

An Introduction to Contesting

Presented by Jamie Hall WB4YDL

May 23, 2024

Reasons to Contest

- Improve skills in the operation of your station
 - Useful in other aspects of amateur radio e.g. emergency communications
- Earn various operating awards - DXCC, WAS, VUCC
- Learn more about propagation, antenna theory, receiver performance
 - Capabilities and limitations of your station
- To have FUN !

Types of Contesters

- Competitors - top 5% of the world
 - Dedicate tremendous resources in time, money, personnel
 - One goal - to win it all !
 - Set records
- Enthusiasts
 - Enjoy the challenge
 - Strive to improve scores each year
 - Use available time
- Participants - by far the most numerous on the band for any given contest
 - Desire to just make contacts
 - Chase awards
 - Improve skills
 - Have FUN !

Types of Contests

- Geographic - international, national (W/VE), regional (state)
- Modes - CW, Phone (SSB), RTTY, digital modes
 - Can be mixed mode - example : CW/SSB for ARRL 10M contest
- Bands - HF, VHF/UHF
 - Never WARC bands (12M, 17M, 30M)
 - HF contest may or may not include 160M - example : RTTY contests never utilize 160M
 - Can choose single band in a multi-band contest - example : 6M only in CQWW VHF
- Power - High, Low, QRP
 - There are no high power only contests
 - Many contests limited to low power (100 - 150 watts)
 - Many specialty contests are QRP (<5 watts) - example : Run for the Bacon
- Many contests allow Club and Team (within club) competition

Station Design

- Antennas are always #1 - put most resources on these
 - You can never have enough antennas
 - "Two antennas are better than one"
- Use a comfortable, supportive chair - not too cushiony
- Keep your radio, keyboard, and monitor in front of you and within easy reach
- Build your station to last
- Automate everything you can

Choose the Game

- Know the rules of the contest - they are all different
- WA7BNM Contest Calendar - <https://www.contestcalendar.com/index.html>
- Most common entry is single operator, all band (SOAB)
- Know your options - power level, any available "overlay", such as Rookie category in CQ WPX
- Assisted or Non-assisted ?
 - Assisted gives you telnet spots (DX Cluster in contest mode) to fill your band map.
 - Understand the rules for this in the particular contest.
- Have a goal in mind
 - Checking out a new 80M antenna ? --> SO80M
 - Need zone 18 on 10M ? --> SO10M assisted
 - Have FUN !

Skill Development

- Theme: It's always you against the clock
- There are no shortcuts to experience
 - The only way to get it is time spent in the chair (BIC)
 - Experience, knowledge, desire --> habit
- Initial primary skill : call sign identification
 - Must try to get it the first time
- Exchange information has a sequence and rhythm
- Learn to type !

Running vs. Search & Pounce

- Someone has to solicit a call by calling CQ --> Running
- Someone has to answer --> Search & Pounce
- Always strive to Run (call CQ)
 - Most beginners start by S&P'ing
 - Get up the nerve to call CQ
 - Position yourself to be heard
 - Think LOUD !
 - Most important thing - Be Accurate !!

Short intervals between CQ's - makes missing you on tuning less likely

- Be careful with key down modes like RTTY - can generate a LOT of heat
- Search & Pounce useful
 - To search for multipliers
 - To search for new run frequency
- Software will allow you to 'mark' station on band map so as to return later when it may be easier to crack the pileup.

Human Sleep

- Human sleep cycle is 90 minutes
- Sleep intervals should be multiples of 90 minutes during a contest
- Do not change your normal sleep pattern prior to a contest
- Get plenty of rest prior to a contest

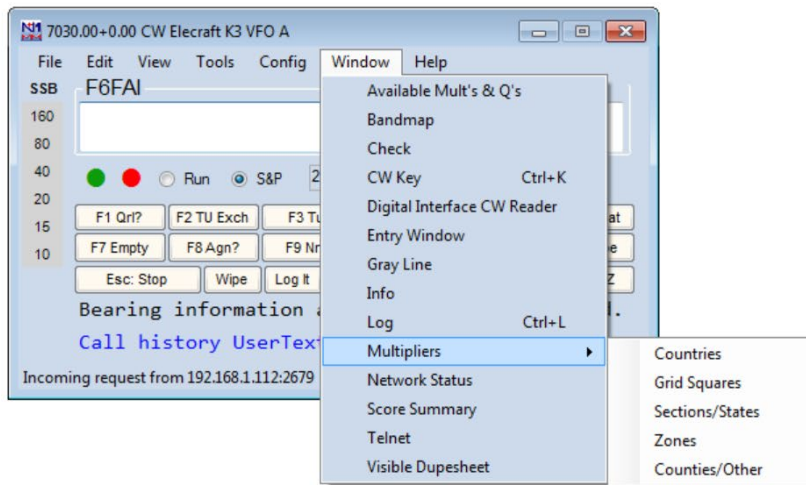
Remember Your Goal !

- Fatigue will make you want to quit
- Use your time wisely
- Keep pushing
- Everyone is experiencing the same conditions - don't get frustrated !
- The next QSO could make all the difference !

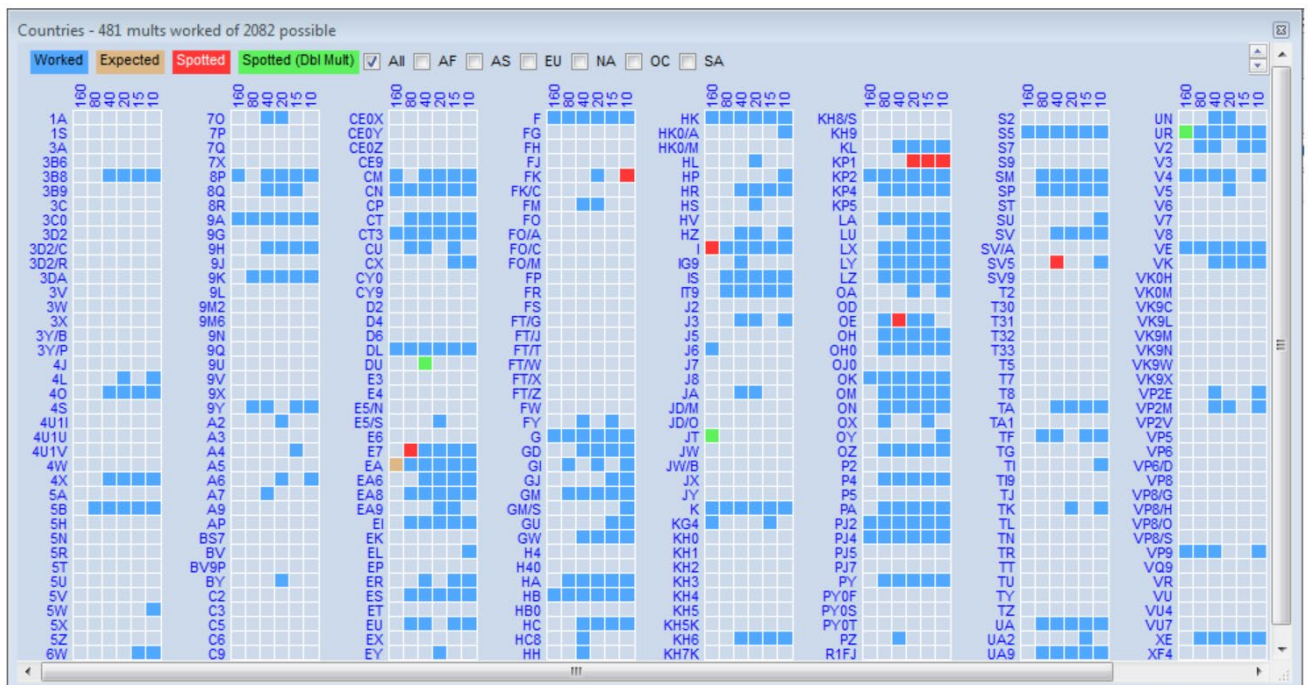
And Remember ...

Contesting is a Game !

N1MM Multiplier Window

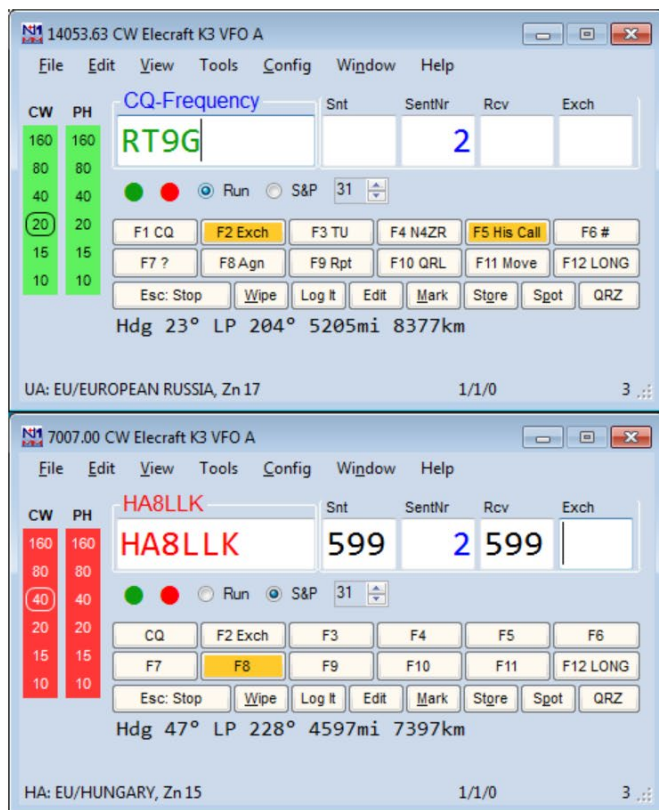


Choosing Countries, in a CQWW log, displays a chart like this:



N1MM Entry Window

The Entry Window examples below reflect a typical setup: VFO-A is now assigned to running, and VFO(B) is assigned to S&P.

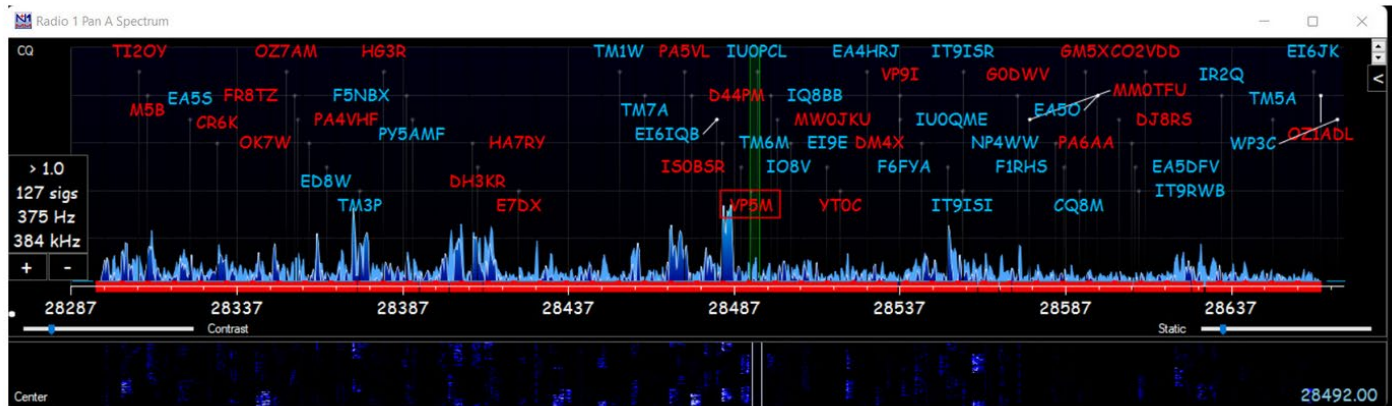


Call-sign Colors

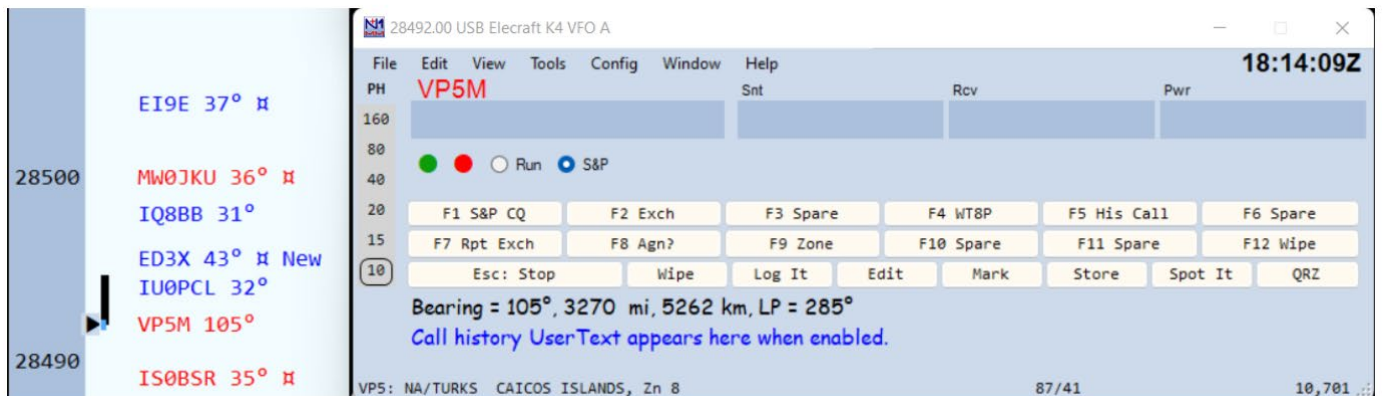
There are two places where a call-sign can be shown in the Entry window , in the Call-sign field and in the Call-frame. The default colors for the call-sign text are consistent with other places throughout (such as the Band Panel and Available Mults and Qs windows), and are described below:

Red	Single Multiplier Example: CQWW – qso is either zone or country multiplier (one multipliers)
Green	Double or better Multiplier Example: CQWW – qso is a zone and a country multiplier (two multipliers)
Blue	New contact
Gray	Dupe contact or an unworkable station in a non-workable country . This means that you don't need this station because he is a dupe or you are not even 'allowed' to work him in this contest according the contest rules.

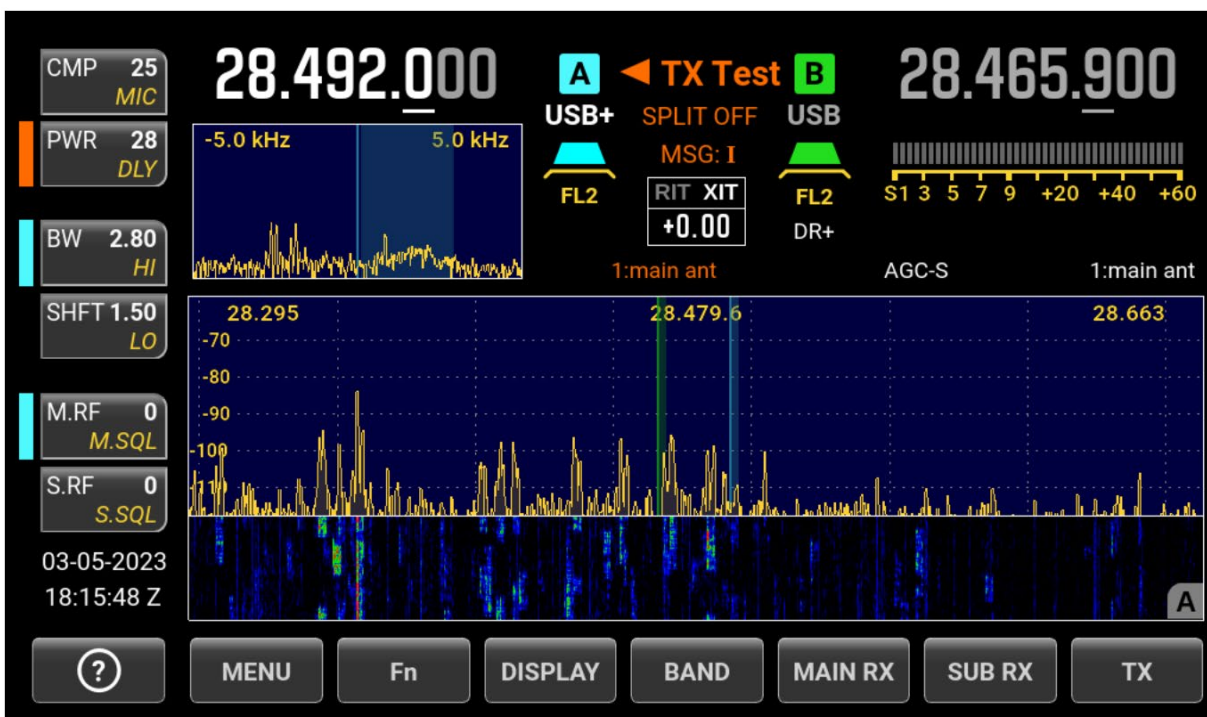
N1MM Spectrum Display



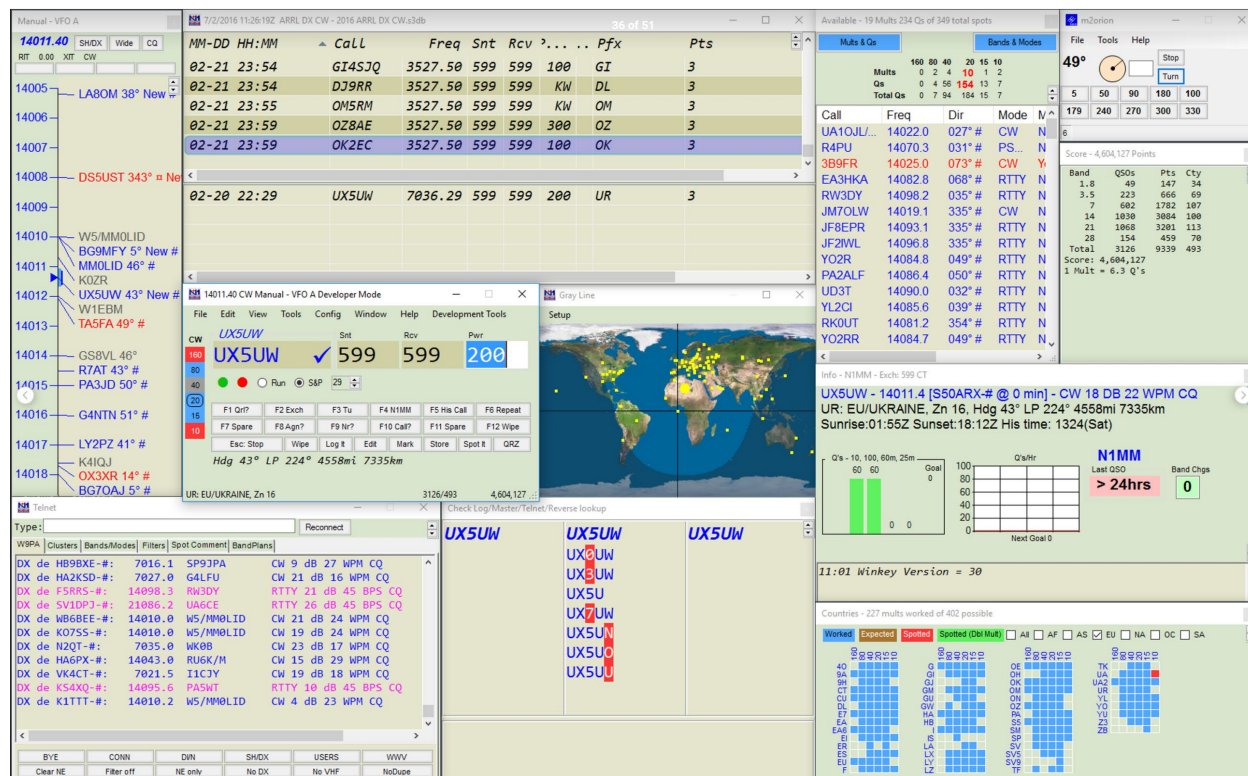
N1MM Entry Display



Elecraft K4D Radio Screen



N1MM Screenshot





The Radio Amateur's Journal
Takes pleasure in awarding this Certificate of Merit to

WB4YDL

World Wide RTTY WPX Contest

#2 United States 4th Call Area
Single Operator Low Power All Bands

A Total score of 1,264,230 points was computed on the basis of the number of stations worked and call sign prefixes contacted. In witness of this achievement, we hereby affix our signatures on this day.

Ed Muns, WØYK

RTTY WPX Contest Director

D.S. Wooten W2VV

Editor, CQ

References

1. The ARRL Operating Manual, 2003, 8th Edition
 - a. *Contesting - The Appeal of Competition*, chapter 10
2. Rob Brownstein, K6RB, *The Joy of Contesting*, QST, January 2008, pp. 51-54,
<http://www.nccc.cc/pdf/K6RB-joyofcontesting.pdf> .
3. Robbins, David, K1TTT, *Ham Radio Contesting*,
<https://www.slideserve.com/maddox/ham-radio-contesting> .
4. Sherrod, Phil, W4PHS, *A Guide to Ham Radio Contests*, April 17, 2011,
http://www.philsherrod.com/hamradio/A_Guide_to_Ham_Radio_Contests.pdf.
5. Hall, Jim AD4EB, *RTTY Contesting Basics*, SEDCO 2009,
http://www.k4ro.net/tcg/sedco/RTTY_Contesting_Basics_AD4EB.pdf .
6. Pickering, Kirk, K4RO, *Contesting 101 : Maximize Your Scores and Fun*, SEDCO 2009,
http://www.k4ro.net/tcg/sedco/Contest101_SEDCO_2009.pdf .
7. The National Contest Journal, ARRL, bimonthly
 - a. The Little Pistols Page, Mike Goldstein, VE3GFN
 - b. Contest Tips, Tricks & Techniques, Gary Sutcliffe, W9XT
 - c. RTTY Contesting, Ed Muns, WØYK
8. WA7BNM Contest Calander ,
<https://www.contestcalendar.com/index.html>.
9. 3830scores.com, Contest Score Rumors,
<https://www.3830scores.com/index.php>.
10. Lindquist, Rick, WW1ME, *CQ World Wide DX Contest Rules Get Complete Rewrite*, NCJ, vol.41, no. 5, September/October 2013.
11. Thompson, Randy, K5ZD, *Tips on Being a Better Single Operator : Useful Tips on Basic Contest Operating and How to Improve Your Scores*, <http://www.youtube.com/watch?v=0VFYjRfBVwo> .
12. Potomac Valley Radio Club, recorded Webinars, <http://www.pvrc.org/webinar/webinars.htm> .
13. Daso, Don, K4ZA, *Contest Video Essay : A Look at Radiosport, Opinions & Experiences from Contesters We All Know*, 2006, <https://youtu.be/5-t5DOTNMfk?si=kPGmAp4VuUSQ9C3>
14. Straw, Dean, N6BV, *Tactical Use of Propagation Predictions for HF Contesting*, PVRC/NCCC Webinar, June 2010, <http://www.nccc.cc/misc/N6BV-2010JUN07-PVRC-Propagation.pdf> .
15. K2YWE Amateur Radio Info : Contesting Tips,
<https://www.contestuniversity.com/wp-content/uploads/2018/05/11.-K2YWE-Contest-Operating-Best-Practices.pdf>
16. K2YWE, *Contesting Tips for Little Pistols* -
<https://www.contestuniversity.com/wp-content/uploads/2021/03/10.-CTU-2014-DaytonCU-K-K2YWE.pdf>
17. N1MM Contest Logging Software - <https://n1mmwp.hamdocs.com/>
18. Writelog for Windows - <http://writelog.com/>

19. Win-test Contest Logging Software - <http://www.win-test.com/>
20. AE6Y Logging software - <http://www.cqp.org/Software-AE6Y.html>
21. N3FJP Amateur Radio Software - <http://www.n3fjp.com/>
22. TR4W Contest Software - <https://tr4w.net/>