



October 2024

Editor: Kevan Nason, N4XL

Thank you to our group leadership:

President – Ed, K3DNE

Vice President - Dave, WN4AFP

Treasurer – Scott, KG9V

Secretary – Kevan, N4XL

Web Master – Frank, KG4IGC

SFCG Webpage: [swampfoxcontestgroup.com](http://swampfoxcontestgroup.com)

### Contest Tips:

SFCG Member Tips	
Tip	From
Study the propagation and focus your time on the windows of opportunity.	W7WZ
Compare your performance and improvement over time primarily to yourself.	W7WZ
Rest and sleep when conditions are weak.	W7WZ
Keep a pencil and sheet of paper to jot down notes as you operate.	N4IQ
When scheduling sleep periods, if at all possible, I try to get at least six hours of sleep. Four hours for me is almost useless. What works for you?	N4IQ

(Editor's Note: Studies show the body goes through 90 minute sleep cycles. Advice has been given that taking your sleep breaks in increments of 90 minutes is better for rest. Perhaps it is coincidence, but note Bill's six hour period is a multiple of 90 minutes)	
If you like FT8/4 contesting, try RTTY contesting. I learned a lot about N1MM+ and contesting more generally by doing a bunch of RTTY contests. The technical set-up can be a little tricky, but once you've got that set, it's very fun.	AA5JF
My contesting skills have greatly improved because of my POTA activities.	AA5JF
I usually contest assisted, but every now and then do a contest unassisted to keep my S&Pping skills sharp. I don't think there are easy to follow rules-of-thumb for S&Pping. Sure, don't wait in pile-ups, but knowing when to call a station a second time (or third perhaps) is not easy to boil down into a single rule. How to deal with a station not sending ID? All depends on the context. This context is learned by doing it a bunch.	AA5JF
Among many factors BIC time is key. (Editor's Note: "BIC" means Butt In Chair. You can't add points to your score if you aren't in the chair operating.)	KZ3P
Remember that contests of all types are an opportunity to help fill in WAS or DXCC. Most of the time on multiple bands	KZ3P
Set-up your logging software at least 24 hours prior to the contest.	WN4AFP
Set activity goals for the contest... (# QSOs, # Multipliers etc)	WN4AFP
When using spotting assistance, DON'T TRUST SPOTTED CALL SIGNS. Always, always verify the call	N4XL
You will find different categories of people in contests. Casual ops are just enjoying their radio. Non-Contesters are just taking advantage of the activity to chase awards or simply want to talk to someone. Ops in these two groups do not operate the way experienced Contesters do. Don't get frustrated with these folks if they don't do things the way we would like them to. For example, they might say "I copy your... Please copy my..." Remember other Non-Contesters might be listening. Sometimes being friendly to these groups, like walking them through what exchange you need and saying "Thank you for the contact" at the end, will encourage those listeners to call you too. Besides, if they have a pleasant experience, they may get the contesting bug themselves.	N4XL
English is a second language to most DX stations. Some only know enough English to make a contact. Use the International Phonetic Alphabet. Don't use cutesie phrases for your call. If a letter isn't received after a couple tries, then use a major city name from their country. Santiago sometimes works better than Sierra for Spanish speakers. Tokyo for Japanese.	N4XL
Pre-Contest. Configure Contest Online Scoreboard both on the site and logger	K3DNE
Post Contest. Submit score to 3830 at 3830scores.com. Make sure the dropdown box for Club: Swamp Fox Contest Group and Team (if applicable) are properly selected.	K3DNE

## Highlights From The Reflector:

- President Ed K3DNE hopes SFCG members will review the last newsletter's comments about using the Contest Online Scoreboard. Many of us enjoy the comradery of following the group's efforts in real time. Several agreed. Herschel KA2G likes to use it to see when members are making band changes and consider doing so himself. He wished Kevan N4XL hadn't pointed out you can tell N1MM (and maybe others?) to not send how many Q's are made on each band along with the total score.
- Matt NU4E asked if anyone could help him set up N1MM to work with two radios and two WSJT-X screens. Great. Besides being one of the best operators in the world, having multiple towers with multiple antennas at different heights, and a rotating moon bounce setup he can use for terrestrial VHF contacts, Matt now wants to get into SO2R.
- Herschel KA2G is looking to repair his Viking MB-V-A tuner. He's discovered some of that older gear is hard to maintain. Frank KG4IGC gave a helpful suggestion to explore 3D printing the part.
- Preliminary results in the NAQP SSB have modest Ed K3DNE setting a new SC record. He displaced Steve AA4V. Sorry Steve, congratulations Ed.
- Matt NU4E reminded people to read the contest rules. A member talked about self-spotting in a contest where that is not allowed.
- Dave WN4AFP won First Place South Carolina in the 2024 Minnesota QSO Party. Congratulations Dave!
- Herschel KA2G had an issue with his MFJ-912 and 4:1 Balun Box and doublet. When he grounded the box his SWR shoots up and drifts down. Some suggestions were made, but we never did learn if he fixed it or not.
- State QSO Parties continue to drive active participation from the SFCG. Your Editor was disappointed to miss the CAQP this year. Like several people, the hurricane disrupted my plans.
- President Ed K3DNE pointed out the CQWW policy has been returned to normal regarding Belarus and Russian stations. Working them now contributes to your score.
- Despite hurricane damage, many had great fun in the CQWW RTTY contest. Frank KG4IGC chased a VK9 station all day before finally snagging them using gray line propagation. He also logged A60 for an ATNO (All Time New One).
- Bill N4IQ had major hurricane damage taking out most of his antennas and both cars. Normally a strong RTTY contender he had to sit this year's CQWW RTTY out.
- Ed K3DNE passed along the unwelcome news that W3RFC, owner of the RF Connection, passed away. There isn't any word yet if the business will continue.

- Herschel KA2G possibly has an opportunity to obtain several thousand feet of free RG6. He asked anyone in the SFCG needing some to let him know. He also asked what it can be used for. Answers included receive antennas (including beverages), loop antennas, Bazooka antennas, and matching lines for 4 squares (*Editor's Note: I'd be careful about limiting power for that use though*).
- Dave NJ4F is back active in the group. He asked for some help getting N1MM back operating and thoughts about using a G5RV. Glad your radioactive again, Dave!
- Frank KG4IGC sparked some interesting comments by asking why he has so much trouble working China and other Asian countries.
- Herschel KA2G asked about tuning his A3S yagi. It was only 3 feet off the ground when he did it. As many are when first hearing that, he too was surprised to read it was recommended to point it towards the sky when tuning that close to the ground. The reason is the reflector acts to shield ground effects making SWR readings more accurate. Still, the higher when testing the better. Herschel also mentioned something newer hams are not aware of. When you raise an antenna, its resonant frequency will usually go up. Be aware though that effect only applies for the first wavelength or so of height.
- Antenna work continues at KB4DX. John W7WZ is dramatically improving his station. We've said it before, but I'll say it again... If you are the least bit interested, then this is your chance to learn firsthand about how a top notch station is built and operated. The radios being tried, compared, and either accepted or rejected, are world class. The thought and engineering processes researched or developed and used by Dave AA4VT regarding station control, networking, remote operation, and antenna switching are enlightening. Many of the lessons learned by the team are transferable to many of our SFCG members' own stations. The antennas used at KB4DX eclipse those used by all SFCG members (except one). This is an opportunity for new operators to experience what it is like to be a "Top Dog" in the S&P pileups or what it is like to run DX. Two people have stepped up and learned climbing towers isn't terribly difficult to do and how satisfying the sense of accomplishment is as they look up the tower at their work. And it's a chance to meet and interact with the very accomplished operators on the team, all of whom are willing to share their knowledge and experience. This Editor simply does not understand why more people are not availing themselves of the opportunity John and Dave are offering. Even if you don't climb, even if you aren't an experienced operator, even if you don't think you have anything to offer the team you should go over and watch how things are done and ask questions. It is an amazing opportunity to learn new operating skills and get ideas about improving your own station.

## How do you get better? A few more ideas...

What follows is a post to the CQ-Contest reflector on 11/1/2008 by Robert L. Shohet KQ2M. It follows suggestions made by other operators. The whole thread is worth reading, but this post in particular impressed me enough that I saved it to my computer for periodic review.

Kevan N4XL

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Lots of excellent suggestions/techniques and ideas from those who know. Here are a few more....

1) The CQWW Log database is an INCREDIBLE source of operating information/strategies and techniques based on ops actually working people in the contests!

Go to:

<http://www.cqww.com/ssblogs.htm>

<http://www.cqww.com/cwlogs.htm>

and click on the log that you want to see.

Want to know what propagation paths are/were possible on a given weekend? Then read the M/M, M/2 and single band logs of serious competitors.

Want to see what the competition was doing in your category? Then look at their log.

Even with having operated contests seriously for 35 years and still having most of the logs (with handwritten notations!), I am still learning; and "reading" the logs of others is an invaluable source of operating ideas/information and strategy. With a few hours of "study" I can quickly figure out what I am doing better than others and what I can improve.

Also, looking at my old logs is also a good review of band conditions at various points of past cycles that I may have forgotten about, including those easily missed and obscure, short-lived band openings.

2) I "operate" daily with five computers and LCD's watching and trading in the stock/bond/commodities and other markets in "real-time". In these exceptionally volatile times, nothing prepares you for the mental/physical demands of SO2R like the mental focus required to watch and then integrate the visual and text information from five computer screens with 100 charts+ and 400+ quotron symbols, plus simultaneously watching CNBC and answering my office phone. Of course I am also making split-second "real-time" decisions to buy/sell while all this is happening, just like the split-second operating decisions we must make during a contest. However, unlike contests, there are no time-outs or rest periods when the markets are open!

3) Listen to complex music (all types from Jazz to Classical to Rock, etc.) and try to pick out all the instrumental and vocal parts, one by one. When you get good at that, "dial it up a notch" and then try to "see" the artist actually playing their part of the piece with the actual fingering while you are focusing on them. The focus on the next artist and the next and so on.

The more complexity and detail that you can "see", the more successfully you are training your brain to develop concentration and focus and to multi-task.

4) I regularly watch DX-Summit on one of my computers to get the "feel" of daily propagation as it changes around the world. I also check the various [www.noaa.gov](http://www.noaa.gov) solar activity websites and monitor auroral cndx and A/K/SF indices in real time. After a while of doing this on a daily basis, I can usually reasonably predict the A/K/SF indices just by looking at DX Summit spots and seeing what bands they are on.

Although a lot of unusual propagation paths and weak stations are not spotted, overall this is a very useful strategy for learning current propagation and what to expect during a contest. Despite the often busted callsigns, this is an excellent way to become familiar with the DX and DXpedition callsigns BEFORE the contest, so you know who to look for DURING the contest.

5) There are a myriad of other ways you can take things from your daily life and work and make them tools for training your mind and body and improving your operating skills. All it takes is a little imagination and creativity plus effort, and having fun.

There is a simple equation that I use every day:

Learning = Improving skills = Having fun!

73 and CU in CQWW CW!

Bob KQ2M

## Observations by the Editor:

- A thread on the CWops reflector talked about charging LiPO batteries while driving.

I have a Bioenno LiPo battery I use when I am mobile (usually state QSO party) . The Bioenno vehicle adaptor to charge the battery is about \$100. I wondered if anyone has used a car battery inverter to charge the battery using the supplied Bioenno charger. I would also like to use the inverter to charge a laptop. Any thoughts or suggestions??

Mike

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I've used the same setup to charge a LiFePo4 while driving. No issues whatsoever.

Richard – N1RBD

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Only about 80% efficient, but will work. Defer to others with more expertise on whether a full sine wave inverter vice modified sine wave is better or worse for your AC charger circuitry. If the former, the inverter may be more expensive.

73

Harv K2PI

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Give it a try, it will most likely work, however if the inverter output is "dirty", the switching power supplies in the Bioenno and the Laptop chargers may struggle trying to regulate and overheat...

Also, don't forget to turn the inverter off when you are parked and on the air, as it will be trying to keep the Bioenno battery charged by drawing power out of the starter battery. Ask me how I know! :)

73 Ed AE8Q

- I had thought people calling a battery a LiPO battery was lazy shorthand and for a LiFEPO4 battery. Nope. Turns out they are actually different beasts. There are many websites explaining the difference. Here's one, [https://uk.eco-worthy.com/blogs/lithium-battery/lithium-battery-comparison?gad\\_source=1&gclid=CjwKCAjw6c63BhAiEiwAF0EH1Nq\\_ClytosNGj4dSdicP1rFgJxaYjd9g49fPIAArymF1CJdNmKZx-RoCNbwQAvD\\_BwE](https://uk.eco-worthy.com/blogs/lithium-battery/lithium-battery-comparison?gad_source=1&gclid=CjwKCAjw6c63BhAiEiwAF0EH1Nq_ClytosNGj4dSdicP1rFgJxaYjd9g49fPIAArymF1CJdNmKZx-RoCNbwQAvD_BwE)

- Another odd Microsoft Windows audio issue popped up. The most common problem with Windows' handling audio is it automatically and "helpfully" rearranges your default audio selection when you plug a device having audio capability into your computer. Mike N4CF discovered another fun thing. The following thread came from the MMTTY-SB-RTTY Groups.io reflector.

*I am using MMTTY v1.70K with my Elecraft K4's internal USB sound card ("Audio CODEC" in Device manager) to send and receive AFSK. This has worked perfectly in previous RTTY contests.*

*But now, when I click the TX button in MMTTY, the AFSK audio level is normal, but drops 9db over a span of 10 seconds. My KPA500 amp indicates 400W at the start of a transmission into a dummy load, and decreases slowly to 50 watts over 10 seconds.*

*The same thing happens if I configure MMTTY to use the computer's speaker instead of the Audio CODEC. I can hear the level drop in the speaker. So I can't blame the Audio CODEC.*

*The level drop occurs if I use the MMTTY engine in N1MM Logger+ or if I launch MMTTY by itself with N1MM closed.*

*Does anyone have an idea what's going on?*

*Thanks. -- Mike N4CF*

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*... 2) Check your computer to see if any audio "enhancements" could be affecting your audio. Turn off any special effects or processing.*

*73, Mark WA9IVH*

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*... I'll check again, but I've never seen any enhancements in Device Manager.*

*73, Mike N4CF*

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*Not Device Manager. See Control Panel -> Sounds -> Playback -> Speakers (USB Audio CODEC) -> Enhancements and check "Disable all enhancements"*

*73, ... Joe, W4TV*

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*That did the trick. The ALC is steady at 5 bars, and the KPA500 is steady at 350W.*

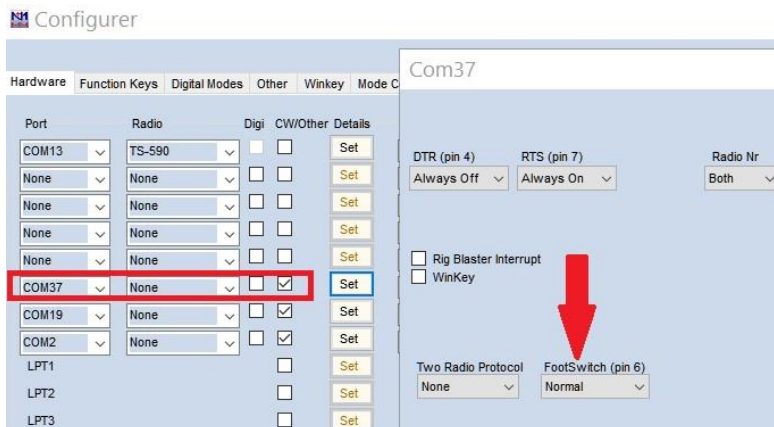


Thank you very much! The receiving stations will appreciate a steady signal.  
73, Mike N4CF

## N1MM+ Tips:

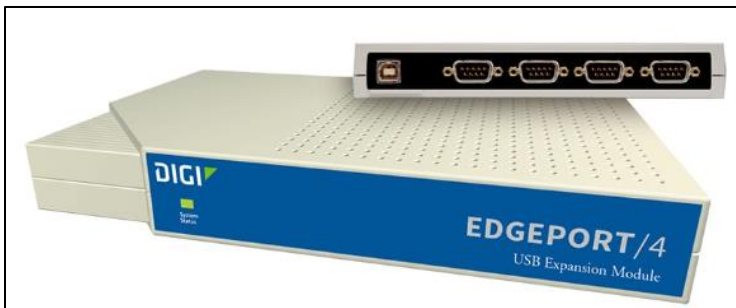
*NOTE: Unless otherwise specified references to problems people are having, solutions, and tips come from the N1MMLoggerPlus Group.io reflector. A search there for items described should turn up the original posts and replies.*

- Selected changes made since last newsletter. (NOTE: These often come from a user requesting a change or fix to a problem.)
  - Added {SwapContests5 & 6} (NE8P) (Coded by N1MM)
  - Upload QSOs logged during realtime contest upload (VA2WA, VE3KI) (Coded by N1MM)
  - Allow quoted strings in function keys & key maps. e.g. "/P" will append to the window & textbox with focus. (DL1ABR) (Coded by N1MM)
  - FTDX101D: Add a diversity (SYNC) work around when diversity is enabled and RIT is changed. (Coded by K3CT & N1MM)
  - FTDX101D: Add diversity (SYNC) commands to radio codes. Add other Diversity coding. (Coded by K3CT)
  - IC-7610: Correct the diversity/RIT radio firmware work around, did not work in SO2R. (N2IC) (Coded by K3CT)
- Everyone knows you can plug a foot switch into your radio for PTT. By plugging one into a COM port N1MM will let you use one for other things too. Here's a Configurer screen shot of a foot switch I have connected to COM 37. I also show the screen that comes up when you click the "Set" button for that COM port



“Normal” means the foot switch acts as everyone is used to... It simply keys the microphone. Note a COM port is assigned to the switch and the CW/Other box is checked. When doing SO2R I like to use three foot switches. One routes the microphone to Radio 1 and keys that radio, another switch controls Radio 2 mic audio, and the third quickly switches Entry Window focus back and forth between Radio 1 and Radio 2. Yeah, there are keys on the keyboard that change focus too, but I like to do it with foot switches. It’s more intuitive for me and has helped me minimize transmitting on the wrong radio when doing SO2R. (Those mistakes usually happen when I’m calling CQ on one band and trying to bust a pile up on the second radio.)

I picked up an Edgeport USB to Serial Converter box on eBay so I could use multiple COM port devices with N1MM. It has worked great. It has 8 com ports, but here’s a picture of a four port device.

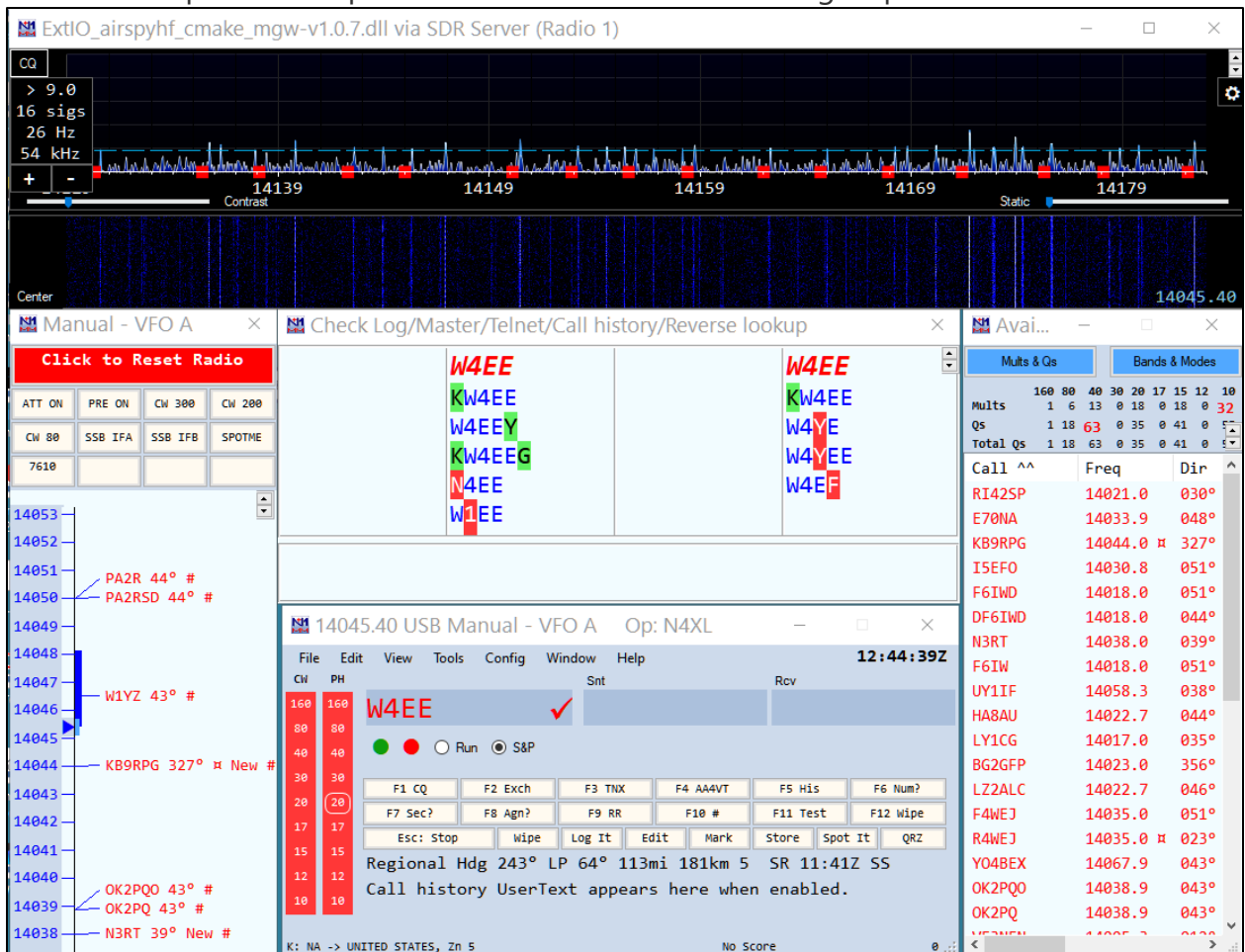


See the N1MM manual for the details, but here are things a foot switch can control:

- **None** – No footswitch on this serial port
- **ESM Enter** – Pressing Footswitch (DSR input transitions from a low to a high) will cause the same action as pressing Enter key in ESM mode
- **Typing Focus** – Pressing Footswitch (DSR input transitions from a low to a high) will switch typing focus
- **Switch Radios** – Pressing Footswitch will switch the radios (in SO2R)
- **Normal** – Pressing the footswitch will behave if it was connected to the PTT of the active radio transmitter
- **Various F keys** – Pressing Footswitch will cause the same action as pressing function key F1 thru F4, F11 and F12
- **Band lockout** – Implemented mostly for multi user stations to block a second signal on the same band/mode. It may be useful for single users as well. This mode should allow you to control PTT for both radios (in case of SO2R) in different modes (SSB/CW). The advantage of using it (compared to a foot switch directly connected to the radio) is that it stops AutoCQ and Dueling CQ’s.

- **First One Wins** – This selection is intended for multi stations that want to prevent other transmitters from beginning a transmission. The computer needs to have network mode
- **Esc** – This selection executes the Esc key
- You can change the font, size of font, colors used for call signs, backgrounds, and such by going to Config>Manage Skins, Colors and Fonts... I have found it useful to select a font having a slash zero to highlight when I accidentally hit the wrong key when trying to type an O or a Ø in a call .
- You can also change the size of text shown in many windows (such as the Band Map, Mult & Q, and Telnet windows) by clicking on the small up and down arrows found near the top of those windows.

- It's not an N1MM feature, but with so many different windows available it is easy to get distracted. You should put the windows you most use as close to being right in front of you and at eye level as possible. My entry window(s) is dead center near the bottom, just above the keyboard. The Band Map window is just to the left of that. I use the M&Q window a lot so it is immediately to the right of the Entry window. The Check Log is right above the Entry window so I can use the Super Check Partial calls it shows to help get call signs correct. And my Spectrum Window is directly above that. Those are the main things I constantly look at. Everything else of second or third level importance is placed further out from that core group.



(Note: If you're looking for deeper insight into how I set up N1MM be advised I am rearranging my station so the radio and N1MMSDRserver are not connected. Nor does it reflect my using SO2R, which I am returning to and why my station isn't configured correctly yet.)

## Upcoming Contests:

See the WA7BNM webpages <https://www.contestcalendar.com/contestcal.html>

## SFOTA Current Leaderboard:

Oct-16-2024

### Current Leaderboard

#### 2024 OVERALL STANDINGS

CALL	Contests	CW QSO'S	SSB QSO'S	DIGITAL QSO'S	RTTY QSO'S	TOTAL QSO'S
1) N4IQ	85	11908	2527	1224	4224	19881
2) WB4HRL	308	14703	1167	548	1524	17942
3) KE4EA	213	11570	616	8	3	12197
4) WN4AFP	93	8636	2784	0	0	11420
5) KZ3P	88	2531	4043	0	1933	8507
6) K3DNE	41	1448	4339	1086	0	6873
7) K2SX	28	6819	0	0	0	6819
8) K4QQG	53	0	4994	771	668	6433
9) N4XL	10	4178	1057	0	0	5235
10) K4FT	79	4745	166	0	0	4911
11) NU4E	7	2400	2151	59	0	4610
12) KG4IGC	17	614	891	0	2815	4320
13) KA2G	35	0	2498	616	0	3114
14) KD4S	61	1876	224	104	722	2926
15) N1UZ	14	333	0	830	1614	2777
16) AA5JF	7	1745	806	14	0	2565
17) N4QI	54	1785	355	0	397	2537
18) K7OM	18	553	0	0	1506	2059
19) NI7R	6	1568	88	0	0	1656
20) AA4SD	20	1635	0	0	0	1635
21) KY4ID	13	1185	62	0	377	1624
22) N1SUZ	28	0	1615	0	0	1615
23) WA4LDU	28	247	536	492	184	1459
24) N4VZ	13	0	433	595	326	1354
25) W1RPG	20	0	708	102	38	848
26) KS4YX	5	176	0	13	565	754
27) K4CU	8	321	171	1	218	711
28) WA2BCK	3	0	100	604	0	704
29) N2OG	7	253	294	0	0	547
30) WB5NHL	9	0	194	0	102	296
31) N4VGE	1	0	167	0	0	167
32) NE4EA	1	50	0	0	0	50

#### 2024 INDIVIDUAL MODE STANDINGS

CALL	CW QSO'S	CALL	SSB QSO'S	CALL	DIGITAL QSO'S	CALL	RTTY QSO'S
WB4HRL	14703	K4QQG	4994	N4IQ	1224	N4IQ	4224
N4IQ	11908	K3DNE	4339	K3DNE	1086	KG4IGC	2815
KE4EA	11570	KZ3P	4043	N1UZ	830	KZ3P	1933
WN4AFP	8636	WN4AFP	2784	K4QQG	771	N1UZ	1614
K2SX	6819	N4IQ	2527	KA2G	616	WB4HRL	1524
K4FT	4745	KA2G	2498	WA2BCK	604	K7OM	1506
N4XL	4178	NU4E	2151	N4VZ	595	KD4S	722
KZ3P	2531	N1SUZ	1615	WB4HRL	548	K4QQG	668
NU4E	2400	WB4HRL	1167	WA4LDU	492	KS4YX	565
KD4S	1876	N4XL	1057	KD4S	104	N4QI	397
N4QI	1785	KG4IGC	891	W1RPG	102	KY4ID	377
AA5JF	1745	AA5JF	806	NU4E	59	N4VZ	326
AA4SD	1635	W1RPG	708	AA5JF	14	K4CU	218
NI7R	1568	KE4EA	616	KS4YX	13	WA4LDU	184
K3DNE	1448	WA4LDU	536	KE4EA	8	WB5NHL	102
KY4ID	1185	N4VZ	433	K4CU	1	W1RPG	38
KG4IGC	614	N4QI	355			KE4EA	3
K7OM	553	N2OG	294				
N1UZ	333	KD4S	224				
K4CU	321	WB5NHL	194				
N2OG	253	K4CU	171				
WA4LDU	247	N4VGE	167				
KS4YX	176	K4FT	166				
NE4EA	50	WA2BCK	100				
		NI7R	88				
		KY4ID	62				

### 3830 Activity:

Contest	Call	Class	Pwr	Score
ARRL Sep VHF				
9/16/24	K3DNE	Single Op-All Modes	HP	10,857
9/16/24	KD4S	Single Op-All Modes	HP	153
9/18/24	WA4LDU	Single Op-All Modes	LP	4,000
9/16/24	WN4AFP	Single Op-All Modes	LP	35
AzQP				
10/13/24	K4FT	SOCW	LP	576
10/12/24	K4QQG	SOSSB	HP	25
10/13/24	KD4S	SOCW	HP	1,832
10/14/24	KZ3P	SOMixed	HP	1,112
10/13/24	N4QI	SOMixed	LP	152
10/14/24	WB4HRL	SOCW	HP	176
10/13/24	WN4AFP	SOCW	LP	670
CaQP				
10/7/24	K4CU	SO(A)	LP	1,656
10/8/24	K4FT	SO	LP	19,932
10/6/24	K4QQG	SO(A)	HP	6,232
10/6/24	KA2G	SO New-Contester	HP	5,320
10/7/24	KD4S	SO	HP	108
10/7/24	KE4EA	SO(A)	LP	11,466
10/6/24	KZ3P	SO(A)	HP	29,937
10/6/24	N4QI	SO	LP	3,836
10/12/24	WB4HRL	SO(A)	HP	168
10/6/24	WN4AFP	SO(A)	LP	21,854
CQ WW RTTY				
9/29/24	K4CU	SOAB	LP	20,185
9/30/24	K4QQG	SOAB	HP	14,812
9/30/24	K7OM	SOAB	HP	101,376
10/2/24	KG4IGC	SO(A)AB	LP	250,848
9/30/24	KZ3P	SOAB Classic	LP	328,878
9/29/24	N1UZ	SOAB	HP	156,468
9/30/24	N4QI	SOAB Classic	LP	58,989

Contest	Call	Class	Pwr	Score
IaQP				
9/22/24	K4FT	Out of State	LP	3,330
9/22/24	K4QQG	SO Fixed	HP	506
9/23/24	KD4S	SO Fixed	HP	840
9/29/24	KE4EA	Out of State	LP	216
9/23/24	KZ3P	SO Fixed	HP	3,825
9/22/24	N4QI	Out of State	LP	190
9/23/24	WB4HRL	SO Fixed	HP	672
9/22/24	WN4AFP	SO Fixed	LP	15,836
Makrothen RTTY				
10/13/24	K4CU	SO/Single Xcvr	LP	473,400
10/14/24	K7OM	SO/Single Xcvr	HP	795,236
10/13/24	KD4S	SO/Single Xcvr	HP	325,725
10/13/24	KG4IGC	SO/Single Xcvr	LP	1,140,196
10/14/24	KZ3P	SO/Single Xcvr	LP	138,478
10/13/24	N1UZ	MO/Single Xcvr	HP	666,638
	(@N1UZ)			
10/12/24	N4IQ	SO/Multi Xcvr	HP	1,243,834
MeQP				
9/29/24	AA4SD	Single Op	QRP	88
10/5/24	K4FT	Single Op	LP	56
9/30/24	K4QQG	Single Op	HP	16,800
NA Sprint RTTY September				
9/16/24	N4IQ	Single Op	HP	2,646
NHQP				
9/24/24	K4FT	Single Xmtr	LP	4
9/22/24	K4QQG	Single Xmtr	HP	18
9/30/24	KE4EA	Single Xmtr	LP	6
9/23/24	KZ3P	Single Xmtr	HP	105
9/22/24	N4QI	Single Xmtr	LP	40
9/23/24	WB4HRL	Single Xmtr	HP	8
9/22/24	WN4AFP	Single Xmtr	LP	120
NJQP				

Contest	Call	Class	Pwr	Score
9/22/24	K4FT	Single Op	LP	1,276
9/22/24	K4QQG	Single Op	HP	88
9/23/24	KD4S	Single Op	HP	616
9/29/24	KE4EA	Single Op	LP	144
9/23/24	KZ3P	Single Op	HP	792
9/22/24	N4QI	Single Op	LP	666
9/23/24	WB4HRL	Single Op	HP	280
9/22/24	WN4AFP	Single Op	LP	3,472
NvQP				
10/13/24	K4FT	SOCW	LP	27
10/14/24	KZ3P	SOMixed	HP	216
10/13/24	N4QI	SOCW	LP	27
10/14/24	WB4HRL	SOMixed	HP	10
10/13/24	WN4AFP	SOCW	LP	12
Oceania SSB				
10/7/24	KZ3P	SOAB	HP	10
PaQP				
10/13/24	K4FT	SOCW	LP	180
10/12/24	K4QQG	SOSSB	HP	36
10/13/24	KD4S	SOCW	HP	1,832
10/14/24	KZ3P	SOMixed	HP	22,040
10/13/24	N4QI	SOMixed	LP	3,039
10/14/24	WB4HRL	SOMixed	HP	5,047
10/13/24	WN4AFP	SOCW	LP	16,800
Salmon Run				
9/24/24	K4FT	SOCW	LP	2,234
9/22/24	K4QQG	SOSSB	HP	840
9/23/24	KA2G	SOSSB	HP	50
9/23/24	KD4S	SOCW	HP	1,652
9/30/24	KE4EA	SOMixed	LP	1,636
9/23/24	KZ3P	SOMixed	HP	5,995
9/23/24	N4QI	SOMixed	LP	423
9/23/24	WB4HRL	SOMixed	HP	2,552
9/22/24	WN4AFP	SOCW	LP	797
SDQP				
10/13/24	K4FT	SO FixedCW	LP	132



Contest	Call	Class	Pwr	Score
10/14/24	KZ3P	SO FixedMixed	HP	191
10/14/24	WB4HRL	SO FixedMixed	HP	115
10/13/24	WN4AFP	SO FixedMixed	LP	127
TxQP				
9/22/24	K4CU	SO CW	LP	972
9/24/24	K4FT	SO CW	LP	10,062
9/22/24	K4QQG	SO SSB	HP	1,056
9/23/24	KA2G	SO SSB	HP	32
9/23/24	KD4S	SO CW	HP	1,652
9/30/24	KE4EA	SO Mixed	LP	2,050
9/23/24	KZ3P	SO Mixed	HP	18,837
9/22/24	N4QI	SO Mixed	LP	1,660
9/23/24	WB4HRL	SO Mixed	HP	6,630
9/22/24	WN4AFP	SO Mixed	LP	20,584
URCDX RTTY				
10/5/24	KG4IGC	SOAB	LP	39,668
10/5/24	KZ3P	SOAB	LP	13,662
WAE SSB				
9/16/24	K4QQG	Single Op	HP	3,036
9/16/24	KZ3P	Single Op	LP	6,975
9/16/24	NU4E	Single Op	HP	282,434

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