TALES FROM THE SWAMP

September 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

Contest Tips:

What follows in the table below are tips from your fellow SFCG members they themselves learned and use. They have provided dozens so this will run for a few months. If you'd like to let folks know what has helped you please send your tips privately to knason00@gmail.com. Nothing is too basic or mode specific to put here. I came up with this idea so our newer members who haven't been doing this for years can get a jump on becoming better contesters. But I then decided this would be a great way of collecting tips applying to all skill levels. Calls are given so you know who to ask for further explanation. Asking follow on questions would be best done on the reflector since others may have the same question, but don't hesitate to contact the tipster privately if you would rather. As you look these over, keep in mind there isn't a single way to do things and that people contest for different reasons. Some operators are very competitive contesters while others take things a bit more casually. If something sounds like it might fit your operating style, mode, and station use it. If not, move on to the next tip.

SFCG Member Tips	
Tip	**From**
Sound excited when calling or answering a CQ. Make the other person want to work you. Excited people stick out more in the pileups.	N4XL
Busting pileups is half skill and half art. When learning, stop contesting and take the time to simply listen to the music of a big pileup. How it changes as people come and go. Pay attention to how the Running station handles things and try to figure out how they pick a station out from the pileup. An example of what to look for is to see if the Runner is answering tail enders, picking the strongest of the surging pack, or waiting until the rush is over and pulling the S&P station from the quiet after the storm. Another is to listen if the Runner is answering stations slightly off frequency of the main pack or only from a specific region (i.e.: EU). Take the time to listen to both good and bad Runners. You'll be working both types in a contest and busting each type of pileup can require different tactics.	N4XL
You should know how to use your station equipment and logging software so well it is second nature. You don't want to pause and figure out how to do something during a contest. You need to get to the point where you simply think "I want to do x" and your hands, brain, or mouth does "X" without you having to think about what button to push or phrase to say. That comes from many hours of Butt In Chair (BIC) contesting focused on racking up the points. In fact, it isn't a matter of thinking "I want to do x". Your subconscious should be in control during a QSO and you just instinctively realize "X" needs to be done. In that state of "flow" your body does it without being slowed by the requirement of consciously being directed to do so. Gaining that level of intimacy with your station requires you to practice, practice, practice. In the beginning of learning how to contest competitively (as opposed to simply playing radio or chasing awards), stop pushing for rate. Try different things. What filters work best in different situations? When trying to bust a pileup what clues do you hear that tell you it is better to try tail ending first rather than waiting for the initial rush of calls to quiet down? Learn to touch type so you don't have to watch the keyboard all the time. Etc.	N4XL
I like to go over all the things to do associated with logs/scores pre and post contest. Make sure your logger is properly configured for and recently updated for the contest, proper mode(s), category, station data, club = Swamp Fox Contest Group.	K3DNE
Post Contest. Submit QSO totals to SFOTA. Upload ADIF to LOTW	K3DNE
Post Contest. Submit/upload log to the contest sponsor and make sure to indicate Club: Swamp Fox Contest Group (both in the logger and, if asked, in the upload process).	K3DNE

Make it fun and start simple. Pick a contest and category that fits your station and skill level.	W7WZ
Consider propagation, your antennas, power and the likelihood of success. That can be assessed by looking at the scores of other stations in the recent past. 3830 summaries are a good place to look up the history.	W7WZ
Read ALL of the contest rules before the day of the contest.	WN4AFP
Choose the contest category that best fits your stations and operator skills.	WN4AFP
The more antennas the better.	AA5JF
Build your contesting skills both deliberately (like by following sage advice found in contesting newsletters), and by experimenting on your own in all kinds of contests, for short and medium bursts. Try different things -- including things that go against the advice you find here.	AA5JF
S&P is a good way to get started in contesting. Unfortunately, many of the larger contesters are bad about giving their call in a pileup. If they don't send their call within about 3 contacts, don't wait for them to broadcast their sign. Send your call. If your a dupe, it on them for not broadcasting their sign. If not, when you get thru, ask for their call. This is actually one of my irritations in many contest. It only takes seconds to give your call. Keep that in mind when you are running!	KZ3P
In general, you will need to get used to running to get the high QSO numbers. I got started running in the PA QSO party a few years ago. It is terrifying at first. I started S&P and found that many people were trying to get back to me. Turned out that I was the only station in Bedford county that year. Just keep in mind that you are running this frequency and you set the pace. Operator will work with you most of the time (especially if you are a rare mult).	KZ3P

- One of the biggest bang-for-the-buck things you can do is free. Stop making logging mistakes – or at least don't submit a log to the contest sponsors that has a questionable contact in it. Some contests hand out hefty penalties for a Busted or Not In Log (NIL) entry. Busted means you got their call wrong, and NIL means you are not in their log. You thought you were working them, but they were actually working someone else. Some log checkers also look for Unique calls. That means there is a legitimate ham radio call in your log, but no one else logged that station. Unique's can happen legitimately. Like someone only worked a few stations and you are the only one worked who submitted their log. More likely they happen because you didn't copy the other stations call correctly, or because you worked someone who wasn't actually participating in the contest but logged them anyway. You can be penalized for too many Unique call signs in your log.

  Here's a situation. You are calling CQ and a weak one answers. You give them their report but just can't pull them out of the muck. You don't want to claim them because you aren't sure of their call or exchange. But they might have copied you just fine. If you delete or don't log the "contact" then the log checker will pull *your* call from *their* log, do a check and not find them in your log. Even though they did everything correctly they will be penalized because you didn't log the attempted contact. Be a good sportsman. Log what you think is

their call and exchange but mark it as "X-QSO" when you submit your Cabrillo log. That means you are not claiming that contact. Then you aren't penalized for a bad contact, but they still get their points for correctly copying you. A recent N1MM version release has made it much easier to mark a contact X-QSO during the contest right when the questionable contact happened. See how in the N1MM section below.

As a Runner, even if you don't want to take a couple seconds out of your Run and make a couple mouse clicks to mark the contact X-QSO you should at least say "Not In Log" or "No Contact" on SSB or send "NIL" if using CW so the other station knows not to try and claim the QSO. Letting them know you didn't log them also tells them they need to try and work you again later. Who knows who they were? They might have been a unique multiplier that needs your state, county or grid. It's worth encouraging them to stop by in an hour.

- Contest Terminology
    - 175 mile radius: A geographic requirement for groups of stations jointly submitting their scores as part of the club competition in ARRL contests. In the "unlimited" category of club competition, stations submitting their scores as part of a club for the club competition must either be within a single ARRL section, or within a 175 mile radius of a centroid, to be eligible to contribute their score to the club total..

    - Assisted is a contest category meaning that use of spotting information delivered from internet or packet radio based networks which give real-time information on frequencies and callsigns of stations in the contest is allowed. Using code readers and skimmers in your own station that provide call sign information are usually included in the definition of things placing you in the Assisted category. Most multi-operator categories already allow spotting assistance. Contest rules typically give examples of what places you in the Assisted category for that particular contest.

    - Bust: A bust is a QSO that is incorrect in some way – the callsign or exchange was inaccurately recorded. May also refer to spots which are incorrect.

    - Category abbreviations.

        - SOAB: Single Operator All Band. No assistance allowed

        - SOABHP or SOABLP or SOAB QRP: SOAB High or Low Power. QRP is typically limited to 5 watts or less.

        - SOSB40 or SOSB10: Single Operator, Single Band, 40 or 10 meter in those cases.

        - SOAB(A) or SOAB(U): Single Operator, All Band, Assisted or Unlimited.

        - SOAB Classic HP/LP: Classic refers to a subcategory of SOAB. These type classifications are called an "Overlay". They help you identify people who are operating in a fashion similarly to you or who have similar stations as you (i.e.: TB-W is a single Tribander and wires as opposed to multiple towers and stacked monobanders.) In the case of the CQWPX contest Classic means,

> "The entrant will use only one radio and may operate up to 24 of the 48 hours"

- MM: Multi Operator, Multi Transmitter
- M/2: Multi Operator, Two Transmitter
- M/S: Multi Operator, Single Transmitter
- M/S LP: Multi Operator, Single Transmitter, Low Power

Highlights From The Reflector:

- Several in the group thought it might be good to start a procrastination committee. If you get around to agreeing, you should let President Ed K3DNE know. I'm sure he will anxiously await your reply.

- Dave WN4AFP received his First Place CW 2023 New York QSO Party, Non-NY, plaque. Great job Dave!

- SFCG participation in the August NAQP SSB was heavy and Ed K3DNE registered three teams. Good participation and scores people! Herschel KA2G gave his new FTDX5000 a workout.

- Herschel KA2G learned the value of a comfortable operating chair. Several people agreed with Jim N2ZZ that the La-Z-boy "Bradley" model is a great chair so he made the leap and is very happy. Others suggested chairs the gamers use or an expensive seat cushion like long haul truckers use bought from Purple.com.

- Jim N2ZZ reflected on his NAQP SSB experience. He thinks DXing prepared him for S&P but he could do better in NAQP's by running. He also believes he needs a better 160 meter antenna. His last posted thought was he needs better time management to handle the two hour off times. He ran out of stations to work doing S&P and realizes running would have been productive.

- Bob KZ3P's NAQP outing left him thinking of a 160 meter antenna too. Several people gave examples of 160 meter antennas that might be effective in a small lot. Jim N2ZZ shared an 1984 article from CQ magazine about an inverted-L design. I'm sure Bob KZ3P

- Dennis K2SX chimed in on the 160 antenna threads with words of wisdom applicable to many things contesting. He wrote "Remember, in a multiband contest, you will usually not be spending much time on 160M so I would suggest putting up the best antenna you can without getting carried away with time and/or money. You may not be the biggest signal on 160M but you will probably do well for the time invested even if you only do 80% or 60% or whatever of the big guys. You can make up for that by doing better on the higher bands while the big antenna guys are wasting time on 160M. This is particularly true when condx

are good and the higher bands are open later. Now, you probably won't win any of the 160M single band contests but you might be surprised." Too often people don't make improvements to their stations (antenna related or other) because they think what they can do now isn't good enough compared to what the winners are doing. Most of the winners didn't end up with their fantastic stations right away. They improved things incrementally over time. I forget who wrote it, but I'll paraphrase what I read somewhere, 'Don't let your quest for a perfect antenna prevent you from putting up an effective one.'

- Dave AA4VT upgraded his HF antenna. He now has a SteppIR DB-18E.

- President Ed K3DNE has been pushing folks to participate in the Team category of contesting. He has been tracking the ARRL DX contest for 7 years. We started out in 2018 with 10 SFCG members participating and our Club Standing was 34th. In 2024 we had 38 participants and for the first time finished in the top 10! We placed 9th. Great job SFCG!

- Several enjoyed the World Wide Digi DX contest. Bill N4IQ wrote, "Conditions were good, particularly on the lower bands. No summer storms for a change… Lots of activity which makes this contest fun." Bill N1UZ dabbled, but mentioned Mr. Murphy visited him and caused some computer connection issues.

- Dave WN4AFP shared the 2024 SCQP winners. Congratulations all!
  Expedition: Single Operator – WA4AUG
  Fixed Station (MIXED MODE):
      High Power – Single-Op – KZ3P
      Low Power – Single-Op – K4CU
  Fixed Station (PHONE):
      High Power – Single-Op – K3DNE
  Top Bonus Station Operator: WN4AFP (WW4SF) – 640 QSOs

- Kevan N4XL mentioned there was a broken Kenwood SiLabs USB driver and it should not be updated. The faulty driver version was later removed from the Kenwood website.

- Dave WN4AFP did a great podcast about growth in State QSO Parties with W1DED. He provided a link to the interview. https://youtu.be/yFA4Bn8FKQc?si=f65ZOFTus2sKhbGf

- Kevan N4XL asked several members for their contesting tips on what works for them. See Contest Tips above for some of the replies. That will be a recurring tip section for the next few months.

- Matt NU4E mentioned there was a great Tropo opening to the northeast. He explained ODX means "Furthest station, in miles (or km everywhere else) :-) Calculated with 6 digit grid squares on VHF and above."
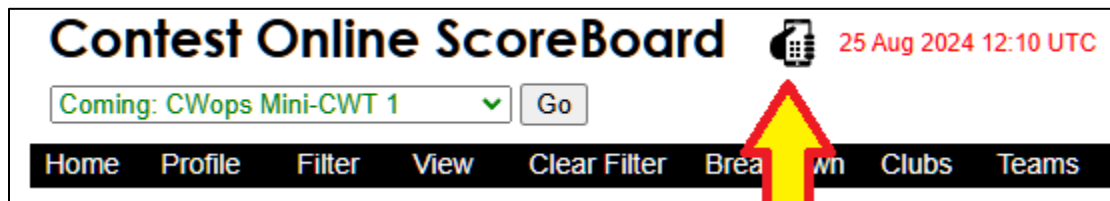
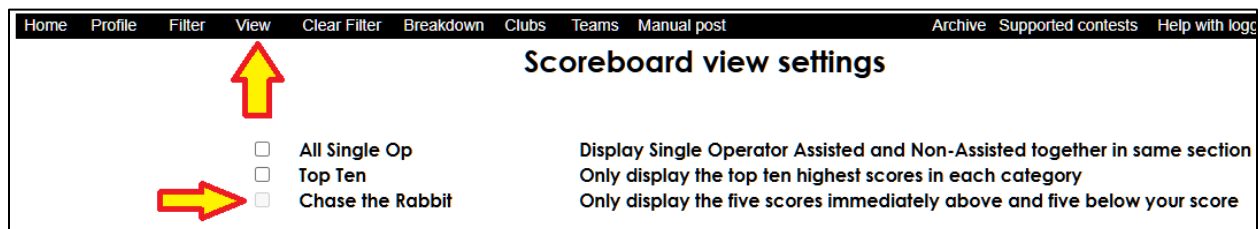# Some Obvious and Not-So-Obvious Contest Online Scoreboard Tips

By Kevan N4XL

The home display that shows everyone can be filtered to only show the group(s) you want to track using the Filter option at the top. It can drill down specific enough so you see only those in the category you are competing with. I have a second computer and monitor connected to the Scoreboard and display both a filtered display of my category and a separate window of how the SFCG (or teams) are doing.

That home display irritates me because the columns don't resize when I try to shrink the window. "Mobile Version" to the rescue! Click the mobile phone icon at the top of the page and you can adjust your window size to better fit on your monitor.

Disheartened at how far down the list from the category leaders you are? Play "Chase the Rabbit". It only shows those immediately around you letting you focus on whuppin' that person just a little bit in front and staying ahead of the person trying to whup you.

Open a secondary window to show how the SFCG is doing as a whole or to track your specific teams standing.

To make the Club and Team score reporting work correctly you should check the accuracy of your Profile setting before each contest. PLEASE… Do not create a team name just because you don't see what you think it should be. President Ed solicits Contest Organizers for most contests. Let them set up the names. Let them know if you don't see a Team name. We have had problems where similar club and team names were created. Instead of being grouped together SFCG members were divided across the different similar sounding names and tracking teams during and post contest was a mess.

Tower Failure and Advice About Considering All Aspects for Good Engineering Design, Whether Tower Related or Not

Hello fellow DXers......

VE6WZ will be QRT from the HF bands above 160m.

On Tuesday Aug 27, I suffered a main lift cable failure on my crank up tower that destroyed all of my Yagi's and the US tower.

At the time of the failure, I was beside the tower (doing work) in my man lift while the tower was going up.

The tower was almost at full height (at 100') when the main lift cable broke. About 500 pounds of Yagis came crashing down almost instantly from 100'. I was in the manlift, and my reaction was to "go down" into the man basket when I heard the crash. This is what saved me. The man basket cage was somewhat damaged and bent. I am totally ok, with not a scratch, but the cage of the man basket protected me. There was debris, bolts, brackets, tubing, pieces of the booms flying everywhere, but somehow, the man lift was not knocked down. After the collapse, one of the 80m Yagi elements was laying on the man basket, but I was able to push it off, and lower the man lift to get out. The tower, my 80m-40m Yagis are completely destroyed. Unrepairable. The high band Optibeam is probably repairable.

Why did this happen? It was my mistake.

I am building a 4 element, 160m, 6 direction triangular parasitic array and needed to modify the shunt feed for the US tower crankup. The crankup is the driver for the parasitic elements.

The existing shunt feed for the tower needed to me modified into a symmetrical skirt surrounding the tower to maintain balanced coupling to the parasitics. I clamped brackets to the outside of each section to support the shunt-wire standoffs. These clamps were working well for the last 3 months, but after a high wind, some of the shunt wires moved and caused the support arms to bend inward. This bending shifted one (or more) of the brackets to bend INWARD into the inner moving sections, then toward the main lift cable and basically sliced the main lift cable.

The point is, this failure was not something that would have happened normally, but was only because of my poor engineering/ modifications. I guess that's why they are called accidents?

I have owned the US tower crankup for 26 years, (beginning at my city QTH) and have been fastidious about maintenance of the cables, sheaves and motorized raising fixture, and have had trouble free use of it.

I will miss it.

Observations by the Editor:

- Those of you using Kenwood radios should be aware the COM port driver might not work. TS990, 890, 590, TH-D72, KPG-22/46/186 are affected. N2IC wrote:

  I was helping someone debug a recent problem with invisible virtual serial ports on a TS-890S. After a lot of head scratching, found this on

  https://www.kenwood.com/i/products/info/amateur/vcp_e.html

  Caution!

  Please do not use the virtual COM port driver v11.4.0 released by Silicon Laboratories on July 29, 2024. A problem has been confirmed where the corresponding COM port becomes invisible in our PC applications. This problem does not occur with v11.3.0, which can be downloaded from the link above. If you encounter this problem with v11.4.0 downloaded from the Silicon Laboratories website, you can avoid it by reverting to v11.3.0. (As of August 1, 2024)

  This also affects the TS-590.

  73,

  Steve, N2IC

- Some members have recently had some questions about crank up tower parts. Just learned there is a groups.io for that.
  https://groups.io/g/CrankupTiltoverTowers/messages

- For you RTTY ops, there's a new version of 2Tone. There are some specific CPU requirements.

  The new version of 2Tone can be found here 2Tone Downloads Page – rttycontesting.com (Thank you Don, AA5AU, for hosting).

  NOTE This version will only work with 64 bit Windows 8 and later. It requires a CPU with the AVX instructions:

Intel

    Sandy Bridge processors (Q1 2011) and newer, except models branded as Celeron and Pentium

    Pentium and Celeron branded processors starting with Tiger Lake (Q3 2020) and newer.

AMD:

    Bulldozer processors (Q4 2011) and newer.

Keep the older version of 2Tone in case you need to revert to it.

73 David G3YYD

- It isn't often, but sometimes I want to read the text shown in the title bar of a Microsoft Windows window. When using higher monitor resolutions that can be difficult because the text is so small. One example of why I look at the window title is when using N1MM the contest being used and its associated database is displayed in the title bar of the Log window. Since I do some work in a test database and contest in another database I need to know which database is active. It also helps to look at the contest name before logging a contact when you are switching between two or three QSO parties during a Saturday afternoon. There might be another way to change the text size but after searching fruitlessly within Windows I ended up searching for a solution online. I reached this website which allowed me to do a registry edit and change the text size. https://www.majorgeeks.com/content/page/how_to_change_text_size_for_title_bars_in_windows_10.html. It worked great.

- Old school me wasn't aware that older HDMI cables will not work correctly with the new 4K television signals. I had thought that a 5 GB bandwidth would be fine, but apparently not. Those older cables are mostly version 1.4 and the version 2.1a are recommended for 4K. Those newer versions handle 48 GB. Wow. I never guessed you need such wide bandwidth these days. While pulling that thread I also learned there are automotive and regular versions of HDMI cable too. Both the older 1.4 and newer version cables are available for your vehicles. Interestingly, the automotive type has extra shielding built in. Sounds like that might be worth investigating if you have birdies from your shack monitors.

- A man was recently asking about modifying a 204BA on the TowerTalk reflector. Jim K9YC included this in his reply, "I'm on the west coast, so I care only about forward gain over the entire band, don't care about front to back. Being in the east, you may be more interested in F/B." When asked about what to look for in a yagi I often here older experienced hams tell newer folk to ensure they get one with a decent F/B ratio. I personally agree with Jim. When I was in the market for my beam it occurred

to me, I would be pointing to high density ham population density areas of Europe and northwest across the US towards Japan. I realized that living here in South Carolina there just aren't many people behind me when I'm pointed in those directions so F/B ratio wouldn't be very important to me either. I chose a yagi design that sacrificed F/B ratio for higher forward gain. I've never regretted that choice.

- Not many of us check high voltage diodes such as are found in power supplies for KW+ level power amplifiers and can't use this observation, but an RSGB thread had an interesting tidbit. It is very difficult, if not impossible when using doped silicon, to make a single diode junction capable of handling voltages in the three to six kilovolt range. Many amplifiers deal with the issue by putting multiple diodes in series, but some diodes have several internal PN junctions placed in series inside a single casing. Each junction has its own voltage drop and since the junctions are in series they are additive. The ham creating the RSGB thread measured a voltage drop of 3 volts across several of his 6 kilovolt diodes instead of the 0.9 volts he expected to find dropped across the "single" diode. Another ham pointed out that means the time saving diode checking feature of your multimeter will show the diode as bad even though it is perfectly fine.

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 a warning in the Info window to notify you if any COM ports used for radio or CW control have been sleep enabled *(Editor's Note: Allowing a COM port to sleep during a contest is not a good thing. You should use Device Manager to prevent that from happening.)*
  - Internal to N1MM key remapping has been implemented which apparently makes it unnecessary for many to continue using AutoHotKey. It is still a work in progress, but many bugs have been fixed. https://n1mmwp.hamdocs.com/setup/keyboard-shortcuts/#key-mapping
  - Several changes have been made allowing on-the-fly marking of a logged contact as an X-QSO during the contest. Scoring, duplicate status, automatically marking Cabrillo file log lines as X-QSO, etc., have been added.
  - Many were complaining of slow message handling. The Network Status window, Info window, and Talk window message handling has been sped up.

- Experimental: Added {PopPrevNeededQ} and {PopNextNeededQ} for use in **VHF contests** where you want to work the same station on many bands (W2FU) (Coded by N1MM)

- GridMap: force refresh on mode change (K3CT) (Coded by N1MM)

- Log: added code to show row of found callsigns when using Ctl+F. This was used for the feature above as well (Coded by N1MM)

- Digital: Corrects wording when no path has been entered for WSJT/JTDX when trying to open it. (W3UL) (Coded by N2AMG)

- K4: Reduced the radio command pacing delay from 40ms to 30ms. (Coded by K3CT)

- Prepopulate Exchange1 when using PopPrev/PopNext (K3CT) (Coded by N1MM)

- Realtime Contesting: enabled check boxes in configurer (Coded by N1MM)

- Grid Map & Grid Field Multiplier Windows: Update display on band change or focus radio change (W2FU) (Coded by N1MM)

- For VHF Contests. Version 4 changes:

It is now easy to mark a contact as X-QSO. (If you don't know what doing that is for look at the explanation in the Contest Tips section above.) Right click on the contact in the Log window and select "Change X-QSO Status".
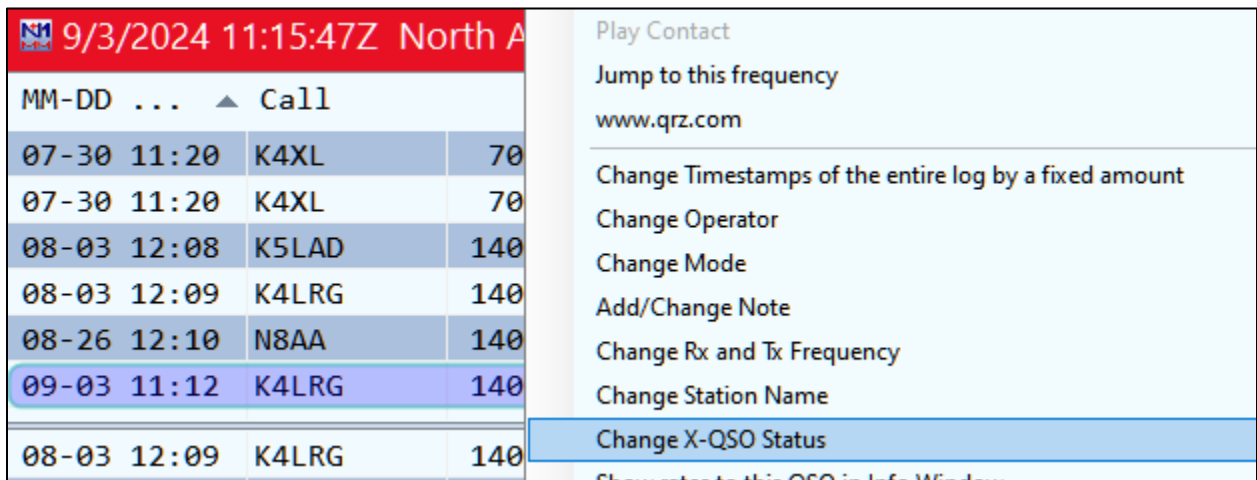
Select Change X-QSO Status and make your choice.
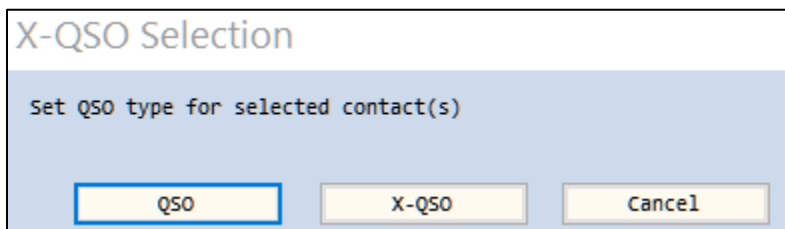
The Log Window will display your contact as X-QSO or normal as you chose.

08-26 12:10	N8AA		14027.73	JOHN		OH	✔
09-03 11:12	K4LRG	✕	14020.00	STAN		AL	
09-03 11:12	K4LRG	✕	14020.00	STAN		AL	
08-03 12:09	K4LRG		21010.50	STAN		AL	✔

When generated the Cabrillo file will also indicate X-QSO.

```
QSO:      7037 CW 2024-07-30 1120 N4XL        Kevan      SC  K4XL
QSO:     14011 CW 2024-08-03 1208 N4XL        Kevan      SC  K5LAD
QSO:     21011 CW 2024-08-03 1209 N4XL        Kevan      SC  K4LRG
QSO:     14028 CW 2024-08-26 1210 N4XL        Kevan      SC  N8AA
X-QSO: 14020 CW 2024-09-03 1112 N4XL        Kevan      SC  K4LRG
END-OF-LOG:
```

- There are several buttons at the top of the N1MM Band Map window. The SH/DX, Wide and CQ buttons are prebuilt into N1MM. They send a request for spots, adjust filter band widths, and one that lets you jump back and forth between your last used CQ frequency and your current S&P frequency. (The latter is useful if you want to try sneaking in quickly working a mult during a slow run period.) Only two choices for the filter width are available, wide and narrow. Just below those premade buttons there are four blank buttons you can use to customize radio control Since I prefer three CW filters I use those to make my choices easily accessible. More on how to do that a minute.

You can edit the values of the default filter choices by right clicking on the Band Map window and navigating the menu that pops up.
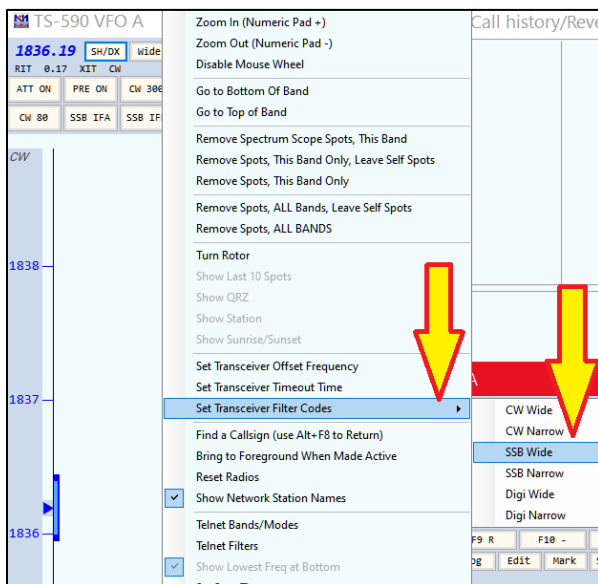
You'll have to look up the particular command codes used for your radio and change those to what you prefer.

The blank ones can be programed with PC codes specific to your radio for almost every function your radio is capable of. They can also be used to run built in N1MM macros. (Not every Macro may work when placed in those buttons and some trial and error time may need to be spent trying things.) Using those buttons allows you to position your radio further away from your keyboard and mouse. They can also be activated by a device like Touch Portal or Stream Deck so you can push a single button on that device to change radio settings. No mouse movement or clicking required. Using those buttons is often easier than working your way through those complicated menu systems modern radio designers seem determined to use. You can also add additional buttons for a total of 32, but the more you put in the less useful the band map portion of that window is. I have eight buttons currently in use and set up as follows.

ATT: Turns the attenuator on and off

PRE ON: Cycles between preamp on or off. Currently it is on. It changes to PRE OFF when you click on it.

CW 300, CW200, CW80: Changes CW filter passband to the appropriate width. These can be changed for whatever you prefer to use

SSB IFA, IFB: The TS590 has two receive IF Filter selections, A and B. I set one for 500-2300 and the other to 200 to 1600. Selecting between the two lets me shift my filters to combat SSB QRM either above or below my frequency.

SPOTME: Sends a self-spot of my current frequency.

You program the buttons by first deciding on what you want them to do followed by looking up your radio's specific code and/or N1MM's macro commands. (Be aware that not every macro command works using this method and some macros are also specific to the mode you are using.) Once you're ready, right click on a blank button and fill in the chart that comes up. Here is an example that makes them work as described above for a TS590. Your command codes will probably be different, and you may elect to use hex instead of ASCII commands. The CAT1ASC part of the code is to send a Cat command code to Radio 1 using ASCII.

Notice there are two command codes for the Attenuator and Preamp lines. They are separated by a | character. That tells N1MM that when pressed the code sent should alternate to the next in sequence. You can string more than two together, as in I used to have the CW filters of 300, 200, and 80 cycle, but I've found for operational efficiency's sake I personally don't like more than two per button. To add an additional code just type information into the bottom line with the asterisk. Also, don't forget to put the last ; before the closing bracket for each PC code.

Two last things. If you select the "File" dropdown you can save and load different button combinations for your favorite contests. And if you're an SO2R/SO2V operator and have two Band Map windows open you can have a different set of buttons for each window if you want. Just don't forget to change CAT1ASC to CAT2ASC to send codes to the second radio.

- The latest N1MM+ documentation is available at https://n1mmwp.hamdocs.com/

Upcoming Contests:

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

SFOTA Current Leaderboard:

Sep-13-2024

Current Leaderboard

2024 OVERALL STANDINGS

	CALL	Contests	CW QSO'S	SSB QSO'S	DIGITAL QSO'S	RTTY QSO'S	TOTAL QSO'S
1)	N4IQ	79	11395	2527	1224	3897	19043
2)	WB4HRL	280	13629	1150	548	1524	16851
3)	KE4EA	194	10728	554	8	3	11293
4)	WN4AFP	85	8106	2694	0	0	10800
5)	KZ3P	71	2144	3558	0	1347	7049
6)	K2SX	26	6819	0	0	0	6819
7)	K3DNE	40	1448	4331	953	0	6732
8)	K4QQG	42	0	4548	771	586	5905
9)	N4XL	10	4178	1057	0	0	5235
10)	NU4E	7	2400	2151	59	0	4610
11)	K4FT	70	4303	166	0	0	4469
12)	KG4IGC	14	614	891	0	2039	3544
13)	KA2G	32	0	2413	616	0	3029
14)	KD4S	52	1707	224	87	648	2666
15)	AA5JF	7	1745	806	14	0	2565
16)	N1UZ	12	333	0	830	1188	2351
17)	N4QI	43	1581	322	0	222	2125
18)	NI7R	6	1568	88	0	0	1656
19)	K7OM	15	553	0	0	1102	1655
20)	KY4ID	13	1185	62	0	377	1624
21)	N1SUZ	28	0	1615	0	0	1615
22)	AA4SD	17	1611	0	0	0	1611
23)	WA4LDU	26	246	519	431	184	1380
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)	WA2BCK	3	0	100	604	0	704
28)	N2OG	7	253	294	0	0	547
29)	K4CU	4	272	170	0	0	442
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	13629	K4QQG	4548	N4IQ	1224	N4IQ	3897
N4IQ	11395	K3DNE	4331	K3DNE	953	KG4IGC	2039
KE4EA	10728	KZ3P	3558	N1UZ	830	WB4HRL	1524
WN4AFP	8106	WN4AFP	2694	K4QQG	771	KZ3P	1347
K2SX	6819	N4IQ	2527	KA2G	616	N1UZ	1188
K4FT	4303	KA2G	2413	WA2BCK	604	K7OM	1102
N4XL	4178	NU4E	2151	N4VZ	595	KD4S	648
NU4E	2400	N1SUZ	1615	WB4HRL	548	K4QQG	586
KZ3P	2144	WB4HRL	1150	WA4LDU	431	KS4YX	565
AA5JF	1745	N4XL	1057	W1RPG	102	KY4ID	377
KD4S	1707	KG4IGC	891	KD4S	87	N4VZ	326
AA4SD	1611	AA5JF	806	NU4E	59	N4QI	222
N4QI	1581	W1RPG	708	AA5JF	14	WA4LDU	184
NI7R	1568	KE4EA	554	KS4YX	13	WB5NHL	102
K3DNE	1448	WA4LDU	519	KE4EA	8	W1RPG	38
KY4ID	1185	N4VZ	433			KE4EA	3
KG4IGC	614	N4QI	322				
K7OM	553	N2OG	294				
N1UZ	333	KD4S	224				
K4CU	272	WB5NHL	194				
N2OG	253	K4CU	170				
WA4LDU	246	N4VGE	167				
KS4YX	176	K4FT	166				
NE4EA	50	WA2BCK	100				
		NI7R	88				
		KY4ID	62				

3830 Activity:

Contest	Call	Class	Pwr	Score
144FallSprnt				
09/10/24	K3DNE	Single Op	HP	494
09/10/24	NU4E	Single Op	LP	180
CoQP				
08/31/24	K3DNE	SOPh	HP	36
09/01/24	K4FT	SOCW	LP	280
09/01/24	KZ3P	SOMixed	HP	1,452
09/03/24	WN4AFP	SOMixed	LP	294
HiQP				
08/26/24	K3DNE	SOAB	HP	24
08/25/24	K4FT	SOAB	LP	60
08/25/24	KD4S	SOAB	HP	48
08/27/24	KE4EA	SOAB	LP	12
08/27/24	KZ3P	SOAB	LP	432
08/26/24	WB4HRL	SOAB	HP	140
08/26/24	WN4AFP	SOAB	LP	243
KsQP				
08/26/24	K3DNE	SO Mixed	HP	540
08/25/24	K4FT	SO CW	LP	624
08/26/24	K4QQG	SO SSB	HP	96
08/25/24	KD4S	SO Mixed	HP	3,004
08/27/24	KE4EA	SO Mixed	LP	2,508
08/28/24	KG4IGC	SO Mixed	LP	9,164
08/25/24	KZ3P	SO Mixed	LP	11,048
08/25/24	N4QI	SO Mixed	LP	108
08/26/24	WB4HRL	SO Mixed	HP	5,372
08/26/24	WN4AFP	SO Mixed	LP	5,705
NAQP SSB August				
08/18/24	K3DNE	Single Op	LP	101,592
08/18/24	K4CU	Single Op	LP	12,191
08/18/24	K4QQG	Single Op Assisted	LP	20,418
08/18/24	KA2G	Single Op	LP	22,444
08/26/24	KY4ID	M/2	LP	49,911
	(@KY4ID)			
08/18/24	KZ3P	Single Op Assisted	LP	50,172
08/18/24	N2ZZ	Single Op	LP	14,168

Contest	Call	Class	Pwr	Score
08/18/24	N4IQ	Single Op	LP	66,096
08/18/24	N4VGE	Single Op	LP	6,435
08/18/24	WA2BCK(@W2FU)	Single Op	LP	3,700
08/19/24	WB4HRL	Single Op	LP	7,548
08/19/24	WN4AFP	Single Op Assisted	LP	3,128
OhQP				
08/26/24	K3DNE	Single Op	HP	16
08/25/24	K4FT	Single Op	LP	1,612
08/25/24	KD4S	Single Op	HP	3,288
08/27/24	KE4EA	Single Op	LP	3,360
08/25/24	KZ3P	Single Op	LP	5,304
08/25/24	N4QI	Single Op	LP	40
08/26/24	WB4HRL	Single Op	HP	2,856
08/25/24	WN4AFP	Single Op	LP	28,886
Rus RTTY				
09/09/24	K7OM	SOAB	HP	2,604
09/08/24	KZ3P	SOAB	LP	3,427
SARTG				
08/18/24	K7OM	SOAB	HP	36,000
08/18/24	KD4S	SOAB	HP	101,530
08/22/24	KG4IGC	SOAB	LP	76,230
08/19/24	WB4HRL	SOAB	HP	9,660
TnQP				
09/02/24	K3DNE	SO FixedSSB	HP	192
09/05/24	K4FT	SO FixedCW	LP	340
09/04/24	KE4EA	SO FixedMixed	LP	12,040
09/02/24	KZ3P	SO FixedMixed	HP	14,622
09/02/24	N4QI	SO FixedMixed	LP	397
09/02/24	WB4HRL	SO FixedMixed	HP	10,950
09/02/24	WN4AFP	SO FixedCW	LP	1,180
WW RTTY				
08/27/24	K7OM	SO Unlimited	HP	2,001
08/28/24	KG4IGC	SO Unlimited	LP	15,549
WWDigi				
08/25/24	K4QQG	SOAB	HP	44,571
08/25/24	KA2G	SOAB	HP	64,375

Contest	Call	Class	Pwr	Score
08/25/24	N1UZ	SOAB	HP	7,656
08/25/24	N4IQ	SOAB	HP	175,890
08/25/24	WA2BCK(@W2FU)	SOAB	HP	32,436
08/26/24	WB4HRL	SOAB	LP	9,954

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73 es QRT de N4XL