Facebook: wrtc2018 | Twitter: wrtc2018

WRTC 2018 WORLD RADIOSPORT TEAM CHAMPIONSHIP

Welcome to Germany!

Proud bronze medalists at WRTC 2014 - Manfred Wolf, DJ5MW and Stefan von Baltz, DL1IAO (Foto: DK9IP)

Competition with Friends

Lifetime Experience

Make it happen!

Contesters' Olympics

Welcome to Germany

Germany has been awarded to stage the WRTC 2018. The Federal Republic is subdivided into sixteen federal states such as Bavaria or Saxony. Some 80 million inhabitants share a plot of less than 140 thousand square miles, about the size of the US state of Montana.

Sometimes the German language is criticized for its harshness; however, a countless number of students around the world start learning German every year as it offers an insight into a fascinating culture and a world ranked economy.

Radiocommunications in Germany

Heinrich Hertz

Here the fundamentals of wireless communication have been developed as young Heinrich Hertz has proved the existence of electromagnetic waves and Nobel Price Winner Ferdinand Braun introduced the closed tuned circuit as part of the radio transmitter. The German Hams were late bloomers after all, as only after WWII a more liberal legislation made a wide ham culture possible. Today Germany is the home base of the world's second largest contest community hosted by two notable clubs: the Bavarian Contest Club (BCC) and the Rhein Ruhr DX Association (RRDXA). That is why you will find such a great number of German call signs in your log as well as multipliers from German radio activities like CR3L or VK9LM.

WRTC 2018 in Germany

World Radiosport Team Championships (WRTC) are being held every four years. More than 60 of the best 2-OP-teams from all over the world meet for a competition. Quite different from other radiosport contests, competitors in WRTCs operate with identical power and antennas on level playing fields from the same geographical region eliminating all variables except their own operational skill. Previous WRTCs were held at Seattle/USA (1990), San Francisco/USA (1996), Slovenia (2000), Finland (2002), Brazil (2006), Russia (2010), and New England (2014).

To participate in WRTC 2018 teams have to qualify in up to 28 different HF contests during 2015 and 2016. Qualification started with the ARRL-DX-CW contest 2015.

To watch your own qualification standings and those of all of your competitors or friends at any time, have a look at our website www.wrtc2018.de. The standings are regularly updated after receiving the results from the contest organizers of each qualification contest.

WRTC - Fieldday Style

Catch the organizers

The members of the WRTC 2018 Organizing Committee are active in many contests using special event call signs like "DLØWRTC" or "DKØWRTC". They are active on all bands from 160m up to 3 cm from various locations in Germany. They hand out the special DOK "WRTC" for DARC awards.

Enjoy the award program

WRTC 2018 sponsors the "Worked WRTC Qualification Regions" award. You can apply online for the WWQR Award via dcl.darc.de. It can be worked on an annual basis in 3 classes, in different modes and on different bands. It shows European radio pioneers on a background in black, red and gold representing the colours of the German flag. Your application will support WRTC 2018 with a small donation.

Point Generator Profile

By Bob, W1RH

Dave, KA6BIM, is our featured point generator this month, and Dave does generate serious points. Unfortunately, because of his location outside of both the CQ and ARRL circles, his points only count for NCCC efforts such as NAQP. Dave, a paid up NCCC member, does qualify for the KB Club Competition awards. We the station you see in the pictures, oh how we wish Dave was within 175 miles of our club center!

Now, more from Dave:

Name/Call Sign: KA6BIM

Past calls: Special PFX KA23BIM & KA84BIM for 1984 Olympics, KA6BIM/7 for CQP, Also operated as W1AW/7 Oregon for ARRL Centennial

Location: Coos County, Oregon, CN73 @ 15 miles East of Coos Bay

How much property do you have? 40 acres @ 500' on a ridge

Describe your antenna system:

Current: .
East Tower: 55' US Tower. 2 element 30 mtr beam@60', 4 element KLM 40 @ 55'
Support for 80 mtr delta loop
Central Tower. 72' US tower KT34XA@ 72', KT34xa@54' Fixed on EU, KT34XA@36' fixed on Carib.
West Tower 72' US Tower KLM 2 ele 80 beam@72', Kt34XA@36' Fixed on JA
Center support for 160 mtr dipole
VHF Tower: Homemade 55' 5 element KLM 6 Mtr @ 60', pair of cushcraft 11 element 2 mtr beams, 440 beam & 1.2 Gig Beam @55'

Future:
Add another KT34XA fixed to Oceania. Add a 12/17 mtr beam. (They are both in my shop awaiting assembly) Would like to get better antenna system for 160. perhaps inverted L. Would like to add a beverage, but terrain is difficult.
I would also like to get set up for satellite and EME

What's in your shack? Kenwood TS870, TS2000, FT1000MP, Alpha 87a, Nye Viking Tuner.

What are your previous QTH's? Manteca, CA CM97 1978-2010

If you're working, what is your career? If not, what was your career?
Retired! I was in the Fire Service for 32 years.

Married? Yes, YL is Dottie, KA6BIL

Kids? Daniel KE6PQV, Dawn K6SBL (she took her Grandmothers call), Doug KI6AFB

Grandkids? 1st grandson is @18 months old. No call yet :-)
My parents (SK's) were K6SBL & K6SEA. My brother and his YL are also licensed and well as one of their sons recently received his license after being bitten by the bug after attending our Family field day operation

How many DXCC entities have you worked? 329 confirmed 336 worked

What's your favorite contest? Several: ARRL10 meter, RAC Canada Winter & Canada Day, and the JIDX SSB. I submitted 26 logs this last year.

Any tips for contesters? Learn to touch Type. I don't hunt, but I peck. I only have a couple of fingers trained. That is one of the things that holds my speed down.
Also remember sleep is overrated during a contest. That 10q hr at Oh-dark thirty may be just what you need to win the section.

What would you like to see changed in NCCC? Nothing that I can think of. It is a great organization. I received an invite from Kip, W6SZN to join NCCC, years ago after we worked in a contest. It was a wonderful group that help mentor and shape me as a contester. The wealth of knowledge is astounding. Although I am now out of the 175 mile circle and can only contribute a few points, I am proud to be a member of NCCC.

Any other aspects of ham radio?
Another aspect of the ham radio hobby is I volunteer with the 7th district qsl bureau and take care of the 7X segment. I enjoy seeing the multitudes of cards that come through the bureau. I am currently in leadership of our local county club and trying to promote contesting and DX'ing. I am also a member of the Willamette Valley DX club, which is the leading contest club here in Oregon. Now that kids are grown and gone and I am retired, I am able to make more meetings than I was able to with NCCC.

Any other hobbies besides ham radio?
I do a little bit of hiking and fishing. I read a lot of Sci Fi and action adventure novels. (Sometimes during slow hours on a contest, to help stay awake). We travel quite a bit visiting family in CA & ID, and volunteer at a camp for kids with cancer in Idaho. I set up a demonstration station there a couple of years ago and I know of at least one person who went on and got their license.

KA6BIM

West Tower — KLM 2 el 80 Mtr

Central Tower — KT36XA @72', KT34XA @54' 20° EU, KT36XA @ 36' 80° Carib

KT34XA@35' 300° JA

160 dipole

VHF Tower — M2 5 el 6 mtr @ 60', Pair of 11 el 2 mtr @50'

East Tower — KLM 4 EL 40

80 mtr Delta
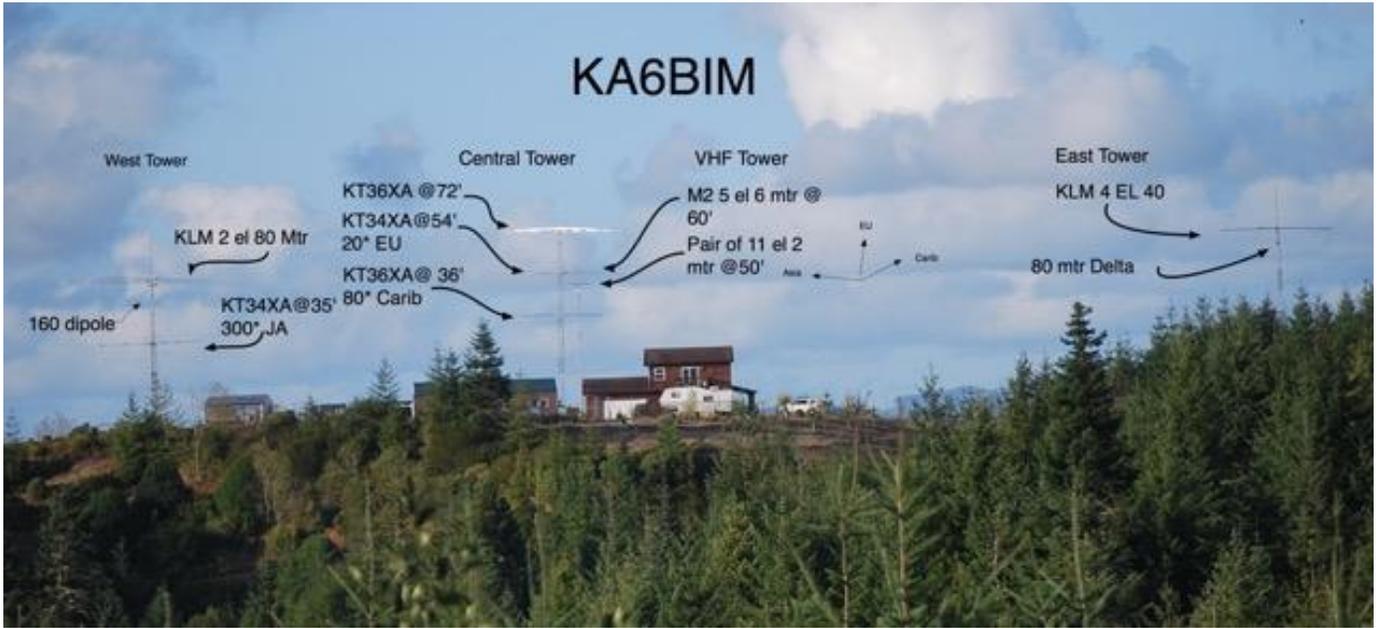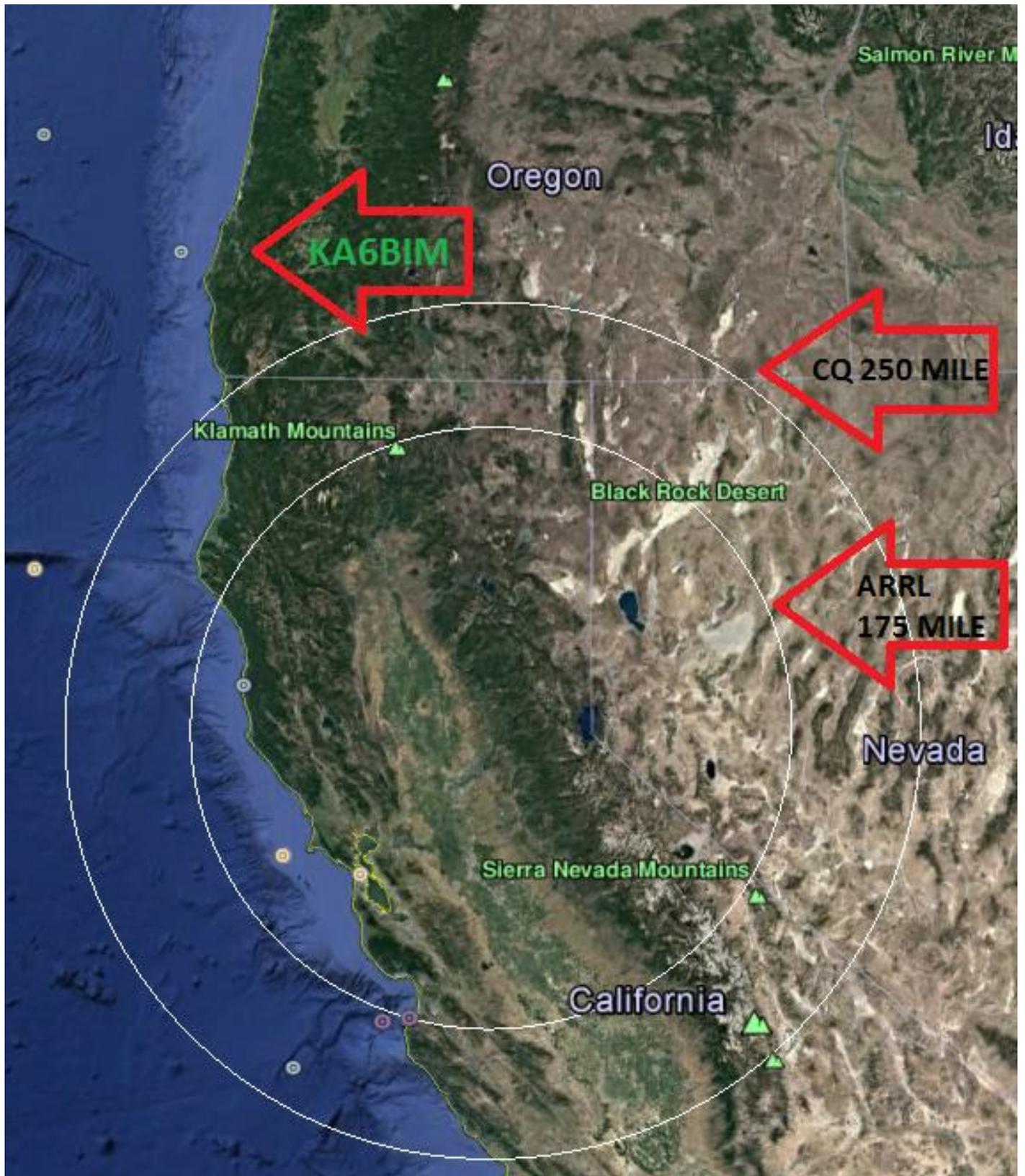
Thank you to Google for use of the maps !

15E

At the beginning of World War II, the need for RADAR equipment stimulated the development of many specialized tubes. The large ring oscillators used in ship and shore installations weren't usable on small aircraft. EIMAC had been making small transmitting triodes like the 35T since 1935. About 1938 they made a few UH-15 tubes. No data on that tube has been found. It was very short and had the grid out the top and the plate out the side. The 15E looks like a baseless UH-15. The 20-watt 15E was produced in large numbers and were used in airborne RADARs like the ASB and in IFF (Identification Friend or Foe) units like the BP unit shown in the photo. These tubes could operate up to 600 MHz and in pulse service, operate on 15,000 volts as an oscillator or pulse modulator. Very small but powerful transmitters could be made like the BP that was a tuned filament, tuned grid and tuned plate oscillator. When the aircraft's receiver detected a RADAR search pulse, it would answer with a coded pulse basically saying, "don't shoot me". Pilots were highly motivated to make sure the IFF was properly serviced.

Small rectifiers were also made in this envelope and were designated the 15R and used in some of the same equipment as the 15E. After the War, hams could buy these tubes cheaply, but they were never widely used. Tubes with bases were easier to mount and replace. Recently I found an advertisement where someone was using 15E tubes to make "night-lights".
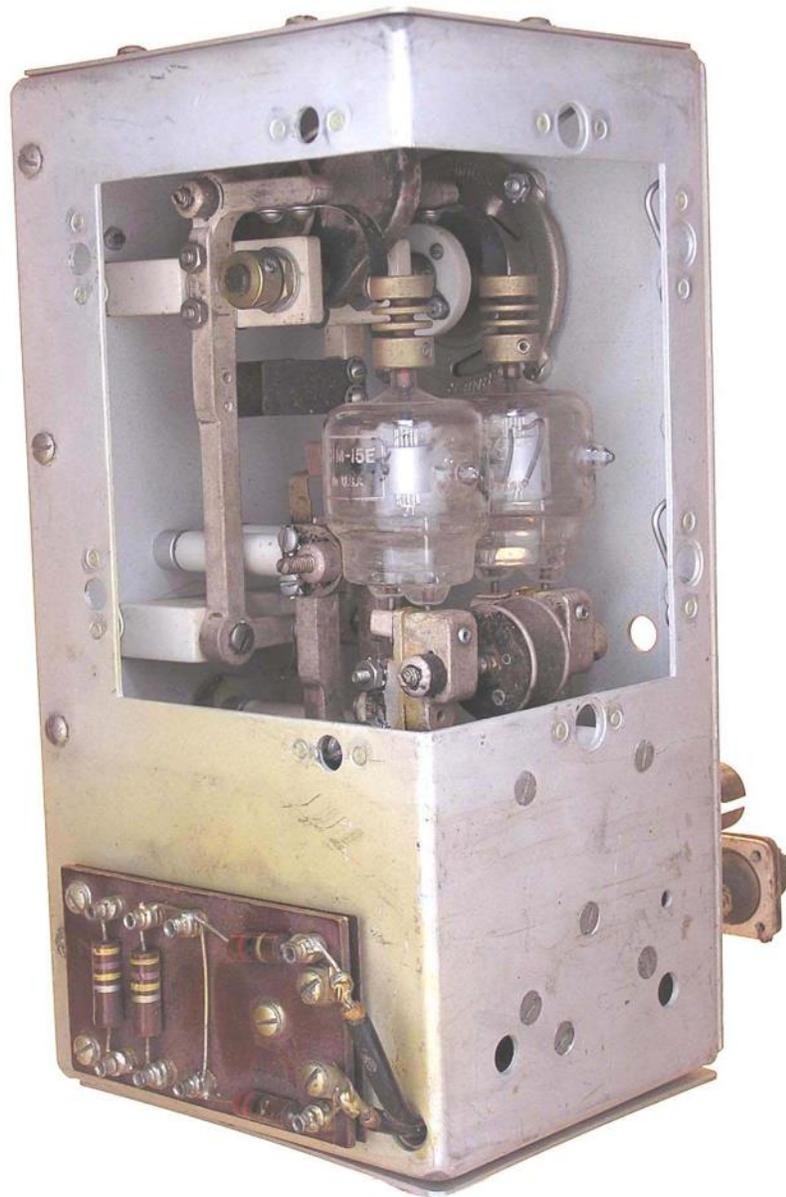
NCCC Meetings

The BOD are working on the NCCC monthly meetings for the next four months. These will be a combination of weekend and weekday meetings to try to cater to everyone.

Additional information will be available shortly !

Northern California Contest Club Reflector—Guidelines

This reflector is devoted to the discussion of contesting.

This includes contests, station building, dxpeditions, technical questions, contesting questions, amateur radio equipment wants/sales, score posting, amateur radio meetings/conventions, and membership achievements.

This does not include personal attacks, politics, or off-subject posts which will be considered a violation of the Guidelines.

Violations may result in removal of the violator from the reflector and possibly from club membership in good standing.

JUG Articles Wanted!

Without your help we cannot reproduce a quality newsletter so please consider submitting a suitable article!

We welcome any and all relevant articles for inclusion in the JUG.

Deadline is 7 days before month end. Preferred format is MS Word, Arial 12 point and pictures should be full resolution. Send your material to Ian, W6TCP at w6tcpian@gmail.com Don't worry

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-1700Z, Jan 1 (144) and
	1700Z-1800Z, Jan 1 (432)
QRP ARCI New Years Sprint	1500Z-1800Z, Jan 1
ARS Spartan Sprint	0200Z-0400Z, Jan 3
QRP Fox Hunt	0200Z-0330Z, Jan 4
Phone Fray	0230Z-0300Z, Jan 4
CWops Mini-CWT Test	1300Z-1400Z, Jan 4 and
	1900Z-2000Z, Jan 4 and
	0300Z-0400Z, Jan 5
UKEICC 80m Contest	2000Z-2100Z, Jan 4
NCCC RTTY Sprint	0145Z-0215Z, Jan 6
QRP Fox Hunt	0200Z-0330Z, Jan 6
NCCC Sprint	0230Z-0300Z, Jan 6
PODXS 070 Club PSKFest	0000Z-2400Z, Jan 7
WW PMC Contest	1200Z, Jan 7 to 1200Z, Jan 8
SKCC Weekend Sprintathon	1200Z, Jan 7 to 2400Z, Jan 8
Original QRP Contest	1500Z, Jan 7 to 1500Z, Jan 8
Kid's Day Contest	1800Z-2359Z, Jan 7
ARRL RTTY Roundup	1800Z, Jan 7 to 2400Z, Jan 8
EUCW 160m Contest	2000Z-2300Z, Jan 7 and
	0400Z-0700Z, Jan 8
DARC 10-Meter Contest	0900Z-1059Z, Jan 8

Midwinter Contest	1000Z-1400Z, Jan 8
QRP Fox Hunt	0200Z-0330Z, Jan 11
Phone Fray	0230Z-0300Z, Jan 11
CWops Mini-CWT Test	1300Z-1400Z, Jan 11 and
	1900Z-2000Z, Jan 11 and
	0300Z-0400Z, Jan 12
AWA Linc Cundall Memorial CW Contest	2300Z, Jan 11 to 2300Z, Jan 12 and
2300Z, Jan 14 to 2300Z, Jan 15	2300Z, Jan 14 to 2300Z, Jan 15
NCCC RTTY Sprint	0145Z-0215Z, Jan 13
QRP Fox Hunt	0200Z-0330Z, Jan 13
NCCC Sprint Ladder	0230Z-0300Z, Jan 13
Old New Year Contest	0500Z-0900Z, Jan 14
UBA PSK63 Prefix Contest	1200Z, Jan 14 to 1200Z, Jan 15
North American QSO Party, CW	1800Z, Jan 14 to 0559Z, Jan 15
NRAU-Baltic Contest, SSB	0630Z-0830Z, Jan 15
NRAU-Baltic Contest, CW	0900Z-1100Z, Jan 15
Run for the Bacon QRP Contest	0200Z-0400Z, Jan 16
QRP Fox Hunt	0200Z-0330Z, Jan 18
Phone Fray	0230Z-0300Z, Jan 18
CWops Mini-CWT Test	1300Z-1400Z, Jan 18 and
	1900Z-2000Z, Jan 18 and
	0300Z-0400Z, Jan 19
NAQCC CW Sprint	0130Z-0330Z, Jan 19
NCCC RTTY Sprint	0145Z-0215Z, Jan 20
QRP Fox Hunt	0200Z-0330Z, Jan 20

NCCC Sprint Ladder	0230Z-0300Z, Jan 20
LZ Open Contest	1800Z-2200Z, Jan 20
Hungarian DX Contest	1200Z, Jan 21 to 1159Z, Jan 22
North American QSO Party, SSB	1800Z, Jan 21 to 0559Z, Jan 22
ARRL January VHF Contest	1900Z, Jan 21 to 0359Z, Jan 23
WAB 1.8 MHz Phone	1900Z-2300Z, Jan 21
Feld Hell Sprint	2000Z-2359Z, Jan 21 (EU/AF) and
	2300Z, Jan 21 to 0259Z, Jan 22 (ENA/ESA) and
	0200Z-0559Z, Jan 22 (WNA/AS/OC)
SKCC Sprint	0000Z-0200Z, Jan 25
NAQCC CW Sprint	0130Z-0330Z, Jan 25
QRP Fox Hunt	0200Z-0330Z, Jan 25
Phone Fray	0230Z-0300Z, Jan 25
CWops Mini-CWT Test	1300Z-1400Z, Jan 25 and
	1900Z-2000Z, Jan 25 and
	0300Z-0400Z, Jan 26
UKEICC 80m Contest	2000Z-2100Z, Jan 25
NCCC RTTY Sprint	0145Z-0215Z, 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
Montana QSO Party	0000Z-2400Z, Jan 28
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
Winter Field Day	1900Z, Jan 28 to 1900Z, Jan 29