TALES FROM THE SWAMP

May 2025

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

Contest Tips:

Contesting Do's & Don'ts

Compliments of the Florida Contest Group

For any contest entry:

- Read the rules BEFORE THE CONTEST! Not only will you be able to determine your entry category, you may also find out activity band segments, rules changes, etc.
- Determine if the contest rules allow for a power multiplier.
- If your goal is to "win" (section awards, etc.), look over previous results either in QST, CQ, 3830 archives on "contesting.com" or the event sponsor's website. Results from previous years, while not completely reliable (think different conditions, activity, etc.), can give direction to your choice of entry category, goals and planning.

- Establish a goal for your effort: Beat my buddy, beat my last year's score, work new ones, contribute max score for FCG, keep my butt in the chair for X number of hours or "just have some fun."
- Determine your best historical score for this contest, and post it in front of you as a goal to beat this time.
- Know your station's strengths and weaknesses. Spend more time on bands & modes that work well with your station.
- Know propagation, sunrise/sunset times, etc. Being at the right place at the right time will help your score.

We've used K2YWE's tips in past newsletters, but let's go over them again. Refreshing is good for experienced ops and newer ops can benefit from hearing them for the first time.

Best Practice **General Operating**	**Rationale**
• Assume a big dog attitude.	• If you act like a big dog, most will believe you. If they bite back painfully, you can find other turf.
• Maintain an "friendly sense of urgency" in your QSOs	• Chattiness will slow your rate and lose you contacts.
• Always work Dupes. Set your software accordingly	• You may *not* be in *their* log • It usually takes more time to rebuff than work.
• Enable and use the Bandmap feature of your logging software even if you are not Assisted. • The Bandmap allows you to enter stations yourself on the fly.	• If you need to check back later, the Bandmap will have the call sign and frequency noted for you • You'll waste less S&P time on waiting for station ID or on calling Dupes.
• In general, use K3ZO's "Rule of TWICE." • Modify "TWICE" to suit your station capabilities and contest circumstances: - If you can't get a station after calling him TWICE, move on. - If the station doesn't ID after transmitting TWICE, move on.	• Your time can be better spent increasing your rate. • A multiplier can quickly become worth less than the QSOs lost trying. • You can put his frequency into the Bandmap to check back later.
• Do not waste time repeatedly calling DX stations that have moderate signals when the band is otherwise quiet from their part of the world. • This is likely to happen when big guns are just "opening the band" or "keeping it open." • Try another time.	• Many stations running high power will be heard when propagation is poor, but will not hear you despite elaborate antennas. • Remember that 1.5kW vs. 100W is roughly the difference between S-7 and S-3. These are the guys that are S9 or more under better conditions.
• Try moving frequency a bit if you don't seem to be heard.	• Often receiver bandwidths in a crowded band are set very narrow.

Best Practice General Operating	Rationale
• Send only the missing or wrong part when correcting your call or exchange (the FILL). • For example, the response to K3? would be "ABC" (several times if necessary) not "K3ABC" since the K3 wasn't in question. • Similarly in SS if the query is for your Check, don't send the entire exchange over.	• The time you spend sending known information is wasted. • You may squander a clear interval or QSB peak on resending known information. • The time spent sending known information may be a missed opportunity for the Fill to be heard.
• Call CQ when the band is active if you are able to find a frequency and hold it.	• You will usually beat your S&P rate. • An exception is the start of the contest when everyone is "fresh meat" for you and your S&P rate can be very high.
• Call CQ when the bands are dead for the day or worked out near the end of the contest.	• That's when the stations that have been CQing will S&P for "fresh meat." .

Highlights From The Reflector:

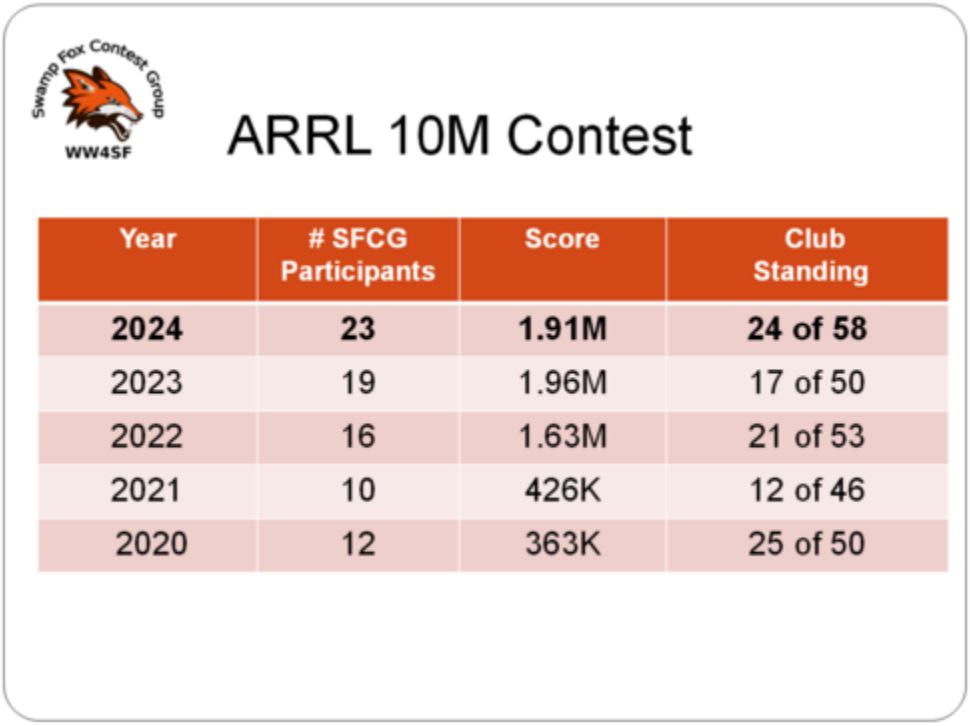
- Herschel KA2G is broadening his Ham horizons and looking for DXing tips.
- Alan W4ANT shared a link to the NCQP results. I wonder what it means when in their respective categories DX comes in first over US stations in all High Power categories by very significant margins? SOHP CW – DL3DXX won by 17K. SOHP Mixed – OM2VL by 17K. (This one is easier to understand) SOHP SSB - VE9CF by 4K (His score was 12,340). Is it just propagation?
- Dave WN4AFP received his certificate for the 2024 New England QSO Party 1st Place US SOLP. Fine operating Dave. No word yet on when the lobster dinner arrives.
- Bob KZ3P also did well and received his 1st Place SC certificate for SOHP. Bob is proving to be strong competition from SC. He also posted his 1st Place SC certificate (and 2nd Place outside the state) from the 2024 NHQP. Great effort Bob.
- Dennis K2SX was part of the 2024 CQWW DX contest VP5M team. The team had some great ops who you will recognize. K2SX, AC0W, AC6ZM, K4QPL, and KK4R. They received a plaque from the EA Contest Club for their effort in the Multi Op/Single Transmitter LP CW category. Great job Dennis!
- Bob KZ3P completed DXCC on 17 meters.
- Matt NU4E is working on improving his shack by adding a VHF/UHF antenna switch. His 6M EME antennas were lost and he's planning on using that tower for VHF and higher, possibly up to 23cm.
- A lot of activity in the big QP weekend of 7QP, INQP, DEQP and New England QP.

- Dave WN4AFP asked about the CQ WPX award. He now has 1914 confirmed prefixes and checked to see how much a CQ Award certificate would cost. It would be a whopping $217 using the LOTW award application process. Dave wrote “The original CQWPX fee for my 1914 would have been $12. ARRL is handling the CQWPX award. OUCH!!! Since CQA is dead, does the award really have any meaning?” He noted information from the Home Page of the CQWPX Contest on the internet’s Wayback Machine said “The WPX Contest is based on an award offered by CQ Magazine for working all prefixes.” With the plethora of prefixes popping up it seems doubtful anyone could now accomplish the original goal.
- Gary W4EEY has a new IC-7760 which he used in the CQWW WPX SSB contest. He posted a review of his initial impressions in post #30342.
- The contest team at W7WZ/AA4VT/KB4DX in Ft. Mill did very well in the CQWW WPX SSB contest. Dave AA4VT wrote, “We more than doubled our last CQ WPX Phone performance in 2023. Our team of operators excelled at running big pile-ups on the high-bands, taming the 40m "jungle" and grinding out contacts on 80m. A special thanks to John and his XYL Sharon for their wonderful hospitality during the weekend and an amazing celebration dinner after the contest.” They enjoyed the added competitive excitement the Online Contest Scoreboard brought to the effort.
- Log Check Reports were shared by Dave WN4AFP and Mark KD4D. Both were excellent. I add a bit more about this in the LCR article below. There were several follow on posts about LCR’s from other members. Some LCR’s were quite good. Phil NI7R had a Golden Log with his 311 contacts. Great job Phil!
- Ed K3DNE posted results from the ARRL 10m contest. Andy AA5JF wrote another expanded results article for that contest. If you haven’t read Andy’s comments it is worth taking the time to do so. He has some valuable insights into how to think about approaching contests when propagation is difficult. https://contests.arrl.org/ContestResults/2024/10M-2024-FinalFullResults.pdf. Ed noted how well SFCG members placed:

  We had 2 Division Winners:
  KS4YX #1 Roanoke Division in the SO(U) CW QRP category
  K3DNE #1 Roanoke Division (Division Record) in the SOHP (U) Phone category

  We had several #1 SC Winners:
  NV4T #1 SC SO PH LP
  NI7R #1 SC SO CW HP
  W7WZ #1 SC SO (U) Mixed HP
  WN4AFP #1 SC SO (U) Mixed LP
  K3DNE #1 SC SO (U) Phone HP
  KS4YX #1 SC SO (U) CW QRP

Ed wrote in a follow on post, “I forgot to look in the Limited Antenna Overlay Categories... In addition to NI7R #7 USA SO CW HP, K4FT #10 USA in the SO CW LP and K4QQG #5 USA SO (U) Phone HP in that sub-category. Anyone else?”



Year	# SFCG Participants	Score	Club Standing
2024	**23**	**1.91M**	**24 of 58**
2023	19	1.96M	17 of 50
2022	16	1.63M	21 of 53
2021	10	426K	12 of 46
2020	12	363K	25 of 50

Network Analyzer or Antenna Analyzer?

By Kevan N4XL

Why would anyone want an antenna analyzer now that those NanoVNA type network analyzers are cheap and available? Here are some comments from the nanovna-users re reflector. There are a couple more comments about the topic in the companion article that follows this one. For many commenters it is a no-brainer. Price seems to have overridden any other consideration. And having seen a couple small network analyzers in action I can understand why some feel that way. You can easily obtain basic information with one of those little gizmo’s. But I will also add the two times I have watched people use them they were somewhat unfamiliar with their device and seemed just a bit uncertain about trusting them. That is something I rarely see when someone

first handles an Antenna analyzer like a RigExpert or MFJ-259. Personally, I'm happy to stick with my RigExpert. But I do wonder what I'm missing.

Edward VE3VYT
Newbie here. I am interested in testing antennas for resonance and swr. 80m to 70cm. Both indoors and outdoors. I was thinking of buying an entry level antenna analyzer. Several helpful people suggested getting a nanovna instead as it was said to have a cheap price ($60ish) and extensive capabilities.
Roger (No call given)
I own several NanoVNA's, a RigExpert AA55-Zoom and a MFJ-259. They are listed according to ease of use.

If all you want to do is measure antennas and SWR up to 70 cm your best choice is a RigExpert product that goes to the maximum frequency that you are interested in. They are much easier to use than a NanoVNA (which has a much steeper learning curve), are more rugged and easier to read in sunlight. However they are much more expensive (3 to 4x) especially if you want to go up to 450 MHz.

The NanoVNA on the other hand has many more features and capability but takes a little effort to learn. It is also much lower cost. For what you want to do I suggest a NanoVNA-H4 from Amazon Canada. It has a 4" screen and for ten dollars more is much better option than the older 2.8" screen version. The -H4 is well supported in this group and the firmware is continually updated with new features. This one has good reviews. If you order it you can check it over to see if it is a genuine "Hugen" manufactured product and if not just return it.

Doug K8RFT
A few years ago, before the nanovna, I bought the MINI60 version of the Sark. It's very small, it sweeps the band you choose, shows the frequency of minimum SWR but you can also read each measurement of the sweep. Mine has the built-in bluetooth module, and works with my Android phone. And it IS readable in sunlight! They currently cost around $120, though. About the price of the nanovna-h4 or -F. It's in my Harbor Freight plastic "ammo box" case with the Nanos and an MFJ-207 analyzer. I am still glad to have it.

DiSlord (No call given)
... PS wireless communication increases measurement noise, especially WiFi

gwilson001@gmail.com (No call given)

Antenna analyzer is much easier to use and the best of the bunch for ease of use is the Comet CAA-500 MKII. Connect your antenna, turn it on, select the band/freq. and see your measurement on both a meter and a digital display. Rigexpert analyzers are also good but a pain with all the menus to wade through. The Comet is super simple and accurate. It beats the Rigexpert for ease of use. NanoVNA works as well but not so easy to use.
~ He added in another post:
The Comet CAA-500 MKII antenna analyzer is far easier to use for your stated purpose than the NanoVNA. Is a bit pricy but sooo much easier to use with no learning curve. If you have an SWR issue that you are trying to solve the Comet is the way to go in my opinion.

Clyde KC7BJE
The Comet is only good to 500Mhz. The NanoVNA H and H4 will go to 1300Mhz. Also I have used both and find the NanoVNA 's much more useful than just an analyzer. As far as ease of use, the NanoVNA is just as easy to use as a swr meter as the Comet. You can not only see a particular frequency but also a range of frequencies at one time for the antenna being tested.
However each has it uses and which one a person likes the best, that is the one for them. All three of my analyzers set in cases and my NanoVNA H4 is either on my bench or in my pocket for mobile use.
I wouldn't leave home without it.
Editor Note: My RigExpert allows seeing 3 (or 5?) antennas simultaneously making it much easier to view the effect of trimming a multiband antenna or adjusting elements on a trapped yagi.

Dennis AF7XT
The nano vna does have a learning curve, but what doesn't?
If you're an appliance user, go ahead and get a dedicated tool.
If however you want to actually learn something it's the nano all day.

I once had a complex antenna problem that could only have been covered by a Pi-L type tuner.
Without going into detail, the nano showed me that other tuner types would not be nearly as efficient let alone work.
Later I took the time to investigate why this was true rather than trying a number of tuners. This was the education part.

People will tell you to use what you're comfortable with. Learning something new isn't always comfortable.

Dave W0LEV
Yes, if one has never used a vector network analyzer (VNA) or even a scalar analyzer, the learning curve is steep. But you will learn a whole bunch that you can carry forward to other projects. The NANOVNAs are so much more capable than a straight "antenna analyzer". And.....the NANOs are considerably less expensive than any of the other antenna analyzers and they do so much more.

Clearly, I'd recommend the NANOVNA!

Mike VK1MC
Because NanoVNA's are so inexpensive, I think they are worth buying just to marvel over how much technology you can now get for so little money, and to start to learn about what a VNA can do. Things like Smith Charts can be at least slightly demystified if you have a VNA to play with. The Internet at large (and this groups.io group in particular) contains an enormous quantity of information to help us all learn to use a NanoVNA.

I *strongly* recommend connecting your NanoVNA to a computer running the nanovna-saver software (https://github.com/NanoVNA-Saver/nanovna-saver) to get a much better (bigger!) user interface and enhanced functionality.

Although I love my RigExpert and its ease of use, it is because the last two comments reinforce my thoughts on why I want to have a VNA in my arsenal that I will likely end up with one. The next article has a couple more comments and suggestions of where to purchase.

Are Those Cheap Spectrum Analyzers Any Good?

By Kevan N4XL

That was the question asked on the Amateur-Repairs reflector. Answers were generally positive. Dave W0LEV wrote, “Yes, they are surprisingly good, especially considering the price! The phase noise is considerably better than my Rigol DSA-815 but not as good as the HP analyzers I have, even the HP plug-ins.” Andrew N5ASE wrote, “Also the NanoVNAs sport something like a 60-65dB dynamic range, not the 80-85dB of a Rohde and Schwarz analyzer, but the NanoVNA will cover 99% of your ham radio needs (and will cost three thousand times less).” Even the criticism was muted. Mikey (no call given)

said, “Yes, and no. The sweep will give a hobbiest what he needs to know, but you won't be able to get it cal certificated.”

The one thing consistently brought up was a recommendation to avoid clones. Dave W0LEV continued on from his comment above with, “I do not recommend buying from Amazon, AliExpress, or others from China. You are highly likely to get a clone - knockoff. The clones do not perform per the designers specifications. Buy ONLY from listed suppliers.”

There is a TinySA.org Wiki page with information on how to avoid clones. It has the following information:

Safe places to buy an original tinySA

- **Zeenko store on AliExpress**. This is the factory store, guaranteed to deliver genuine tinySA. Other sellers on aliexpress may sell bad clones. To be sure you get a good product only buy from Zeenko store on AliExpress.
- **R&L Electronics** in the USA. When the tinySA is listed as "out of stock" R&L can still take you order and only charge your credit card when the product is available again (which should be in a few weeks).
- **Eleshop** in Europe
- **Switch Science** in Japan
- **Taobao** in China
- **1688** in China
- **Mirfield Electronics** in the UK.
- **astroradio** in SPAIN
- **Neven** in Central and Eastern Europe
- **Kami teknoloji** in Turkey
- Aursinc on Amazon
- SeeSii store on Amazon

If the tinySA is listed as Pre-order it means there is currently no stock but a next batch of tinySA is being manufactured and as soon as these are available (usually within one month) the pre-ordered products will be shipped in order sequence.

Where to buy the tinySA Ultra or Ultra+

- **Zeenko store on AliExpress**. This is the factory store. Select a **Color** to select which Ultra model
- **Eleshop** in Europe
- **R&L Electronics** in the USA. When the tinySA is listed as "out of stock" R&L can still take you order and only charge your credit card when the product is available again (which should be in a few weeks).
- **Switch Science** in Japan
- **Mirfield Electronics** in the UK.

- **astroradio** in SPAIN
- **Neven** in Central and Eastern Europe
- **Kami teknoloji** in Turkey
- Aursinc on Amazon
- SeeSii store on Amazon

Other stores will be added in the future.

Be aware of bad performing illegal copy products.

Much effort went into the tinySA to ensure accurate measurements over the entire frequency range. This is however only possible when using the original high quality components. Clones may use lower quality components with incorrect reverse engineered component values and because of this the clones can have a worse performance. Unless you can compare the tinySA to another good spectrum analyzer you may not be able to detect the bad performance of a clone.

The following sellers have sold at least one illegal clone:

- Navplus on eBay
- ahken-81 on eBay
- ideafoxtrot on eBay
- KKmoon on Amazon
- Shop910459103 on AliExpress
- ahken-81 on AliExpress
- Feature Tools on AliExpress
- Tool-box Store on AliExpress
- Good Home-Accessories for you Store on AliExpress
- Tools & Instruments Factory Store on AliExpress
- Tools & Meter Store on AliExpress
- Aisanray Tech Officia Store on AliExpress
- Aisanray Radio Club Store on AliExpress
- tomtop.com
- Banggood has removed almost all references to the tinySA trademark and is now only selling clones.

How to recognize a cloned tinySA

The cloners copied everything, included packaging, trademarked name and logo. We are able to recognize some clones but it's best to buy from one of the safe places to buy instead of asking us to check if you bought a clone.

Comments on LCR and UBN Reports

By Kevan N4XL

(Note: I wrote this after the first two LCR report posts on our reflector. Afterwards, there were several more posts about LCR's that almost made me delete this article. But for those who didn't follow that thread I decided to leave it in.)

Log Check Reports (LCR) and Unique Busted Not-In-Log (UBN) reports are sometimes overlooked as being a great tool for improving your scores. If you're not using them yet, take the time to seek them out (Not all are emailed to you). It took me a few contesting years to realize just how significantly logging errors can affect your scores. Reducing errors is one of those "low hanging fruit" things that doesn't cost any money to give a significant score improvement.

Dave WN4AFP and Mark KD4D shared theirs from the 2025 CQ 160 CW contest. Both are very very good and they should be proud. Dave's LCR reported a Golden Log with a 0.0% error rate. I'd be very happy with that. Not to take anything away from his achievement, I will note that his log had a total of 9 contacts in 21 minutes. I know Dave works hard to reduce errors. He understands the point I am about to say about Mark's LCR so I don't think he will take offense. I express the point here only to emphasize LCR's for logs with low Q counts are not (in my opinion) as significant as those with many Q's. Meaning don't pat yourself on the back until you have a decent LCR/UBN report from a contest you put a major effort into. With his 0.4% error rate Mark didn't do as well as Dave. But Mark had that low error rate after logging 798 Q's before log checking found those errors. That is an excellent and extremely difficult to achieve accomplishment.

10 years into contesting I discovered LCR/UBN reports. Typical error rates were in the 7 to 10 percent range. For those not understanding the significance of that, it means I was losing thousands and thousands of points because inaccurate QSO's were being removed from my submitted score. I remember once seeing a score reduction around 170,000 which caused me to drop a couple spots in the final standings. My chosen competition whupped me because of that. I began to pay attention to errors. I learned many top scorers have an error rate that is 1% or less. I've only achieved that a few times. 1 to 2.5% is common for me now with CW errors being higher than SSB.

Achieving low error rates is a balancing act for most of us. Yes, lower error rates improve your score. But focusing too much on accuracy slows you down resulting in lower scores. Few of us can maintain the concentration to be consistently accurate at high

rates over long periods of time. That is why I find Mark's LCR to be more significant than Dave's.

Try it in your next contest. Beat it into your head that accuracy is critical and insist (to yourself) that you won't log anything unless you know you have it right. But also beat it into your head that rate is critical too. Don't spend too much time trying to complete an accurate Q that your rate suffers. THAT is what K2ZO's 'Rule of Two's' is about. He said to call a station twice, or if Running try to get his information twice. If you can't get through after two tries then move on. He also said to modify "twice" based on your station's capabilities. As a Little Pistol low power station I usually try three times before moving on. K2ZO also said If the station doesn't ID after transmitting TWICE, move on; but that's another topic.

My scores took a step improvement after focusing on accuracy and adopting the Rule of Two's approach to maintaining rate.

Observations by the Editor:

- Dave WN4AFP is known beyond the SFCG for being a CW speed demon. Doug KR2Q wrote during a thread about high speed CW ops during the CWT tests on the CWOPS reflector, "However, the fastest guy who ever calls me is WN4AFP who has told me that he calls me at 50 wpm. On one occasion, he told me 53 wpm."
- A South Carolina hands free driving bill has passed, or is very likely to be passed. I read that Ham Radio operation is included as an exception. Just remember to be safe when operating. A couple times I have caught myself looking at the VHF/UHF rig screen a couple seconds too long and nearly running off the road. Those instances have helped me place more focus on avoiding that in the future. Now I pull over when operating the radio is more complicated than a channel change or adjusting the volume/squelch.
- W6PQL has some interesting reading about using inexpensive relays for antenna switching. https://www.w6pql.com/using_inexpensive_relays.htm

- Jim K9DU had a problem where his TS590S wouldn't transmit unless it had been on for 20 or 30 minutes. I recently obtained an IC-821H with a very weak receive. Suggested "repairs" for each were easy. My Icom is working fine now.
    - Jim K9DU
      My TS-590s won't transmit unless it has been turned on for 20-30 minutes. When first powered up, the red transmit light will illuminate when I attempt to xmit, but there is zero power out. But 20-30 min later it's normal—100 w out to dummy load or matched antenna. I've done a full reset and firmware update to no avail. Any idea what's going on?
    - Kriss KA1GJU
      Sounds like one of the RF jumpers needs the connector ends reset/excercised. They use a small diameter coax with a push in connector that some have found to be not seated properly or soldered properly. Once the circuit boards heat up, the connection is good. As I recall, there's a history of the RX chain going deaf with the TS590S. I tried using the search feature on the web GUI, but need to have the proper key search words

      (Editor: If you're not sure what "RF jumpers" look like, in a second post Kriss provided additional information)
      https://groups.io/g/TS-590/message/36787

      Go to the photos in the link of the post:
      https://groups.io/g/TS-590/message/31774

      The grey cables are RF, on the underside of right. Remove cover when cold and wiggle while TXing into a dummy load and RF power meter. You didn't mention what mode you were attempting to TX, but from some of the posts, FM will be fine but other modes, not so much.

  The IC-821 had a receive problem, but pulling the jumpers one at a time and cleaning each connection with DeoxIT restored full operation.

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 the last newsletter. (NOTE: These often come from a user requesting a change or fix to a problem.)
    - Changes to Mult & Q Window on 4/24/25 V89
        - Changed behavior when clicking on summary table items. It no longer QSYs the radio, just changes the band selection dialog. It does not change to time sort anymore.
        - Clicking on the summary table will select that single band to be shown, Shift+click will add that band to the display.
        - To confirm the click, the label in the summary table that you clicked on will change its background to your mult color.
        - Added code to further prevent updating of the mult list while moving the mouse. Should be easier to click on a spot. If you keep moving the mouse, it will never update. If you move the mouse out of the window, it updates immediately.
        - Fixed system sound when pressing enter from within AMQ
        - Incorporated band saving bug fix in this weeks build.
        - Fixed a couple of RTEs
        - Specialized time sort descending changes (new since V88).by N2IC)
- I'm sorry to say I procrastinated on this part for this month's edition. Taking a vacation and do not have time to dig deeper.
- While researching how best to incorporate my new Stream Deck into the station I discovered several new and updated sections in the N1MM user manual. When first learning N1MM I made a habit of just randomly picking a topic from the Table of Contents and reviewing that section. It didn't matter if I was interested or not. Doing so brought many N1MM subtleties to my attention. It's been a couple years since I last did that. Guess it's time to start again. I recommend it to all N1MM users. You may find solutions to problems you didn't even know you had.

Upcoming Contests:

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

SFOTA Current Leaderboard:

May-17-2025

Current Leaderboard

2025 OVERALL STANDINGS

	CALL	Contests	CW QSO'S	SSB QSO'S	DIGITAL QSO'S	RTTY QSO'S	TOTAL QSO'S
1)	WB4HRL	169	8519	456	0	520	9495
2)	WN4AFP	60	4561	2802	43	0	7406
3)	KE4EA	98	5772	1187	15	0	6974
4)	K3DNE	22	789	5514	98	0	6401
5)	N4IQ	33	4679	476	11	0	5166
6)	K4FT	54	3744	203	0	136	4083
7)	K4QQG	27	0	3132	1	802	3935
8)	KZ3P	32	1150	1537	18	414	3119
9)	KD4S	45	1916	196	16	461	2589
10)	W4ANT	47	1043	1512	2	0	2557
11)	KG4IGC	5	570	438	0	1085	2093
12)	K7OM	12	449	0	0	1313	1762
13)	AA5JF	3	1394	352	0	0	1746
14)	KB1QU	4	612	565	0	376	1553
15)	N4XL	15	738	696	0	0	1434
16)	KS4YX	20	358	40	221	580	1199
17)	N4QI	34	786	179	0	67	1032
18)	KA2G	18	0	1016	0	0	1016
19)	WA4LDU	24	156	265	168	338	927
20)	KK4MRG	18	0	846	18	27	891
21)	W1RPG	10	0	706	0	6	712
22)	NV4T	15	0	684	2	0	686
23)	NI7R	7	600	0	0	0	600
24)	K2SX	10	362	0	0	0	362
25)	AA4SD	5	325	0	0	0	325
26)	N1UZ	3	88	0	0	215	303
27)	KS4VJ	4	0	42	49	0	91

2025 INDIVIDUAL MODE STANDINGS

CALL	CW QSO'S
WB4HRL	8519
KE4EA	5772
N4IQ	4679
WN4AFP	4561
K4FT	3744
KD4S	1916
AA5JF	1394
KZ3P	1150
W4ANT	1043
K3DNE	789
N4QI	786
N4XL	738
KB1QU	612
NI7R	600
KG4IGC	570
K7OM	449
K2SX	362
KS4YX	358
AA4SD	325
WA4LDU	156
N1UZ	88

CALL	SSB QSO'S
K3DNE	5514
K4QQG	3132
WN4AFP	2802
KZ3P	1537
W4ANT	1512
KE4EA	1187
KA2G	1016
KK4MRG	846
W1RPG	706
N4XL	696
NV4T	684
KB1QU	565
N4IQ	476
WB4HRL	456
KG4IGC	438
AA5JF	352
WA4LDU	265
K4FT	203
KD4S	196
N4QI	179
KS4VJ	42
KS4YX	40

CALL	DIGITAL QSO'S
KS4YX	221
WA4LDU	168
K3DNE	98
KS4VJ	49
WN4AFP	43
KK4MRG	18
KZ3P	18
KD4S	16
KE4EA	15
N4IQ	11
W4ANT	2
NV4T	2
K4QQG	1

CALL	RTTY QSO'S
K7OM	1313
KG4IGC	1085
K4QQG	802
KS4YX	580
WB4HRL	520
KD4S	461
KZ3P	414
KB1QU	376
WA4LDU	338
N1UZ	215
K4FT	136
N4QI	67
KK4MRG	27
W1RPG	6

3830 Activity:

Contest	Call	Class	Pwr	Score
432SprngSprnt				
5/2/25	WA4LDU	Single Op	LP	54
50SprngSprnt				
5/11/25	K3DNE	Single Op	HP	252
7QP				
5/5/25	AA5JF	SOMixed	HP	36,936
5/5/25	WN4AFP	SOMixed	LP	17,864
5/5/25	N4IQ	SOMixed	HP	13,464
5/5/25	K4FT	SOCW	LP	13,395
5/5/25	KZ3P	SOMixed	HP	5,814
5/5/25	KB1QU	SOMixed	HP	4,770
5/4/25	N2ZZ	SOMixed	HP	4,309
5/5/25	WB4HRL	SOCW	LP	2,652
5/8/25	KE4EA	SOMixed	LP	2,280
5/4/25	KD4S	SOCW	HP	1,680
5/8/25	W1RPG	SOSSB	LP	532
5/5/25	N4XL	SOMixed	LP	517
5/4/25	N4QI	SOCW	LP	504
5/5/25	K4QQG	SOSSB	HP	260
5/7/25	NI7R	SOCW	LP	75
5/5/25	W4ANT	SOCW	LP	27
CPQP				
5/11/25	N4IQ	Single Op	HP	180
5/11/25	W4ANT	Single Op	HP	140
5/10/25	KZ3P	Single Op	HP	108
5/11/25	WB4HRL	Single Op	LP	72
5/10/25	KA2G	Single Op	HP	64
5/14/25	WN4AFP	Single Op	LP	63
5/11/25	KB1QU	Single Op	HP	63
5/14/25	K4FT	Single Op	LP	30
5/11/25	K4QQG	Single Op	HP	30
5/11/25	AA5JF	Single Op	HP	16
5/15/25	W1RPG	Single Op	LP	16
5/10/25	K3DNE	Single Op	HP	4
CQMM DX				
4/20/25	N4QI	SOAB	LP	8,160
4/20/25	K2SX	SOAB	LP	3,618

Contest	Call	Class	Pwr	Score
DeQP				
5/5/25	K4FT	Single Op	LP	960
5/5/25	WN4AFP	Single Op	LP	960
5/5/25	KZ3P	Single Op	HP	800
5/8/25	KE4EA	Single Op	LP	470
5/5/25	N4XL	Single Op	LP	360
5/5/25	N2ZZ	Single Op	HP	300
5/5/25	N4QI	Single Op	LP	210
5/5/25	AA5JF	Single Op	HP	140
5/5/25	N4IQ	Single Op	HP	120
5/5/25	K4QQG	Single Op	HP	40
5/5/25	KB1QU	Single Op	HP	20
5/5/25	W4ANT	Single Op	LP	20
5/5/25	WB4HRL	Single Op	LP	12
FlQP				
4/28/25	WN4AFP	SOAB(A)Mixed	LP	129,792
4/27/25	N4IQ	SOAB(A)Mixed	HP	25,949
4/28/25	WB4HRL	SOAB(A)CW	LP	22,800
4/27/25	KZ3P	SOAB(A)Mixed	LP	19,456
4/29/25	K4FT	SOABCW	LP	18,900
4/27/25	AA5JF	SOAB(A)CW	HP	15,228
4/29/25	KE4EA	SOAB(A)Mixed	LP	15,200
4/28/25	KD4S	SOAB(A)Mixed	HP	11,648
4/27/25	N4QI	SOABMixed	LP	9,880
4/27/25	N2ZZ	SOABMixed	HP	2,485
4/28/25	W4ANT	SOAB(A)SSB	LP	2,368
4/27/25	NV4T	SOABSSB	LP	2,108
4/28/25	KB1QU	SOABMixed	HP	1,664
4/28/25	KA2G	SOAB(A)SSB	HP	660
4/30/25	K3DNE	SOAB(A)Mixed	HP	627
4/28/25	N4XL	SOAB(A)Mixed	LP	340
4/27/25	W1MRC	SOABSSB	LP	208
4/26/25	K4QQG	SOABSSB	HP	42
GaQP				
4/17/25	KE4EA	Single OpMixed	LP	1,242
InQP				
5/4/25	KD4S	Single Op	HP	8,866
5/5/25	WN4AFP	Single Op	LP	2,108

Contest	Call	Class	Pwr	Score
5/5/25	K4FT	Single Op	LP	1,102
5/4/25	NV4T	Single Op	LP	550
5/5/25	AA5JF	Single Op	HP	540
5/5/25	WB4HRL	Single Op	LP	504
5/5/25	KB1QU	Single Op	HP	336
5/4/25	N2ZZ	Single Op	HP	336
5/5/25	N4IQ	Single Op	HP	288
5/8/25	KE4EA	Single Op	LP	180
5/4/25	N4QI	Single Op	LP	112
5/8/25	W1RPG	Single Op	LP	81
5/7/25	NI7R	Single Op	LP	50
5/5/25	K4QQG	Single Op	HP	42
5/5/25	N4XL	Single Op	LP	28
5/5/25	W4ANT	Single Op	LP	9
MiQP				
4/20/25	N4XL	Single Op	LP	15,252
4/21/25	N4IQ	Single Op	HP	3,885
4/20/25	AA5JF	Single Op	HP	3,234
4/20/25	KZ3P	Single Op	HP	2,752
4/20/25	K4FT	Single Op	LP	2,200
4/21/25	WN4AFP	Single Op	LP	2,117
4/21/25	WB4HRL	Single Op	LP	1,050
4/20/25	KD4S	Single Op	HP	648
4/22/25	KE4EA	Single Op	LP	495
4/20/25	K4QQG	Single Op	HP	192
4/20/25	KA2G	Single Op	HP	170
4/20/25	N4QI	Single Op	LP	104
4/21/25	NI7R	Single Op	LP	96
4/20/25	NV4T	Single Op	LP	90
4/20/25	N2ZZ	Single Op	HP	24
4/21/25	W4ANT	Single Op	LP	9
NDQP				
4/17/25	KE4EA	Out of State	LP	6
NeQP				
4/25/25	AA5JF	Fixed	HP	7,790
4/21/25	WN4AFP	Fixed	LP	7,141
4/20/25	KZ3P	Fixed	HP	2,652
4/21/25	N4IQ	Out of State	HP	1,218
4/20/25	N2ZZ	Fixed	HP	817

Contest	Call	Class	Pwr	Score
4/20/25	K4FT	Out of State	LP	680
4/20/25	KA2G	Out of State	HP	299
4/21/25	WB4HRL	Fixed	LP	180
4/20/25	N4QI	Out of State	LP	156
4/20/25	K4QQG	Fixed	HP	54
4/22/25	N4XL	Out of State	LP	36
4/22/25	KE4EA	Out of State	LP	20
4/20/25	KB1QU	Fixed	HP	12
4/21/25	W4ANT	Out of State	LP	12
NewEngQP				
5/5/25	WN4AFP	Single Op	LP	28,396
5/5/25	K4FT	Single Op	LP	16,430
5/5/25	N4IQ	Single Op	HP	11,730
5/5/25	KZ3P	Single Op	HP	9,216
5/5/25	WB4HRL	Single Op	LP	6,666
5/5/25	N2ZZ	Single Op	HP	4,686
5/8/25	KE4EA	Single Op	LP	4,284
5/5/25	AA5JF	Single Op	HP	3,648
5/4/25	W8CS	Single Op	LP	3,538
5/5/25	N4QI	Single Op	LP	3,007
5/5/25	KB1QU	Single Op	HP	1,716
5/8/25	W1RPG	Single Op	LP	1,612
5/5/25	K4QQG	Single Op	HP	1,392
5/5/25	NV4T	Single Op	LP	884
5/7/25	NI7R	Single Op	LP	884
5/4/25	KD4S	Single Op	HP	242
5/5/25	N4XL	Single Op	LP	84
5/5/25	W4ANT	Single Op	LP	21
5/10/25	WA4LDU	Single Op	LP	4
NMQP				
4/17/25	KE4EA	Single Op	LP	256
OnQP				
4/21/25	N4IQ	SO Mixed	HP	6,696
4/20/25	K4FT	SO CW	LP	5,530
4/21/25	WN4AFP	SO Mixed	LP	2,394
4/21/25	AA5JF	SO CW	HP	1,720
4/20/25	KZ3P	SO Mixed	HP	1,387
4/21/25	WB4HRL	SO Mixed	LP	1,216
4/22/25	N4XL	SO Mixed	LP	1,083

Contest	Call	Class	Pwr	Score
4/20/25	KA2G	SO SSB	HP	504
4/20/25	N4QI	SO Mixed	LP	280
4/22/25	KE4EA	SO Mixed	LP	276
4/20/25	K4QQG	SO SSB	HP	200
4/20/25	KB1QU	SO Mixed	HP	162
4/21/25	NI7R	SO CW	LP	80
4/20/25	N2ZZ	SO Mixed	HP	32
4/21/25	W4ANT	SO SSB	LP	4
QCQP				
4/21/25	N4IQ	SO Mixed	HP	346
4/20/25	KZ3P	SO Mixed	HP	162
4/20/25	KA2G	SO SSB	HP	117
4/21/25	WN4AFP	SO Mixed	LP	84
4/20/25	KB1QU	SO Mixed	HP	60
4/20/25	K4FT	SO Mixed	LP	45
4/21/25	WB4HRL	SO Mixed	LP	40
4/20/25	N4QI	SO Mixed	LP	28
4/20/25	AA5JF	SO Mixed	HP	28
4/20/25	NV4T	SO SSB	LP	20
4/20/25	K4QQG	SO SSB	HP	12
4/21/25	W4ANT	SO SSB	LP	4
SPDX RTTY				
4/27/25	K7OM	SOAB	HP	201,294
UK/EI DX CW				
4/27/25	N4QI	SO12 1-Element Ant	LP	32
Volta RTTY				
5/11/25	K7OM	SOAB	HP	834,768
5/11/25	KD4S	SOAB	HP	162,792

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