TALES FROM THE SWAMP

July 2023

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

Condolences to Dave WN4AFP

It is with great sadness that I inform the club that Dave WN4AFP's mom passed away this evening (*Editor: Thursday July 13th*). Dave texted me stating:

> "At 6:07pm today, Wilma passed peacefully and quickly into heaven after 88 glorious years. We'll let you know about the funeral service details asap. Thank you for your prayers.
>
> Dave & Joye Edmonds"

Please keep Dave, Joye and the rest of his family in your thoughts and prayers during this difficult time.

Either Dave or I will let you know about arrangements.

Ed K3DNE

N1UZ Welcome!

Please welcome William N1UZ to the Swamp Fox Contest Group! William found our club via an internet search, so again, kudos to our webmaster Frank KG4IGC for keeping our website attractive and up-to-date! William started as a Technician in 1993 as N1OPR upgraded from General to Advanced and in '94 obtained KD1UZ then on to extra as N1UZ. He's a member and past president of the Mohawk ARC and Montachusset ARC. He and his XYL Pam now reside in Georgetown SC. They live in an HOA community but have managed to keep a 160-10m end-fed wire at 40ft that nobody has noticed yet! William enjoys digital contesting and in the 2022 WPX RTTY contest made 627 QSO's resulting in an impressive score of 622K! I see a great fit with our other RTTY and digital SFCG contesters!
William: Welcome to the Swamp Fox Contest Group!

73
Ed K3DNE

Editor: It is interesting to note that Bill has been a member of the Geratol net for a couple years. I can't help but tease a bit by saying I hope that doesn't mean he takes nappies while the "CQ Contest N1UZ" machine is droning on and on! Seriously though, William has some solid scores on 3830, particularly in the M/S and M/2 categories and is a member of the YCCC and thus has been exposed to some great contesters. A quick Google search found him in the 2004 CQWW scores so he has been contesting for many years. He is also listed many times as being active generally in Amateur Radio so I'm sure he will have much to share. Glad to have you in our skulk Bill!

Contest Tips:

A bit different this month. See the article below on Dealing With QRM.

From the Reflector:

- Yes, Burton KY4ID, you are finally a Real Ham. During the Stew Perry Burton found N1MM wasn't controlling his rig. He figured out the USB connector was loose. Opening the shell showed all four wires had broken off. He soldered them back on to the correct pins and was back in action. He wrote "That was my first successful fix." One Gold Attaboy for displaying proper Contester attitude and fixing the problem rather than giving up.
- Although not in this month's reflector, I noticed on Burton's QRZ site he and his wife toured Italy last October. While there he visited Begali Keys and had the opportunity to see Pietro and Bruna at work. Check it out. Take a look for no other reason to see the picture showing how his wife feels about him. https://www.qrz.com/db/KY4ID
- Several SFCG folk have reported email and reflector issues. Things like unsubscribe notices when they did not unsubscribe, delayed reflector emails, and things unexpectedly ending up in their spam folders. Since many are affected, I've started periodically logging directly onto the reflector to make sure I'm not missing things. So far, so good.

- George N4QI was disappointed with a CWT effort and wrote “Pathetic… but I tried.” I disagree George. Considering your antenna situation, you did okay. CWT’s are good practice regardless of the score. I don’t do many, but sometimes I do one just to try out changes I’ve made to my station or to practice using my rig in new ways rather than using up precious time in an actual contest. Even though you put in less than three hours you did good in the RAC Canada Contest George.
- Thought I’d point out to those of you who aren’t paying close attention that Bob KZ3P is always posting contest entries. Bob is definitely radioactive. Check out the SOFTA and 3830 results at the end of the newsletter. Bob doesn’t do CW so the number of contest entries isn’t boosted by weekly CWT entries, yet he has 39 contest entries for the year and is third on the SSB QSO list. Good job, Bob!
- Dave WN4AFP is still contributing to the rising global CO2 levels. There are rumors a lumber company in Brazil has organized a special logistics path for handling wood used solely for producing plaques and certificate frames used by contest organizers when issuing awards to WN4AFP. One of his latest is First Place Non-New York CW in the 2022 New York QSO Party.
- Darcy K4DQP is tearing up the POTA airwaves. He received a Warthog certificate for wrapping up a five park POTA Rover award by activating 5 parks in one day. He is aspiring to do 15 in a day. Great drive and aspiration Darcy!
- Dave WN4AFP shared a link to an interesting RBN tracking site showing CW/PSK/RTTY spots for the past year. https://rbn.telegraphy.de/activity/WN4AFP . I’ll mention the RBN site offers other useful features such as being able to compare your signal strength against other stations (both have to be calling CQ), a list of beacons and their frequencies, explanation on what the RBN is and how it can be used, how to increase your chances of being spotted, and the ability to download raw data which can be parsed with Excel or other computer software for detailed analysis.
- On July 3rd, Dave WN4AFP celebrated 48 years on the air. Congratulations, Dave! He’s just a young’un though. I’ve got three weeks on him.
- Burton KY4ID has jumped on the POTA bandwagon too. He shared his trip to the Savannah National Wildlife Refuge where he was the first fist to send CW in over 200 park activations. He was a bit wary when the bobcat showed up though.
- Dennis K2SX added to Kevan N4XL’s thoughts on approaching the IARU contest. Some of his advice applies to contests in general. Even if you aren’t entering the contest being discussed, it is always a good idea to review posts from such a good operator and gain some little tidbit that will help your next contest. Case in point. I was rushed the week before the contest and didn’t read Dennis tell us about the special WRTC call competition rules being done in parallel with the IARU contest. Oops. I could have easily spent a bit more S&P time looking specifically for the WRTC competitors. Although I have worked them all in previous WRTC events I missed some this year.

- Matt NU4E is an engineer for a major international company. Gotta tease him a bit. He wrote, “Had no luck with my quick fix from the 40m antenna and it faulted quickly after QSY to 40m again.” Hope your professional work goes better than your amateur repair efforts, Matt.
- It’s good to have Phil NI7R posting scores again. He managed 218 q’s using compromised antennas in his HOA controlled yard. He used an attic antenna and temporary 40 meter vertical.
- Bill N1UZ asked what spotting clusters members are using. That is a great question worthy of more reflector and newsletter time. See an article below for a bit more thoughts on clusters, but it would be nice to continue Bill’s reflector thread with contributions from other ops. Besides Bill, I too am interested in hearing why people are using what the are. Bills post is #24560 from Jul 9th. Here’s the link https://swampfoxcontestgroup.groups.io/g/main/message/24560
- Several members were involved in the 13 Colonies event. Thank you Scott KG9V for organizing the South Carolina K2L effort.
- Although Frank KG4IGC is quite familiar with computers, he is fighting some serious COM port issues that are severely impacting his operations. We hope he can work through them. He thanked Bill N4IQ for spending several phone hours and Matt NU4E for suggesting alternative software.

Dealing With QRM

From the Tennessee Contest Group website, Contesting 101 #6, written by Kirk Pickering K4RO

Contesting 101

By Kirk Pickering, K4RO

Hello, and welcome back to Contesting 101. Please send me your questions or comments, whether you are a newcomer or an old timer. I can be contacted via e-mail at **k4ro@k4ro.net**, or at my call book address. Contesting season is upon us, and by the time you read this the 2008 Sweepstakes and CQWW contests will be history. Hopefully you were able to apply some of the ideas presented in this column on the air, and maybe even increased your scores and satisfaction.

Dealing with QRM

Anyone who has spent some time operating radio contests has probably been engaged in a frequency fight at one time or another. Particularly during the low sunspot years, only one or two bands will be open at once, and the crowding can get intense. Probably the worst case is 20 meter phone during a sunspot minimum, when it seems like the entire contest community world-wide is packed into a single band. It's not unusual to hear 2 or even 3 contesters calling CQ on the same frequency simultaneously under such conditions. Consider that the 20 meter phone band is only 200 kHz wide, there are less than one hundred 2 kHz SSB “channels” available, and less than seventy 3 kHz SSB channels available. There is simply not enough room for everyone to have a “clear” frequency.

I recall the 2006 WPX SSB contest, where a team of TCG operators were operating Multi Single from K4JNY's station in East Tennessee, using the call sign KM9P. For the first 20 straight hours of the contest, we were calling CQ on 14225.30 kHz. Contesting Hall-of-Famer K3ZO was calling CQ on 14225.00 kHz. We were 300 HERTZ apart, essentially on the same frequency. We could hear Fred, and I suspect that Fred could hear us. The entire contest was basically on 20 meters, and it was a complete madhouse, there was just nowhere to go on the band. To the casual observer, it might have seemed appalling that we were operating so close to each other. Yet as the hours went by, we were both putting QSOs in the log at a good rate. We did not want to operate on top of each other, but this was an extreme circumstance, and there really was no where else to go. Every frequency had 2 or 3 stations calling CQ on top of one another. The proof was in the pudding. K3ZO worked through our QRM and that of other stations all weekend to win the USA SOHP category that year. Meanwhile, the KM9P crew worked through the QRM on our end to win the USA Multi Single category.

Note that this was an extreme case of two big gun stations with highly skilled contesters, and no other bands were open or useful. Typically contesters will find it more productive to find a clearer frequency to call CQ if at all possible. This is especially true if we are not one of the loudest signals on the band. I just finished a weekend of operating the CW Sweepstakes in the QRP category. The longest I was able to hold a run frequency was typically 10 minutes. Usually after 10 minutes or so, a stronger station would come by and push me away.

Does Might make Right?

Some years ago on the CQ-Contest reflector, there was a discussion about frequency fights, and many folks weighed in on the topic. K3ZO made a comment that surprised me at first. He said: “As my dear departed and deeply missed mentor W3GRF always said: 'It's a listening contest as well as a sending contest.' One measure of contest skill is the ability of a person to copy weak signals through heavy QRM. I reserve the right to decide for myself what bandwidth I need to run stations successfully. I don't allow someone else to make that

decision for me. If someone considers themselves to be my equal in operating skill, they should be able to put up with the same amount of QRM I'm willing to.”

Fred has been operating contests for longer than I have been alive, and it took me a while to truly understand what he was saying. Each operator has to learn for themselves how much QRM they can tolerate, and operate accordingly. In a sense, might does make right in contests, but it is not always simply a matter of who is louder. Typically the “winner” is the station who is able to generate more QSOs, as evidenced by more stations calling him. I was even more surprised to learn that Fred operates CW contests with 2.4 kHz filters, and SSB contests with a 6.0 kHz filter. No wonder he is a frequent winner of the Dayton CW pileup competitions. Fred has trained his brain to pull calls out of the worst QRM, and it shows in his results.

So does this mean that it is OK to jump upon a weak station's frequency and start calling CQ? While there are some operators who justify such frequency “scrumming,” most operators will instead keep tuning and try to find a “hole” in the band to call CQ. Each individual has to make choices and develop their own operating style. I've heard one top operator declare “I have no friends once the starting bell rings” while other operators place some emphasis on courtesy over

conflict. It is unacceptable is to purposely generate key clicks or over-drive your transmitter in order to create QRM. Such practices should be heavily frowned upon. Be sure to check with a trusted friend on the air to confirm that the settings you use during a contest sound OK.

Know When to Hold 'Em

The choice of whether to stay and battle or QSY, like a lot of things in contesting, depends on the situation. One wants to be aggressive in keeping a productive CQ frequency, while not wasting too much time over an unproductive one. The best way to hold a frequency is to keep making QSOs on that frequency. If I have a good productive run frequency, I will generally fight hard to keep it. If we have a good signal into the target area and the rate is staying up, it makes sense to stay put and keep on putting QSOs into the log.

I might QSY from a run frequency for a number of reasons though. If I've just arrived and the frequency is clearly still in use, I'll QSY. If I've been there a long time and the rate is dropping or the propagation is going against my favor, I might QSY. Sometimes a frequency that was clearly “ours” can become someone else's as the sun's terminator sweeps across our continent. Two stations productively using the same frequency towards different target areas can wind up on top of one another as propagation changes.

If I can move a multiplier, I might QSY. If I think I can make higher rate by searching and pouncing I might QSY. I might even leave a perfectly good run frequency to make sure that I don't miss any multipliers during a band opening. The more contests that we operate, the more that we develop an instinct for finding and keeping run frequencies. In the beginning, the simplest rule of thumb is to go higher in the band to find clearer frequencies.

Save your Ears

I don't believe that I have ever operated a contest without headphones. A good pair of headphones is an essential tool for CW and SSB contesting. I recently learned that many top RTTY operators also use headphones, as they can tune quite accurately by ear. We as contesters must work stations over a very wide dynamic range, and sometimes the receiver

gain is turned up very high to copy the weakest signals. The problem occurs when a loud station calls while the gain is way up. Even with AGC circuits enabled, our ears can be subject to some high sound pressure levels via the headphones. Try to remember to keep the gain turned down as much as possible. Besides saving your ears, it will also lower your fatigue factor.

That's all for this time. Please remember to send me your questions or comments.

73

-Kirk K4RO

Logic Behind a Contest Exchange

By Rich Ferch, VE3KI

Editor: Rich VE3KI wrote a great article for the June 2023 CW Operators Club newsletter, Solid Copy. He wrote it to explain the rational behind a CWT contest exchange. His reasoning applies to other modes as well. Nothing much new for a serious contester, but he does give reasoning for his viewpoints on things that others do differently. An example of such a difference is whether you should send your call after your TU (Thank You) message. Rich advocates doing it. Others who have strong stations where it is normal for two or three people to calling after every q find it better to not send their call after every TU. (Just such a situation is where N1MM's VARYMSG macro is useful.) Rich clearly lays out reasons why things are done the way they are. It helps people understand the ramifications if they decide to do something different.

CWops Tests (CWTs)

Rich Ferch, VE3KI

Following on after a recent conversation on the groups.io reflector, a review of QSO protocols in the CWTs may be useful. While the CWTs are not adjudicated contests, the QSO procedure is basically the same, and it is a good idea to practice good operating techniques during the CWTs and not adopt bad habits that might be less tolerable in a serious contest.

A canonical CWT QSO might go as follows:

1. CQ CWT VE3KI

2. NT6Q

3. NT6Q RICH 783

4. MARKO CA

5. TU VE3KI

My rationale explaining how this works goes as follows:

1. My CQ message contains only one copy of my callsign. If you send your callsign twice, experience suggests that some responders are likely to call over top of the second copy. Even if you are using QSK and hear a responder doubling with you, you will probably have to ask for a repeat in order to get their full callsign. Likewise, to avoid doubling with callers don't add K, CQ or CWT after your callsign, as many responders will start sending their callsign as soon as they hear the end of yours.

Even if you are not using cluster assistance yourself, it is a good idea to do what you can to ensure you will be spotted correctly on the Reverse Beacon Network. To this end, at least some of your CQ messages should contain either CQ or TEST. Make sure to leave a full space both before and after your callsign in order to avoid creating busted spots with extra characters tacked onto your callsign. It is best to send your callsign with standard spacing. If you feel that judicious use of half spaces within your callsign helps others to copy it more easily, do some testing with the RBN to ensure that your chosen spacing does not impede the ability of CW Skimmers to copy your callsign correctly.

If no-one answers your CQ right away, wait for a couple of seconds before sending the next CQ. Too short a delay can result in a responder calling at the same time as your next CQ message. Basically, what you want to do is give responders enough time to type in your callsign and start sending their own.

2. As an S&P station, when responding to a CQ you normally send your own callsign just once. Sending your callsign twice may result in doubling with the CQing station and messing up the rhythm. If the CQer does not respond right away, give them enough time to type in your callsign and start their exchange, and if there is still silence, you may assume they didn't copy your callsign, so drop it in once more. There is no need to send the CQing station's callsign, nor to add unnecessary fillers like DE and K.

3. The running station picks out a call from the pileup and sends that call followed by the ex change. There is no need to send the exchange twice, especially in the CWTs where requests for repeats are almost vanishingly rare. If the S&P station does not respond right away with their exchange, after a short wait the running station may send the responder's callsign once again, just in case the responder wasn't able to copy their own callsign because of QRM. Sometimes the running station may also need to repeat their sent exchange, but often it's enough just to send the responder's callsign in order to let them know that they were the one being replied to.

4. As the responding station, do not send your exchange until after you have copied your callsign from the running station. If the CQer was actually responding to someone else, sending your exchange "blind" only causes QRM.

If you hear what sounds like a busted version of your callsign, send your own callsign before your exchange. The fact that you sent your callsign as well as your exchange alerts the CQing station to the fact that they may have miscopied your call. On the other hand, if they did send your call correctly, don't send it again with your exchange, as that will just cause them to think they miscopied it and possibly ask for an unnecessary repeat. In either case, you do not need to send the CQing station's callsign.

If you want to add a bit of something sociable (a "dit dit", TU, GM/GA/GE, his name, whatever…), I'd suggest sending it before your exchange. If you wait until after your exchange to send something extra, the CQer may charge ahead over top of it, which defeats the purpose.

5. The normal TU message includes your callsign. If there were two or more responders to your original CQ and you feel it is likely that at least one of them stayed around during your QSO with the first one, you might cut your TU message short, but if there was only one responder, sending a TU without your callsign does not usually save any time. Indeed, if there is someone who doesn't yet know your callsign who is newly arrived on frequency and waiting to hear who it is, sending a bare TU without a callsign can actually end up slowing things down while the other station waits for your CQ message.

Even if there is a big pileup and what seems like an endless stream of callers, avoid the temptation to leave out your callsign on every TU. In major contests, a running station making more than three consecutive contacts without sending their callsign, or failing to identify for a period longer than one minute, is considered unsportsmanlike conduct and may even be grounds for disciplinary action. It is a good idea not to get into bad habits in the CWTs.

If a second responder ignored the advice above and sent their exchange in parallel with the person you were actually responding to, you might choose to precede your TU message with the callsign of the station you were responding to, to let them both know which callsign you are logging the contact with. If the other responder is paying attention, this should be a cue to them that they are not yet in the log.

If you want to add something sociable, I'd suggest sending it before the TU. Once the responder hears the TU, they may QSY right away, and if you send something after your callsign, other new responders may start sending on top of it and doubling with you.

That's my take; YMMV of course.

***73, Rich,* VE3KI** CWops #783)

(Editor's Note: I had to look up "canonical". It means "according to or ordered by canon law." Example: "the canonical rites of the Roman Church")

The Type of Cluster You Use For Spots Matters

By Kevan Nason N4XL

Even if you use the same filter, the type of cluster you use can affect whether you see a particular spot or not. Theoretical example: You tell your cluster filter to only show spots sent from stations in K4. Two skimmers, one in located in Pennsylvania (K3) and the other in South Carolina (K4), pick up D4C and dutifully tell the cluster about it. You may or may not be told where D4C is. One determining factor is whether you are using a cluster based on ARC 6 or CC Cluster. Lee VE7CC (designer of the popular CCUSER cluster filter software and owner of the VE7CC cluster) said this in post #10213 on the CC-User reflector on the CC-User reflector.

> "I am an active contester. I designed the CC Cluster software to deliver the spots that I would like to see myself. I do not want to see busted spots. ARC 6 needs to see 3 spots of a new call all on the same frequency before it sends out the third spot as valid. CC Cluster on the other hand needs to see only 2 spots. Then it will send out both of them. If there are 3 spots, then all 3 of them get sent out to users that have their filtering set to accept these spots. So CC Cluster sends out 3 spots, many times from 3 different areas, whereas ARC 6 only sends out one as valid. More users see these new valid spots."

Back to the D4C statement I made earlier. If you are logged onto a cluster and a spot comparison of D4C returns a positive match, both clusters will pass along the spot. But if you are using an ARC 6 based cluster it will only pass along one of the two spots. If the spot chosen is the K3 spot you won't see D4C because you are only accepting spots from K4 stations. You would see D4C if you used a CC Cluster based cluster because both the K3 and K4 skimmer spots would be passed along to you.

The implication for some might be to use clusters based on CC Cluster instead of ARC 6. But some operators might not want to do that. Because ARC 6 clusters require an additional positive comparison check those clusters should have fewer busted spots. As the old carnival barker saying goes, "Ya' pays your money and takes your chances."

Me? I have trained myself to not accept any spot as valid until I hear the call sign. When I jump to a spot, I assume it is wrong until proven otherwise. That being my mantra, quantity of spots is more important than quality.

Lee VE7CC had some other interesting points to make about his cluster filtering.

> "My CW and RTTY busted spot detection starts with the same routine as the ARC 6 software except that it only gives out skimmer valid spots. These valid spots are further processed. This consists of detection of harmonic spots, removal of spots always

busted, removal of spots ending in "test" or other similar characters depending on the contest. Runs them through a valid spot for country routine. Then they go out. These spots are dupe checked on a per user basis so that each user only gets one per 3 minute or greater time period. This keeps "new" next to N1MM band mapped spots to users know the spots were posted in the last 3 minutes and are more likely to still be on the band rather than other ones that are not updated as "new".

Although the CT1BOH algorithm as you use from ARC 6 gives you lots of statistics to use, I do not see it very useful during a contest. Most users only want useful spots that are really there"

I'm still digesting all that but wanted to get this out for this edition of the newsletter so decided to put some thoughts down. The SFCG reflector would be a great place to bat thoughts and ideas around. Here is my initial impression on how that filtering algorithm can affect me in a contest. CC Cluster based clusters like my favorite VE7CC:

- Do not include manual spots from actual people.
- Do not include SSB spots.
- Do not include stations who end their CQ's with "Test". Over the years I have run across recommendations to end your CQ that way many times and I regularly hear it during a contest. I'll have to start paying attention to whether they are a spotted station or one I ran across while spinning the knob.
- Many countries are now issuing weird call signs that may not pass CC Cluster country validation routine checking. They will not be spotted.
- I've been wondering why "New" has been appearing next to spots for stations I knew were there for a long time. Now I know.

All those last points on skimmer spot filtering help explain why I almost always find unspotted stations whenever I spin the dial. I think a lot of hams who use Assistance while operating fail to use their VFO's enough. I base that on my experience at a multi-multi. I watched many mult operators just sit waiting for new spots after working all the stations shown on their assigned bands spot list. Some would be bored and play with their phones. Some turned their chairs around and looked around the shack or out the glass door for several minutes at a time. Hate to say so, but once I asked one of those ops if he wanted a break. He said sure and wandered off. I sat down, spun the dial, found, then worked a dozen or so unspotted stations while he was gone. He was surprised I had logged so many new ones. As I rose to leave, I explained rather than sit there waiting I went looking for unspotted stations. He took the hint and kept the knob busy after that.

Observations by the Editor:

- Sometimes our computers seem to run excessively slow. The first item in the N1MM+ Tips section below might help.
- The answer to a Ham's post wondering why only one fuse melted when both the positive and negative lines had fuses reminded me how easy it is to forget. Both the Navy and civilian businesses I worked for had the same policy. Other than a cursory inspection for obvious things wrong, whenever a fuse would blow or circuit breaker trip the first action taken was to replace the fuse or reset the breaker and see if it happened again. One main reason for that is fuses and circuit breaker sensors have lifetimes. They get weaker with age and can simply blow for no apparent reason. Or maybe it was just an unusual occurrence like a temporary voltage/current transient. I remember recently spending an hour looking for the reason a fuse blew in my shack without ever discovering why. It bothered me for days and I worried every time I turned the device on. I had even opened the gear up and checked for damage. Nothing. I should just get back to the way the professionals do it. Replace it. If it doesn't blow, forget about it, and move on.
- An op asked how to safely remove the rubber ring around his VFO knob so it he could investigate a squeak. Andy K3WYC answered how he did it for a friends TS590. It should work for other rigs too. TS590 groups.io post #41577

  I removed the rubber from the main tuning knob as follows:

  Inserted a wooden toothpick between rubber and knob and parallel to the encoder shaft. As the rubber stretched, I added more toothpicks to stretch it more. When I had maybe 4 or 5 toothpicks in place, I inserted a smooth dental spoon between the knob flange and the rubber and started teasing the rubber forward. When I had enough gap to get my fingernails in, I slid the rubber off.

  I'm sure it could be removed a lot quicker, but I wanted to avoid any damage to the rubber or the knob finish.
- A thread on the Amateur-repairs reflector gave tips for cleaning plastic radio cases that are so old the plastic had become sticky.
  - Consensus was 99% Isopropyl Alcohol (IPA) was best. It had been used by many, including an old ham who had been in the radio repair business for decades. IPA at that concentration isn't normally found at your local drug stores or Walmart. At that concentration it naturally absorbs water directly from the air and slowly dilutes to 91% -- which you can find at Wally World, Target, drug stores, and similar outlets. Consensus was 91% IPA works okay, but claims are not anywhere near as well as the 99% does.
  - Anything with acetone in it (i.e.: nail polish and others) risks damaging and discoloring plastic.
  - Some repliers suggested WD-40 followed by IPA to remove the WD-40 residue.
  - Worth noting is I recently tried cleaning the plastic front of a stereo with a cleaner and too late discovered it had acetone in it. White streaks were left on the front

panel. My wife has a household cure all for everything that should be marketed on those late night TV commercials. Sticky toilet flush valves, tight windows, sticky wooden drawers, etc. She suggested I use some spray wax on the stereo panel. Huh. Hey Mikey! It worked! It didn't remove every white discoloration mark, but it did do a respectable job.

N1MM+ Tips:

- An N1MMLoggerPlus reflector post was made concerning slow computer response when running N1MM. That can happen anytime you are using your computer, especially with one having a low to midrange processor and a marginal RAM loadout. A Solid State Drive (SSD) has almost become mandatory for high performance. Development Team member John K3CT wrote this in message #77934:

  Several things that you can do:
  - If you are running other programs during a contest experiment with stopping other applications.
  - If your RF clobbers your wireless network, Windows will stall while reestablishing the network.
  - Make sure your user directory is not in the cloud (One Drive or similar). Database caching is disabled to help prevent database corruption. This will impact performance.
  - With an SSD disk you really shouldn't see an improvement if you open a new database for each contest.
  - Open the Windows power mode settings and set the computer for best performance.
  - During a contest open Task Manager, select Performance and look at the memory display to verify that there is more than 1Gb of "Available" memory. If your computer swaps memory to the disk it will cripple the performance of this low power computer.
  - While Task Manager is open, see if the CPU is operating normally above 50% utilization.
  - Run Windows update manually before the contest to reduce the risk of a Windows update during the contest.
  - If you are sending CW with internal CW, adding a Winkey or MORTTY will offload the CW generation saving CPU cycles for other items.
- Telnet filtering for and in N1MM+ happens in several places. The wrong selection in any of them can result in spots not showing. During a recent post on the N1MM reflector an op was not receiving spots and asked for help.
  - To minimize CPU loading it is recommended the first filter be in at the telnet site itself. The op knew that might be a problem. To verify it wasn't he wrote:

"I am trying to make the telnet cluster not filter anything at all. I send all the below to shut off any filters and check if any are active.
SET/NOFILTER
SH/FILTER
SET/FILTER DXBM/OFF
SH/FILTER DXBM
The results from those show that NO filters are active"

- Besides filters at the internet server level, filters can be set from within N1MM+ on the "Filters" tab of the Telnet window. You should check there.
- A third place is on the N1MM Mult & Q window. There are two boxes on that. One box determines if only Mults are displayed or if both Mults and unworked Q's are to be shown. The other box has band and mode filters.
- Many times, I have discovered I changed N1MM filter settings in one place but not the other. The settings are often "sticky" and remain when changing from one contest to another. An example is you last did a CW contest and are now wondering why you aren't seeing SSB spots in your current telnet feed. If you are having problems you need to check both places.
- An incorrect choice in any area can stop spots from showing.
- At the bottom of the Filter tab in the Telnet Window is a button called "Help – Why don't I See Spots?" Clicking that can help lead you to the solution. I just clicked on that and received some guidance explaining N1MM's filter options followed by this information:

  The current user selections are:
  Spots are removed when older than 20 minutes
  Spots are allowed for only the following bands: 1.8 3.5 7 14 21 28
  Spots are allowed for the following modes: CW
  Spots allowed from these call areas: K2 K3 K4

  Try sending a telnet sh/filter command to the cluster to see what filters are enabled on the cluster

Upcoming Contests:

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

SFOTA Current Leaderboard:

Jul-14-2023

Current Leaderboard

2023 OVERALL STANDINGS

	CALL	Contests	CW QSO'S	SSB QSO'S	DIGITAL QSO'S	RTTY QSO'S	TOTAL QSO'S
1)	N4XL	7	5140	1632	0	0	6772
2)	K3DNE	9	392	5851	16	102	6361
3)	WN4AFP	57	3594	1586	0	0	5180
4)	K4FT	64	4740	229	0	182	5151
5)	K4QQG	27	0	4018	0	259	4277
6)	N4IQ	14	2055	0	0	1272	3327
7)	N4QI	67	2215	539	0	531	3285
8)	KZ3P	39	0	3268	0	0	3268
9)	WB4HRL	50	2390	142	407	262	3201
10)	KG4IGC	13	685	762	0	1711	3158
11)	K7OM	16	1144	0	0	1830	2974
12)	NU4E	4	500	2375	0	0	2875
13)	KY4ID	21	2477	0	0	0	2477
14)	AC4MC	5	769	933	0	0	1702
15)	KD4S	10	924	160	106	236	1426
16)	NJ4Z	4	267	968	0	0	1235
17)	NE4EA	7	630	477	0	0	1107
18)	KS4YX	4	122	0	0	718	840
19)	KG9V	1	0	465	0	0	465
20)	N2OG	2	12	293	0	0	305
21)	KM4RK	3	0	100	0	0	100
22)	WA2BCK	2	0	63	0	0	63
23)	KB1QU	1	0	57	0	0	57

2023 INDIVIDUAL MODE STANDINGS

CALL	CW QSO'S
N4XL	5140
K4FT	4740
WN4AFP	3594
KY4ID	2477
WB4HRL	2390
N4QI	2215
N4IQ	2055
K7OM	1144
KD4S	924
AC4MC	769
KG4IGC	685
NE4EA	630
NU4E	500
K3DNE	392
NJ4Z	267
KS4YX	122
N2OG	12

CALL	SSB QSO'S
K3DNE	5851
K4QQG	4018
KZ3P	3268
NU4E	2375
N4XL	1632
WN4AFP	1586
NJ4Z	968
AC4MC	933
KG4IGC	762
N4QI	539
NE4EA	477
KG9V	465
N2OG	293
K4FT	229
KD4S	160
WB4HRL	142
KM4RK	100
WA2BCK	63
KB1QU	57

CALL	DIGITAL QSO'S
WB4HRL	407
KD4S	106
K3DNE	16

CALL	RTTY QSO'S
K7OM	1830
KG4IGC	1711
N4IQ	1272
KS4YX	718
N4QI	531
WB4HRL	262
K4QQG	259
KD4S	236
K4FT	182
K3DNE	102

3830 Activity:

Contest	Call	Class	Power	Score
ARRL FD				
06/26/23	KZ3P	1D	LP	502
06/25/23	N4IQ(AC4Q)	2D	LP	3,002
06/25/23	N4QI	1D	LP	446
06/26/23	WB4HRL	1D	HP	436
IARU				
07/09/23	K2SX	SOAB(A)CW	HP	524,992
07/09/23	K4QQG	SOABSSB	HP	55,506
07/09/23	K7OM	SOABCW	LP	9,728
07/10/23	KD4S	SOABMixed	HP	7,052
07/09/23	KZ3P	SOABSSB	HP	9,500
07/09/23	N4IQ	SOAB(A)Mixed	HP	521,110
07/09/23	N4XL	SOAB(A)Mixed	LP	859,971
07/09/23	NI7R	SOABCW	HP	71,024
07/09/23	NN4SS	SOABCW	HP	140,175
07/09/23	NU4E	SOAB(A)Mixed	HP	86,104
07/09/23	WB4HRL	SOABCW	HP	69,776
07/11/23	WN4AFP	SOAB(A)Mixed	LP	355,770
King of Spain SSB				
06/26/23	KZ3P	SOAB	HP	112
06/25/23	N4QI	SOAB	LP	60
RAC Day				
07/02/23	K4QQG	Single Op Assisted	HP	19,080
07/02/23	KZ3P	Single Op Phone	LP	4,950
07/02/23	N4QI	Single Op	LP	5,850
07/02/23	WB4HRL	Single Op Assisted	HP	7,504
TBDC				
06/18/23	KY4ID	Single Op	LP	125
06/18/23	N4IQ	Single Op	HP	139
WVQP				
06/18/23	K4QQG	Single Op	HP	30
06/18/23	KZ3P	Single Op	HP	416
06/18/23	WB4HRL	Single Op	HP	236
06/18/23	WN4AFP	Single Op	LP	1,473

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73 es QRT de N4XL