March 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

Welcome W1RPG

Bob W1RPG was referred to SFCG by Scott N2OG after their NAQP QSO. He recently relocated from Fairfield County CT to Piedmont SC. He was first licensed in 1979 as a Novice and has upgraded over the years to Extra. Bob enjoys operating FD, Ten Ten, Sweepstakes, NAQPs and State QSO Parties (Bob: our SCQP is this Saturday!!! Hint-hint). His first logger post paper logging was CT on a DOS machine loaded with a 5.5" floppy (I remember those days)! After moving to SC he's started putting up a few wires and has plans for an HF Yagi. Bob has been involved with the ARRL W1AW/1 Centennial operation in 2014, has been a member of the CT K2D team for 13 Colonies and was involved as a Boy Scout Radio Merit Badge Counselor. Bob is also a member of the Yankee Clipper Contest Club (YCCC).   Please visit his QRZ.com page for a bunch more info.

Bob: Welcome to the Swamp Fox Contest Group!

73, Ed K3DN

Editor's Note: Bob used to live in Shelton, CT. On his QRZ site he says Shelton is home to the Bic Corporation. Look out for Bob, he has to be a force to be reckoned with because he is used to a lot of BIC time!

Welcome KQ4LQL

Herschel KQ4LQL found his way to SFCG via Dave WN4AFP. Herschel just received his General license in October of 2023! Like many, he came from the 11 meter world - a natural progression. He gives thanks to his Elmer and good friend, W4SMF for helping him along the way, teaching him, and pushing him to get licensed. When not in his hamshack or fishing, Herschel works in IT with a focus on telecom. His

hamshack: Kenwood TS-570D, a Yaesu FT-767GX with 2 and 6 meter modules, and his favorite; an Icom IC-706MKII. His antenna collection is a fan dipole for 40, 20, and 15, a very old Antron 99 for 10 meters, a 12 meter dipole and a 17 meter dipole (the first antennas he built himself). He is primarily an FT4/FT8 and SSB operator. In the spring he will be relocating his tower, adding a tilt plate, and putting a nice beam antenna at the top! Herschel told Dave that he plans on operating many of the state QSO parties this year and on his SFCG application he states that he enjoys all contests! Great to hear!

Herschel: Welcome to the Swamp Fox Contest Group!

73, Ed K3DN

Editor's Note: We're glad to see Herschel hitting the ground running in the SFCG. He has posted many times and shared plans for a portable mast made from material readily available at Lowe's or Home Depot.

Contest Tips:

I've been thinking of doing a presentation for new contesters in which I'd cover the basics that all of us old timers thoroughly know. It's easy to forget some newer folk haven't ever been taught some of them. So, this month I'm just going to jot down whatever random thoughts pop into my head.

- Spotting during CW, RTTY and FT contests is greatly enhanced by the Reverse Beacon Network (RBN). How you structure your CQ can directly affect how easily the RBN picks you up or if it generates a busted call for you (i.e.: N4XR instead of my N4XL). Here's some RBN tips…

    o The RBN will mark you as calling CQ if it hears you sending CQ (duh!), your call is repeated twice, if you use Test instead of CQ.

    o Although it adds time to your CQ some people advocate sending your call twice to ensure the RBN has it correct. Example: CQ TEST N4XL N4XL.

    o Many people click on a call sign, work and then log a station, without listening to the call sign. If you are spotted with a busted call (i.e.: K4XL instead of N4XL) it is usually best to just move and find another CQ frequency rather than fighting people asking for fills on your call when you send an unexpected exchange.

- To be competitive you must be aggressive. Following then nice rule that if you hear another station answering the station you want to work then you wait and let them go first will result in you being disappointed with your score.

- Many people ignore the part of the rules that talk about penalty points. In most cases during log checking, if you did not copy their call correctly you not only lose the points of that QSO you lose 2 or 3 times the points the QSO was worth. Newer contesters typically have a 10 to 15% error rate of their 600 QSO's. The top scorers typically have less than 2% of their 2,000 QSO's and some are less than 1%.

- Always, always, always read and understand the rules well before the contest starts.

- If you are doing a CW contest and click on a spot and find a pileup you should understand that everyone else who clicks on that spot is on the exact frequency as you. The poor Running station has a heck of a time sorting out a call sign. It often benefits you to move a bit off frequency so they can pick you out using their RIT (Receive Incremental Tuning). Don't go too far off frequency though. If the Runner is using narrow filters you might be trying to get their attention while outside their filter pass band.

- When trying to bust a pileup there are three main ways to do it. 1) Wait until the Runner says thanks and gives their call letting everyone know he is ready and then throw you call out hoping your stronger than the rest of the people, 2) Wait until the initial rush of calls is over and then throw yours out, and 3) After the Runner says Thanks throw your call out before the big rush of people starts. Experienced Runners respond best to #1 and #3. Inexperienced ones are usually overwhelmed by people and do best when things are quiet. #2 works best for them.

- Always make sure you hear the other stations call sign and exchange before logging them. Don't trust the spotted call sign or assume the name or exchange information provided by the Call History File is correct.

- You won't work as many stations as you could if you are looking at websites (like their QRZ page) or watching a football game while contesting. You can't work any stations if your Butt is not In the Chair (BIC). If you want a good score you need to pay attention to your radio and stay in the chair.

- Both multipliers and the number of QSO's contribute to your final score. Although it is fun to chase mults, it is mostly rate that wins contests. Some loggers give you a continuous updated reading of '1 mult is worth X QSO's". They also show your current rate. Combine the two. If you are doing a 60 Q's/Hr rate (1 per minute), and the Mult/Q ratio is 1 mult is worth 2 Q's, if it takes you more than 2 minutes to bust a pileup you probably wasted time trying to bust the pileup and your score suffered. It would have been better for you to have moved on and come back to that station again later in the contest.

- You don't need rates of over 100 Q's/hr to do well in a contest. I have several #1 in Region 4 certificates in the SOABLP Assisted and Unassisted categories with a 50 to 70 Q's an hour rate.

- Although cheating does happen it is far more likely the people that are killing you are simply better operators than you are. If you are finishing 19th in your category, you need to get better.

- Don't rely only on spots. Turn the VFO and find unspotted stations.

- If you aren't comfortable Running, practice.

- Most newer contesters know about desensitization in FM radios due to transmitters being close to you. The same thing happens in HF radios too. Sometimes the reason you can't hear the weaker ones is simply because your receiver is overloaded by all the stronger

signal on the band. Learn to use your RF gain control or to fight strong signals with SDR based radios.

- If you don't know why Take Off Angles are important, learn. Then evaluate your antenna system using your new knowledge.

- You don't really need an amplifier to break 1,000,000 points in a major DX contest. Hint: Are you a good operator or do you just think you are?

N4MCC's QSL Card

Received this the other day.
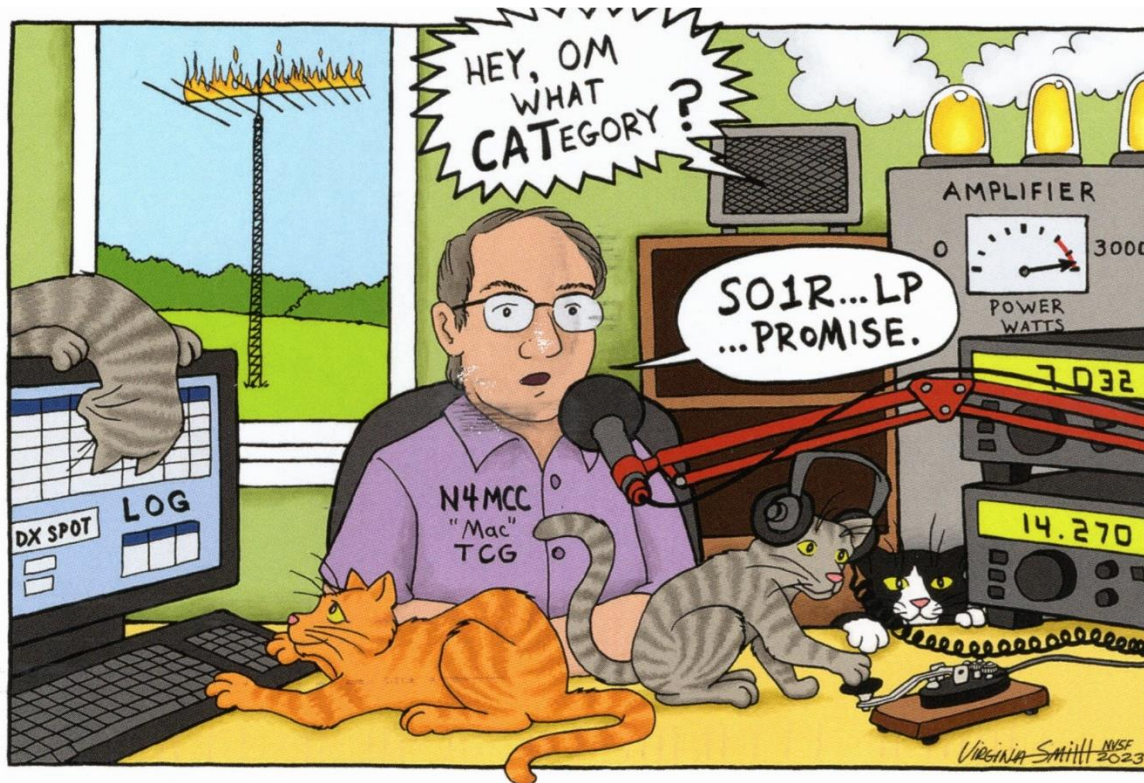
SFOTA Errors

A couple people have made some errors creating new contests in the SFOTA. Be sure the contest you are adding isn't already listed. Check for alternative names as some people may call it something slightly different. Also pay attention and select the modes allowed in the contest.

From the Reflector:

- Dave NJ4F is giving up on his tower plans and polled the group for their thoughts on replacement antennas. I agree Dave. It is getting harder to maintain antennas high up in the air.

- There were many great scores posted for the ARRL DX CW contest. Kevan N4XL ended up with a personal best of any contest at over 3.5 million claimed points. Ron N4VZ jumped into the fray and tried to improve his CW skills by copying without the CW decoders. Dave KE4EA put in his 1st ARRL DX CW score. Ed K3DNE said he scrolled the 3830 site and noticed the following:

  #1 USA SOAB QRP Limited Antennas: AA4SD
  #3 USA SOAB U HP Limited Antennas: K2SX
  #3 USA SOAB U LP: N4XL
  # 6 USA SOSB10 LP Limited Antennas: K4FT

- Ed K3DNE, Dave WN4AFP, and Andy AA5JF (and perhaps others, sorry if I missed you) have been doing some post contest data mining on their scores. If you are looking to improve that is a great idea. Critique yourself. See what works and what didn't. Great job guys!

- It is good to see Dennis K2SX posting so many scores and sharing advice. Dennis is moving and about to lose his station. Hope to hear you from your new QTH, be it remote operation, at W7WZ, or even your new location.

- Matt NU4E is having fun checking out his new antenna farm in between working weekends. It must be killing him to have new toys and not be able to fully play with them.

- Matt NU4E must have bad eyesight. He bought a 50" curved monitor too.

- Scott N2OG had some fun in the ARRL DX CW playing with SO2R. He managed to snag DP1SOL while doing so. Scott, while reading your email for this I realized I didn't comment on your antenna question. If it was me I'd go with the Hexbeam.

- Kevan N4XL started a discussion about how to Run pileups with several loud signals calling at once. Some good ideas were thrown out. It was decided a lot of the problem is simply rude behavior from the S&P crowd.

- Bob KZ3P snagged some good DX and managed to complete 4 band DXCC. Good work, Bob. He's looking at improving his 80 and 160 antennas to make it 5 and 6 bands.

- Kevan N4XL had some water damage in his home. His XYL also had some medical issues. The two have put a damper on his contesting.

- Our Skulk (group of Foxes) did very well in the SCQP. Thank you, Dave AFP, for driving that. Also thank you SFCG leadership for being a cosponsor of the event. Andy AA5JF did fantastic with a claimed score of 765,016 points! Even Dennis K2SX and Dave WB5NHL found time to play. Surprisingly, many like Ron N4VZ, Frank KG4IGC, Bob W1RPG, and Rob AJ5E found FT8

to be a bust. Sounds like Dave AFP's QSO Party group might have a bit more work to do getting the word out to casual contesters and the FT8 community in general about using FT8 in QP's. Unfortunately, your Editor and at least one other SFCG member was involved in manning voting polls during the event. By the time we shut down our poll down and made it home there were only a few minutes left in the contest and the dog demanded those. First SCQP I've missed in many years.

- Several also played in the CQ 160. Ron N4VZ noted a low dipole (50 ft) on 160 meters isn't the best antenna for the CQ 160 contest, but he still had fun. Maybe he'll get his beverage up for next year. Ed had a Senior Moment and hit the Self-Spot button. A no-no in this one. He submitted his log anyway to help the log checkers. His score will be listed as a Check Log and not count because of the error. Glad I'm not the only one who's done something silly like that.

- John W7WZ didn't have as much trouble as Ron did, but John's inverted-V's apex is at 95 ft. John spent 8 hours in the chair and used his HiZ receive antenna.

- Many have been enjoying the great high band openings. Bob KZ3P noted a 10 meter SSB opening that let him snag two HI5 South Korean stations.

- Dave WN4AFP's article about the State QSO Party Challenge was featured in the March/April Edition of the National Contest Journal. As Ed K3DNE stated, "Congrats Dave!"

- Kevan N4XL coordinated and gave a presentation on N1MM features via Zoom. He is repeating some presentations given years ago for the benefit of our newer members. Stay tuned for more talks.

- Ford KK4MRG lost his dipole just before a contest. Rather than give up he reached into his SOTA bag and pulled out his Wolf River Coil SOTA special. Isn't great to have a backup plan? He later wrote "So I was able to use my SOTA Special Wolf River Coil for the contest since my dipole snapped. I felt like I wasnt doing well until I realized I had a balun attached that was made for my last antenna. That went off. Things picked up then. I was only able to do limited hours, but I was happy to get Russia and Morocco with the [tiny] antenna."

- Dave NJ4F finally managed to sell his SteppIR. He is planning to go vertical.

- The KB4DX team at W7WZ had a great time in the ARRL DX Phone contest. Wish I could have been there. They especially enjoyed using voice keying via N1MM's function keys. Yes, that definitely saves the voice and makes it quieter in the shack. The team of W7WZ, AA4VT, K3DNE, KG9V, and WN4AFP ended up with a very respectable 5,934,717 points. It's a shame more SFCG members aren't taking advantage of operating from John W7WZ's great station.

- The ARRL DX SSB was well represented by the SFCG. Check out the scores in the 3830 section below. Besides those often playing, stations participating included both some newer members and some we don't always hear from. Calls included K4QQG, N1SUZ, NN4SS, W1RPG, KQ4LQL, NI7R and W4GE.

- David AA4VT brought up an old technique for combatting QRM on 40 meter phone. His friend AA4V reminded him you can always operate split mode. Matt NU4E has extensive experience

running split. His comment about it is included below in the Observations by the Editor section.

- It's annoying to hear a weak CW signal and spend time during a contest trying to make out the call only to find it is a beacon. Or maybe you want to monitor beacons to see where the bands are open to. Ed K3DNE found a feature in Telnet filters that prevents or only allows beacon spots. It involves using the /b modifier. That reminds me to mention a practice I use. I will periodically read through the instructions (or manual) for things I use while contesting just to see what kinds of things are possible. Sometimes I find a nugget like that which can help me be more efficient.

- It is great to hear Herschel KQ4LQL asking questions like how to interpret his WSPR spots of his dipole antenna pattern. I also appreciated Dave WB5NHL's response. We are all made stronger when everyone participates.

  - President Ed K3DNE mentioned our dues are used to sponsor two plaques. The 2023 ARRL DX SOULP Overall Winner sponsored by Swamp Fox Contest Group - in memory of Marc Tarplee, N4UFP and the CQ WPX SSB USA Tribander/Single-Element Tom Francis, W1TEF Memorial plaques.

  - Dave NJ4F started an interesting thread about using an antenna fed with open wire feed line. The thread started with post #26838 on March 6th. Dennis K2SX included some supporting info on the thread in post #26859 on March 7th.

  - The SFCG is responding to the State QSO Party Challenge by being very active. There are several posts after every weekend QSO Party.

  - Dennis K2SX is moving from Pawleys Island to the Charlotte area and downsizing his shack. Pay attention to his posts for equipment.

  - President Ed is thrilled with SFCG's "ginormous" improving participation in the combined ARRL DX SSB/CW events. Between 2023 and 2024 we went from 24 to 37 participants and from 10.7 million to 22.6 million points (before log checking and ARRL logs received reports). Our Club standing compared to all participating clubs is still to be determined.

  - Perhaps it was because of being on Easter weekend, but the lackluster response to W7WZ's offer to operate in the March CQ WPX SSB contest was disappointing. John W7WZ has canceled the event.

  - Al NE4EA is upgrading from a vertical resistor antenna to a new SteppIR vertical. He says it is under the carport. Must not be very tall. Not sure how good it will work Al. Did you put out plenty of radials.

  - Herschel KQ4LQL posted plans for how he constructed a DIY Telescoping Antenna Mast. Parts are readily available at places like Lowe's and Home Depot. A high antenna often significantly improves your scores. Keep safety and duty load in mind when using this type of mast though. It uses EMT conduit which hasn't proven to be strong enough for the antennas typically used by hams. Especially in windy conditions. I've heard several stories over the years about failed EMT masts.

- The BARTG RTTY contest uses the current time as part of the exchange. Bill N4IQ shared his N1MM Fkey file with the group in post #26896. He uses the N1MM macro command {TIME2} which reads and uses his computers time clock to automatically send the time.

- Several were disappointed that the high bands were long during the VAQP. Many had trouble making Q's on 10, 15, or 20 meters.

- Bob W1RPG is seeking advice for what program(s) to use for his initial foray into RTTY contesting.

Observations by the Editor:

- Not from the SFCG, but Brian G8OSN wrote in the RSGBTechnical Groups.io reflector "Please be aware, if you receive posts in your inbox from GroupsIO and you mark one as Spam, you will be unsubscribed from the relevant group. This isn't an option we can change."

- Matt NU4E/DJ8OG is a world class operator with some 1st place World wins. He commented about running split in response to doing so on 40 meters to overcome QRM in the limited operating window shared by IARU Regions 1 and 2.

    I found running split is nowhere near the rate you can do simplex if you have the elbows and the nerves to fight the QRM. But [sometimes] a smaller run is better than no run, [especially] on M2 where the two stations need to be somewhere during the night hours.

    I think I've said it before during my CQWW SSB writeup, I had a very nice 40m frequency about 45 minutes before the contest started, talked all over Europe, I got nice reports and I kept the frequency busy until about 10 minutes before the contest. This was when the monster QRM began and I had [no one] answering me on my CQ, I kept the frequency until a few minutes into the contest but it was not worth fighting as nobody cared about my signal in Europe. I gave up and started S&P, at that point it was the better choice for me.

    This happened to me when contesting from DL also, I sure wasn't weak back in those days but I could not keep a run frequency inside the DX window. I still remember those nice runs when it finally worked for a while but recently it's harder and harder to do so. I also would think that the Elecraft K4 and my contest ears should let me deal with QRM but if there's no rate then it's not worth it :-)

    With a clean QSX frequency and self spotting it may be a game changer as somebody must find and spot you above 7200. I love 40m but during a SSB contest my numbers on that band aren't good as I find I can do other things on 20m / 80m / 160m. A decent run rate on 40m would make me rethink but as long as it's not a good one I'd prefer other bands or S&P

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.

- N1MM's Spectrum Window is often cluttered enough without showing stations you've already worked. Recent changes to the Spectrum Window now allow the following selections:
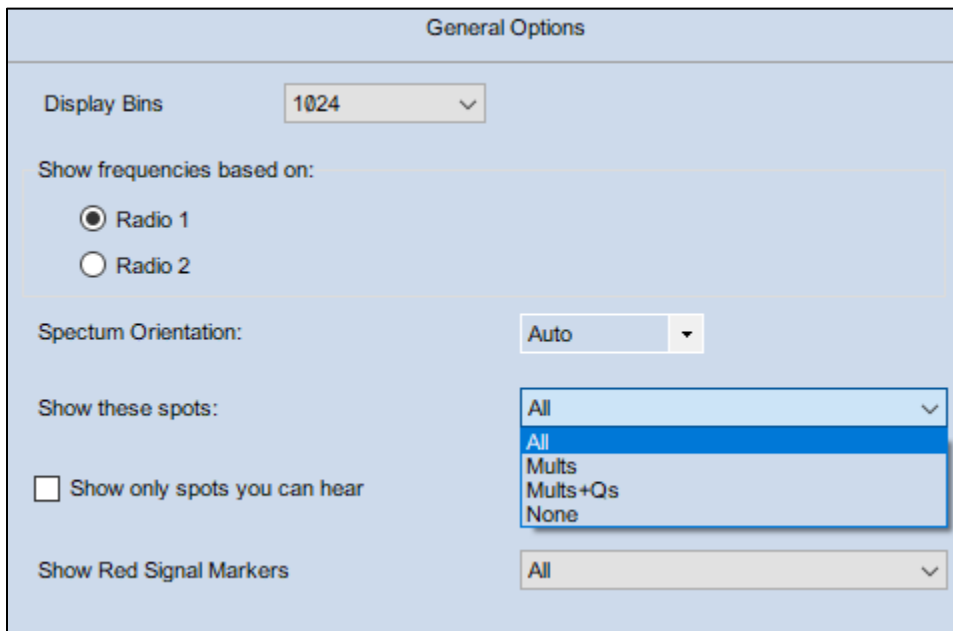
- Sometimes confusing things happens when you change frequency in N1MM. Even knowing about it, I was caught by surprise during the VAQP. N1MM's configurer has a built in band plan and can be set to change your radio's mode based upon frequency. The program is also smart enough to look at what contest you are in, or if you said you are only using a particular mode for your entry and prevent you from transmitting with an unauthorized mode. It only took me a second to realize I had set the program wrong. Below are some options on the Mode Control tab of Configurer. Note the drop down arrow to the right of RTTY will let you designate other modes.
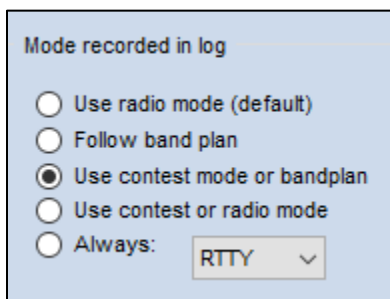
- During my talk on N1MM a few days ago Dennis K2SX asked why I did not have an option to send partial calls. I was confused because when operating I often let N1MM send partial call

signs from the Entry Window. The image in my talk was from about 10 years ago and did not have that box checked, but it was in my program. It is good to have the option of sending partial calls. If you can't, check here…
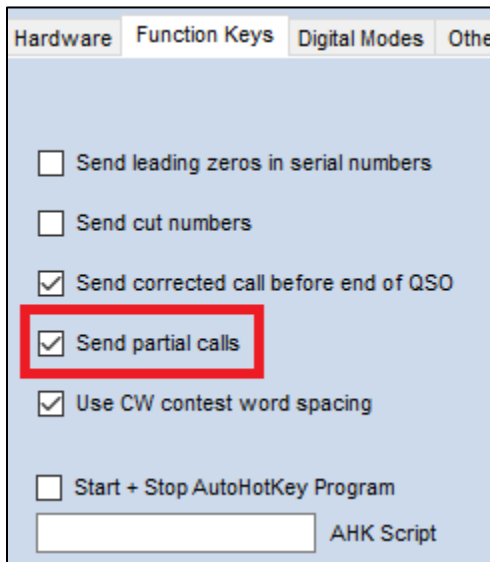
- RTTY operators using N1MM and MMTTY may be interested in this thread involving Align and PROFILE0.

n7or Mar 12   #83835

I replaced the CLEARRIT in my function keys with ALIGN and now the 2 keys I did that to don't transmit anything, but they do perform the alignment? As if everything before that macro is ignored. Bet I'm goofing up syntax somewhere.
Example RUN F1 and RUN F3 below.

F1 Run CQ,{TX}{ENTER} BARTG {MYCALL} {MYCALL} CQ {RX}{ALIGN}

F2 Run Exch,{TX}{ENTER} {SENTRST} {EXCH} {EXCH} {TIME2} ! {RX}

F3 Run TU,{TX}{ENTER} TU {MYCALL} CQ {RX}{ALIGN}

Thank you - N7OR

Just a guess... But probably needs to be inside of the RX... RX should be the last macro. (Maybe) :o)

Ron, WV4P

What I am guessing you want to do is move the received Mark audio frequency in your RTTY engine program to line it up with your transmitter's Mark frequency. ALIGN doesn't do this; it changes the transmitter's dial frequency and the audio frequency in your RTTY program by numerically equal amounts, in order to align your transmitter with a signal you tuned in by clicking in the RTTY program's waterfall or spectrum display. The time to use the ALIGN button or macro is not during your CQ message, it is immediately after clicking on a signal in the waterfall/spectrum and before starting your transmission to that station.

If you are using MMTTY as your primary RTTY engine, you can move MMTTY's audio Mark frequency back to the default HAM setting using the {PROFILE0} macro at the start of your CQ messages. The {CLEARRIT} macro clears the radio's RIT, and the {PROFILE0} macro effectively does the same thing for the "RIT" in the MMTTY receive decoder.

73,
Rich VE3Ki

Upcoming Contests:

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

SFOTA Current Leaderboard:

Mar-18-2024

Current Leaderboard

2024 OVERALL STANDINGS

	CALL	Contests	CW QSO'S	SSB QSO'S	DIGITAL QSO'S	RTTY QSO'S	TOTAL QSO'S
1)	N4IQ	23	3083	1061	0	3054	7198
2)	WB4HRL	69	4194	736	8	1350	6288
3)	WN4AFP	43	3942	2001	0	0	5943
4)	K2SX	15	5167	0	0	0	5167
5)	N4XL	4	3438	867	0	0	4305
6)	K3DNE	14	1042	3101	101	0	4244
7)	KE4EA	54	3372	318	8	3	3701
8)	K4QQG	17	0	3037	3	516	3556
9)	KZ3P	23	535	1453	0	999	2987
10)	K4FT	25	1839	158	0	0	1997
11)	KG4IGC	5	304	427	0	1153	1884
12)	NU4E	3	1600	1	44	0	1645
13)	AA5JF	4	1400	230	0	0	1630
14)	KY4ID	13	1185	62	0	377	1624
15)	NI7R	3	1220	88	0	0	1308
16)	N1UZ	7	290	0	0	987	1277
17)	AA4SD	10	1269	0	0	0	1269
18)	N4QI	16	707	258	0	206	1171
19)	KQ4LQL	7	0	1095	0	0	1095
20)	KD4S	15	546	49	5	296	896
21)	K7OM	6	155	0	0	731	886
22)	WA4LDU	8	139	343	94	183	759
23)	KS4YX	5	176	0	13	565	754
24)	N4VZ	9	0	433	9	255	697
25)	W1RPG	6	0	596	0	0	596
26)	N1SUZ	7	0	533	0	0	533
27)	WB5NHL	9	0	194	0	102	296
28)	N2OG	5	124	122	0	0	246
29)	N4VGE	1	0	167	0	0	167

2024 INDIVIDUAL MODE STANDINGS

CALL	CW QSO'S	CALL	SSB QSO'S	CALL	DIGITAL QSO'S	CALL	RTTY QSO'S
K2SX	5167	K3DNE	3101	K3DNE	101	N4IQ	3054
WB4HRL	4194	K4QQG	3037	WA4LDU	94	WB4HRL	1350
WN4AFP	3942	WN4AFP	2001	NU4E	44	KG4IGC	1153
N4XL	3438	KZ3P	1453	KS4YX	13	KZ3P	999
KE4EA	3372	KQ4LQL	1095	N4VZ	9	N1UZ	987
N4IQ	3083	N4IQ	1061	KE4EA	8	K7OM	731
K4FT	1839	N4XL	867	WB4HRL	8	KS4YX	565
NU4E	1600	WB4HRL	736	KD4S	5	K4QQG	516
AA5JF	1400	W1RPG	596	K4QQG	3	KY4ID	377
AA4SD	1269	N1SUZ	533			KD4S	296
NI7R	1220	N4VZ	433			N4VZ	255
KY4ID	1185	KG4IGC	427			N4QI	206
K3DNE	1042	WA4LDU	343			WA4LDU	183
N4QI	707	KE4EA	318			WB5NHL	102
KD4S	546	N4QI	258			KE4EA	3
KZ3P	535	AA5JF	230				
KG4IGC	304	WB5NHL	194				
N1UZ	290	N4VGE	167				
KS4YX	176	K4FT	158				
K7OM	155	N2OG	122				
WA4LDU	139	NI7R	88				
N2OG	124	KY4ID	62				
		KD4S	49				
		NU4E	1				

3830 Activity:

We haven't said in a couple years, but we decided to not post the regular weekly events like CWT's to minimize space.

Contest	Call	Class	Power	Score
ARRLDX CW				
02/19/24	AA4SD	SOAB Limited-Ant	QRP	356,379
02/19/24	AA4VT	SOAB	HP	241,029
02/19/24	K2SX	SOUAB Limited-Ant	HP	2,971,710
02/18/24	K3DNE	SOUSB15	HP	182,412
02/19/24	K4FT	SOSB10 Limited-Ant	LP	42,480
02/19/24	KD4S	SOAB Limited-Ant	HP	4,446
02/19/24	KE4EA	SOUAB Limited-Ant	LP	311,640
02/19/24	KY4ID	SOUAB	LP	29,748
02/19/24	KZ3P	SOUAB	LP	144,096
02/19/24	N1UZ	SOAB	LP	75,264
02/19/24	N4QI	SOAB Limited-Ant	LP	104,148
02/21/24	N4VZ	SOAB	LP	18,600
02/19/24	N4XL	SOUAB	HP	3,584,988
02/19/24	NI7R	SOUAB Limited-Ant	HP	950,250
02/19/24	NN4SS	SOAB	HP	793,260
02/19/24	NU4E	SOUAB	HP	1,798,500
02/19/24	W7WZ	SOAB	HP	915,342
02/19/24	WA4LDU	SOSB10 Limited-Ant	LP	576
02/19/24	WB4HRL	SOUAB	HP	273,480
02/19/24	WN4AFP	SOUAB Limited-Ant	LP	869,466
ARRLDX SSB				
03/04/24	K4QQG	SOAB Limited-Ant	HP	936,936

Contest	Call	Class	Power	Score
03/04/24	KB4DX	M/2	HP	5,934,717
	(KB4DX,AA4VT,K3DNE,WN4AFP,KG9V,@ W7WZ)			
03/04/24	KD4S	SOAB Limited-Ant	HP	1,071
03/05/24	KE4EA	SOUAB Limited-Ant	LP	89,208
03/03/24	KQ4LQL	SOUAB	LP	327,000
03/05/24	KZ3P	SOUAB	HP	91,875
03/03/24	N1SUZ	SOAB	LP	39,204
03/04/24	N4IQ	SOUAB Limited-Ant	HP	705,189
03/04/24	NI7R	SOAB Limited-Ant	HP	16,368
03/03/24	NN4SS	SOAB	HP	121,002
03/04/24	W1RPG	SOAB Limited-Ant	LP	127,332
03/04/24	W4GE	SOUAB	HP	290,895
03/04/24	WB4HRL	SOUAB Limited-Ant	HP	145,920
BARTG				
03/17/24	N1UZ	SOAB	LP	8,800
03/17/24	N4IQ	SOAB	HP	424,800
03/18/24	NN4SS	SOAB	HP	75,816
03/18/24	WB4HRL	SOAB	HP	40,500
CQ160 SSB				
02/25/24	N4VZ	Single Op	LP	6,061
02/25/24	NU4E	Single Op Assisted	HP	44,544
02/25/24	W7WZ	Single Op Assisted	HP	10,240
02/26/24	WA4LDU	Single Op	LP	12,684
IdQP				
03/10/24	K3DNE	SOABMixed	HP	176
03/10/24	K4FT	SOABCW	LP	8
03/10/24	K4QQG	SOABSSB	HP	88

Contest	Call	Class	Power	Score
03/11/24	KD4S	SOABCW	HP	70
03/12/24	KE4EA	SOABCW	LP	60
03/11/24	KZ3P	SOABMixed	LP	512
03/10/24	N1SUZ	SOABSSB	LP	676
03/11/24	N4QI	SOABMixed	LP	60
03/11/24	W1RPG	SOABSSB	LP	12
03/11/24	WB4HRL	SOABMixed	HP	510
03/10/24	WB5NHL	SOABSSB	LP	132
03/11/24	WN4AFP	SOABCW	LP	280
NA Sprint RTTY March				
03/10/24	N4IQ	Single Op	HP	3,480
NAQP RTTY February				
02/26/24	K7OM	Single Op	LP	320
02/27/24	KG4IGC	Single Op	LP	32,430
02/25/24	KS4YX	Single Op	LP	7,869
02/25/24	N4VZ	Single Op Assisted	LP	3,479
02/26/24	WB4HRL	Single Op Assisted	LP	1,428
NCQP				
02/26/24	K3DNE	SO SSB	HP	470
02/26/24	K4FT	SO CW	LP	3,986
02/26/24	K4QQG	SO SSB	HP	7,056
02/26/24	KD4S	SO CW	HP	1,562
02/28/24	KE4EA	SO Mixed	LP	4,398
02/26/24	KQ4LQL	SO SSB	LP	3,672
02/26/24	KZ3P	SO Mixed	HP	14,162
02/26/24	N1SUZ	SO SSB	LP	7,730
02/25/24	N4IQ	SO SSB	LP	18
02/26/24	N4QI	SO Mixed	LP	896
02/26/24	N4VZ	SO SSB	HP	576
02/25/24	N4XL	SO CW	LP	147
02/26/24	W1RPG	SO SSB	LP	2,390
02/26/24	WB4HRL	SO Mixed	HP	15,440
02/25/24	WB5NHL	SO SSB	LP	3,850

Contest	Call	Class	Power	Score
02/26/24	WN4AFP	SO Mixed	LP	20,632
OkQP				
03/10/24	K3DNE	SOABMixed	HP	1,320
03/10/24	K4FT	SOABCW	LP	1,020
03/10/24	K4QQG	SOABSSB	HP	680
03/11/24	KD4S	SOABCW	HP	4,224
03/11/24	KE4EA	SOABMixed	LP	767
03/11/24	KZ3P	SOABMixed	LP	1,156
03/11/24	N1SUZ	SOABSSB	LP	972
03/11/24	N4QI	SOABMixed	LP	384
03/11/24	W1RPG	SOABSSB	LP	8
03/11/24	WB4HRL	SOABMixed	HP	2,425
03/10/24	WB5NHL	SOABSSB	LP	308
03/11/24	WN4AFP	SOABMixed	LP	23,427
SA10				
03/11/24	N1SUZ	SO SSB	LP	600
SCQP				
02/25/24	AA4SD	Single Op FixedCW	LP	20
02/25/24	K2SX	Single Op FixedCW	HP	221,502
02/25/24	K3DNE	Single Op FixedSSB	HP	674,538
02/26/24	K4FT	Single Op FixedCW	LP	39,344
02/25/24	K4QQG	Single Op FixedSSB	HP	365,334
02/26/24	K4YTZ(KG9V)	SO MobileSSB	LP	4,416
02/26/24	KB4FHA	Single Op FixedSSB	HP	13,688
02/25/24	KD4S	Single Op FixedMixed	HP	55,030
02/26/24	KE4EA	Single Op FixedMixed	LP	263,948
02/25/24	KN8F	Single Op FixedSSB	LP	16,584
02/25/24	KQ4LQL	Single Op FixedSSB	LP	97,020

Contest	Call	Class	Power	Score
02/25/24	KZ3P	Single Op FixedMixed	HP	279,834
02/25/24	N4QI	Single Op FixedMixed	LP	58,764
02/25/24	N4VGE	Cnty ExpedSSB	LP	29,442
02/25/24	N4VZ	Single Op FixedMixed	HP	286
02/26/24	W1RPG	Single Op FixedSSB	LP	82,960
02/25/24	W4JM	Single Op FixedCW	LP	51,500
02/25/24	WA4AUG(AA5JF)	Cnty ExpedMixed	LP	765,016
02/25/24	WA4LDU	Single Op FixedSSB	LP	66,642
02/26/24	WB4HRL	Single Op FixedMixed	HP	200,592
02/25/24	WB5NHL	Single Op FixedSSB	LP	3,132
02/28/24	WW4SF	M/M FixedMixed	HP	2,745,642
	(N4IQ,WN4AFP,N1SUZ,AJ5E,KJ4WKD,@WW4SF)			
VaQP				
03/18/24	K4FT	SOAB/CWFixed	LP	6,630
03/18/24	K4QQG	SOAB/PhFixed	HP	4,186
03/17/24	KJ4WKD	SOAB/PhFixed	LP	25
03/18/24	KQ4LQL	SOAB/PhFixed	LP	18,509
03/18/24	N1SUZ	SOAB/PhFixed	LP	7,260
03/17/24	N4QI	SOAB/MixedFixed	LP	1,350
03/18/24	WB4HRL	SOAB/MixedFixed	HP	8,840
03/16/24	WN4AFP	SOAB/MixedFixed	LP	5,336
WiQP				
03/11/24	K3DNE	SO Fixed	HP	1,950
03/11/24	K4FT	SO Fixed	LP	192
03/10/24	K4QQG	SO Fixed	HP	660

Contest	Call	Class	Power	Score
03/11/24	KD4S	SO Fixed	HP	2,200
03/13/24	KE4EA	Rookie SO	LP	1,288
03/11/24	KZ3P	SO Fixed	LP	473
03/11/24	N1SUZ	SO Fixed	LP	1,352
03/11/24	N4QI	SO Fixed	LP	1,269
03/11/24	W1RPG	SO Fixed	LP	748
03/11/24	WB4HRL	SO Fixed	HP	4,788
03/10/24	WB5NHL	SO Fixed	LP	252
03/11/24	WN4AFP	SO Fixed	LP	8,844

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73 es QRT de N4XL