QRP CW INC.

ISSUE 297 • MARCH 2023



In This Issue

Prez Sez he could use your help; QRP Tip #3; QSO Party Challenge results and schedule; Contesting the hard way: rockbound!; Vacation balcony operation; A new Letter Challenge bubbles up from the deep; WSPR as a QRP CW aid; Winter Field Day report; Awards; Sprint reports; Soapbox activity; Member polls; Nets; Chapters; and more.

STATE QSO PARTIES OFF TO A GREAT START

The 2nd year of our QSO Party event we had 32 members making 2,920 QSOs in the first five parties. Major growth, and there are still 45 more to go. See page 4 and join the fun.

WSPR FOR QRP CW OPS

QRP ops have to squeeze the most out of our antennas. How do you really know which antenna is best, what's working, and where you're being heard? Rich KC3MIO #9942 explores this valuable tool.

GREGG W8GG IN QST

Our own Gregg, W8GG, has a two-page article in March *QST* entitled "Desert Portable." Turn to page 58.

VIDEO HELP FROM ANTHONY K8ZT #414

Anthony keeps giving, this time with a primer on State QSO Party Challenges: https://youtu.be/XDGvcsXaFDU and a slideshow- http://tiny.cc/stqspc. This is about the main QSO Party system that we piggyback on for our QRP CW version. Great info!

Your Newsletter Submissions Needed

Please take a few minutes to tell us about your latest excursion, that thing you built, your favorite rig, or something funny. As long as it relates to QRP CW. Send it to Paul KD2MX: kd2mx@arrl.net

IN THIS ISSUE	
Key Clicks	1
Prez Sez	2
QRP Op Tips	3
Member Poll	3
QSO Party Challenge	4
Awards	7
Rockbound Contesting	8
Top Floor Vertical	9
Letter Challenge	10
WSPR for Antennas	13
Sprints	16
Nets	19
Chapters	21

24

25

26

Sponsors

Contacts

About The NAOCC



THE PREZ SEZ...

It has been a very interesting month piecing together all of the moving parts of the NAQCC organization. At last count there were over 40 volunteers/positions who help to keep the club functioning on a daily basis.... **Thank You All!**

The **NAQCC Board of Directors** has an opening for at least one new member and we always need a pool of other volunteers too. If interested please contact me at **KK4ITX@PM.ME** as soon as you can.

We also could use a person to be part of the **website maintenance team**. HTML, raw text, and FTP skills and experience required.

The March Challenge starts the first day of the month 0000Z and runs through the last day of the month 2400Z. This month's theme is The Guinness Widget Challenge.

SPRINTS

February Sprint Results:

Logs submitted: 98 Total participants: 140 Total QSOs: 1220

States + Provinces represented: 36 + AB, ON,

QC, & DX

Noted is that 42 participants <u>did not</u> submit a log. Even if you are unhappy with your results it helps us determine the overall Sprint participation. I often report ZERO due to conditions at my QTH but I do get lucky sometimes.

This month's Sprint is March 16, 0030-0230Z (Note the ZULU Date and Time), there is a handy

chart that can be found using a link on the Home Page: "Sprint Schedules," print it out for future reference and never miss another Sprint.

AWARDS

Hats Off to Enzo, M0KTZ He achieved (2A) eleven months (Feb to Dec) of at least one QSO a day using a SWA and 5w. He also earned the 9 Band endorsement.

There's been some chatter on the Groups.io email concerning the **30-30 Award** and a few said they were going to try for the 30-30 Award starting in March, probably during the daytime. For information for all NAQCC Award offerings see the Index on each website page: Awards/ Current and check out the many choices. Pick one or two out and give it a go.

DROP ME A LINE

I receive many, many emails a day so please put NAQCC in the subject line of any emails sent to me so they don't get sent somewhere else. I try to read those first.

HAPPY ST. PATRICK'S DAY

72/73! John KK4ITX #7249 VP/NAQCC President



A little bit of QRP on a wire goes a long way!

TIPS FOR QRP OPERATION

BY GLENN N4MJ #6587

TIP 3 - KNOW YOUR EQUIPMENT/STATION AND HOW TO USE IT

Most QRP transceivers, like QRO transceivers, have a VFO, variable frequency oscillator; and receiver and transmitter incremental tuning, aka RIT/XIT. Some lesser expensive QRP transceivers/ kits may or may not have those tuning options.

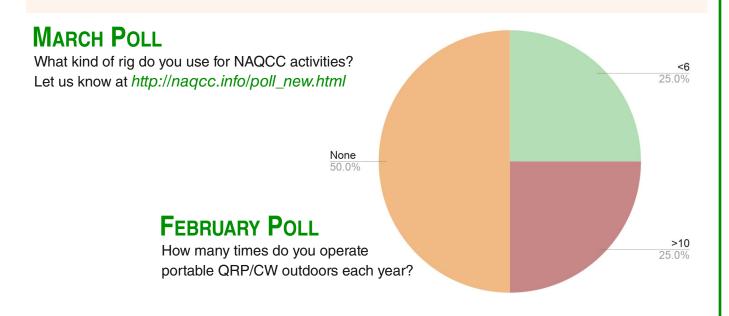
Being intimately familiar with your station's capabilities is key to making contacts. Know how to use RIT/XIT and/or a second VFO if available. During heavy QRM, the RIT provides the option of tuning the receiver above or below the VFO frequency to find the best copy position. The XIT is normally used during split operation. It provides the capability of incrementally tuning the transmitter frequency a few Khz above or below the VFO frequency. Knowing how and when to use

these tools can make all the difference in making that special contact.

Positioning the R.F. gain control for maximum gain may be your enemy. Learn to use the R.F. gain control to reduce noise and QRM. In some instances, turning off the AGC (automatic gain control) and using the R.F. gain control manually will yield better results.

Other features to know: P.O. or power output control. Know which filter to use and how and when to activate it is additive to success. Learn about VOX control, if available/used. Some transceivers may have antenna switching built-in; verify you are using the proper antenna before transmitting.

MEMBER POLL



NAQCC STATE QSO PARTY CHALLENGE

This year's Challenge is off to a booming start with 32 members making 2,920 QSOs in the first five events, and once again NAQCC members dominate the 3830Score.com QRP catagories.

Great job!

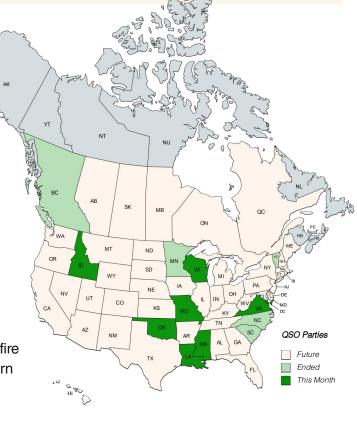
THE PARTY IS JUST GETTING STARTED

Five down, and 42 to go, so it's still early in the QSO Party season. The coming weekends are going to be busy. As you work events and add multipliers your score will increase exponentially, so don't think it's too late to start.

GRAB THAT MULTIPLIER

Even if you can't spend much time on a given event, fire up the rig long enough to grab two quick QSOs to earn the multiplier.

Member	Mult	QSOs	Score	Award	Pace
Lee AA4GA, #5415	5	571	2,855	Bronze	252,268
Alan KR4AE, #5847	5	200	1,000	Bronze	88,360
Steve NI8W, #11335	5	161	805	Bronze	71,130
Brent WT4U, #9019	5	152	760	Bronze	67,154
Mike W7LG, #10391	5	143	715	Bronze	63,177
Will NQ2W, #4839	5	135	675	Bronze	59,643
Bob N2EIM, #10373	5	130	650	Bronze	57,434
Ben AC2YD, #10378	3	208	624	Bronze	55,137
Dave N3CKI, #8478	2	305	610	Bronze	
Dave AB9BZ, #9309	5	115	575	Bronze	50,807
Dick N9EEE, #11389	5	112	560	Bronze	49,482
Chris KU4A, #1960	5	89	445	-	39,320
Sean KK9U, #10869	5	81	405	-	35,786
Anthony K8ZT, #412	5	64	320	-	28,275
Ernie N2DGQ, #11090	4	73	292	-	25,801
Don VE3DQN, #5846	5	55	275	-	24,299
Robin NG8S, #3261	5	25	125	-	11,045
Kevin NN3E, #9851	4	30	120	-	10,603
Don KI4MZC, #10922	4	26	104	-	9,189
Dan W9SAU, #10073	4	23	92	-	8,129



TIME TO GET STARTED

For instructions on how to participate in the SQP Challenge see the next page and http://naqcc.info/qsoparties.html If something isn't clear to you, please ask Remember, the number of SQPs you participate in through the season is a multiplier for your final score. So this weekend you have a chance of having a running start by nabbing three: Vermont, Minnesota, and British Columbia.

LEADERBOARD

Compete results at http://naqcc.info/ qsoparties_scores.html

UPCOMING EVENTS

State	Times	IN	Out	Freqs	Links
Oklahoma	Mar 11 1500Z to Mar 12 0200Z and Mar 12 1500Z to Mar 12 2100Z	RST County	RST ST	3540, 7040, 14040, 21040, 28040	Rules
Idaho	Mar 11 1900Z to Mar 12 1900Z	County	ST	plus or minus 35 kHz up	Rules
Wisconsin	Mar 12 1800Z to Mar 13 0100Z	County	ST	1.820, 3.550, 7.050, 14.050, 21.050, 28.050	Rules
Virginia	Mar 18 1400Z to Mar 19 0400Z and Mar 19 1200Z to Mar 19 2400Z	QSO# County	QSO# ST	1805 KHz and 50 KHz up from band edge on others.	Rules
Louisiana	Apr 1 1400Z to Apr 2 0200Z	RST Parish (4char)	RST ST	40 kHz up	Rules
Mississippi	Apr 1 1400Z to Apr 2 0200Z	RST County	RST ST	-	Rules
Missouri	Apr 1 1400Z to Apr 2 0400Z and Apr 2 1400Z to Apr 2 2000Z	RST County	RST ST	40 kHz up	Rules

How to Participate

- Work the QSO Parties. Rules differ slightly by state, so check those. Work at least two stations in each QSO Party.
- Post a summary of your results for each QSO Party to the appropriate page on https://www.3830scores.com The links to the submittal forms are on the left side of the page in yellow.
- Under "club" choose "other" and then type in NAQCC. If enough people do that we can get added to the pulldown menu. If you're already committed to another club, don't worry about it. It won't affect our friendly competition, but it's nice to get NAQCC some visibility.
- Some QSO Parties lump CW together with digital or other modes. If that happens, send a note to QSO Party Challenge Manager Don VE3DQN at don@hekman.net and

- let him know that you worked strictly CW, or if mixed, how many of your contacts were CW.
- Check the NAQCC Newsletter each month to see how everyone is doing.

Notes

- Individual QSO Parties will do their own official scoring based on uploaded Cabrillo logs. We're just looking at the summary you post to 3830scores.
- To participate, you must enter as a QRP station. You don't have to limit yourself to CW operation, but only those QSOs will count toward the NAQCC QSO Party Challenge.
- Questions? Read Don VE3DQN's November article or contact him at: don@hekman.net

QSO PARTY SOAPBOX SAMPLER

Lee AA4GA #5415 - This is my first time participating in the QSO party challenge. I had contacted the "official" state QSO party challenge about a QRP category, but they were not interested. Glad to see that NAQCC has stepped up to fill that void. I was unaware of this until late last season when my friend KR4AE told me about it...I guess I just haven't been paying attention! I wasn't sure Alan was going to participate this year, but judging by his first week's performance, I think he may be! I was mostly just hoping for the three QSO party multipliers this week. I am semi-planning on combining the QSO party challenge with POTA activities, but operated the first three from home. I was using a K3/10 at 5W to a 100' doublet. My portable rig will be similar, a KX3 at 5W, usually to a doublet or EFHW.

Anthony K8ZT #412 - Here is a video on State QSO Party Challenge that I did last week-https://youtu.be/XDGvcsXaFDU and here is the slideshow- http://tiny.cc/stqspc. Please feel free to share with NAQCCers.

Chris KU4A #1960 - It's great to be back in the saddle for 2023, after "retiring" from the NAQCC Sprints and Letter Challenges. I wanted to hold off in participating in the QSO Party Challenge until I could start in a brand new year and compare myself to everyone else. I'm already way behind - hi! Vermont was tough since the few stations are spread out over a 48-hour period. Minnesota and British Columbia much better. I'm more of a "daytime high band" operator and so from here in Kentucky the Carolinas are going to be tough later this month. Will have to stay up past my bedtime and grab them on 40 and 80 - hi!

Dan W9SAU #10073 - SCQP signals heard on Saturday were strong but not a lot of them at my QTH. I was able to work six Stations. On Sunday, working portable from the K-7638 POTA Site, 20 meters was jammed full of NCQP Ops, most of them so strong I had to turn the RF gain way down. I could have made a killing but, after 4 QSOs, I had a much more important function. I invited a brand-new Ham, Ron KD9WKK... to ioin me. He showed up loaded with enthusiasm and questions, but has not been on the air. He doesn't know CW yet, so I demonstrated the process by making another 4 contacts. Ron observed the patience required to get through a pile-up at only 5 Watts, with so many QRO Stations overpowering me. S&P is the challenge for the State QSO Parties. This is a lot of fun!

Will NQ2W #4839 - SCQP - I didn't have a lot of time to operate...maybe 45 minutes total. It was cool to work K5CM at a tri-county location...like getting three for the price of one. NCQP - The NCQP was very enjoyable. I was able to be in the shack at various times throughout the QP. There was always someone to work. It was neat getting K3TD and N4CW in the log a number of times as they changed counties. I am very happy they were able to hear my 4.8W with their mobile stations.

Don VE3DQN #5846 - One of my strategies in the SQP Challenge is to take special note of the SQPs that are in the Top Ten with regard to activity...The North Carolina QP figures in the top ten, so I intended to put a bit more time in the NCQP to "pad" my total. Sunday didn't quite work out that way. Besides some prior commitments, other friends happened to stop by. Well, I keep reminding myself this is just a hobby ;-)

Complete soapbox at http://naqcc.info/qsoparties_soapbox.html

NAQCC Awards

You may already be a winner! NAQCC has an extensive list of awards. Check your log to see if you're close, or just need to submit. Complete details can be found at http://naqcc.info/awards.html.

FEATURED AWARDS:

30-30

The 30-30 Award is presented as an alternative to the QSO-A-Day Award for those who for one reason or other just can't get on the air each and every day even for such a short period as a month. Note the new DX endorsement.

Time Frame For Qualifying QSO's:

January 1, 2006 0000Z through the present

Basic Award Premise:

Make 30 QSO's on 30 meters during a calendar month.

Categories:

A - Single Month

B - Three Months (30-30 Magnum)

QSOs:

Rag chew and DX QSO's are acceptable. Just sitting on the County Hunters Net frequency and racking up QSO's is not permissible. However, you may count a maximum of two QSO's from the CHN each month.

Other:

You can earn as many as 12 Single Month awards per year or as many as 4 30-30 Magnum awards per year. The months for the Magnums do not have to be consecutive. Once a month is used for a Magnum, that month cannot be used again for a future Magnum. That is if you use Jan-Feb-Apr for a Magnum, you can't use Jan, Feb, or Apr for any future Magnums.

If you earn a 30-30 for a single month and get a certificate, you may use that month toward one Magnum award as well.

RECENTLY ISSUED AWARDS:

QSO-A-DAY

11 MONTHS (CLASS 2A)

Nr Call Total QSOs Date Notes

0001 MOKTZ 2112 01/08/23 Feb-Dec 2022 SWA & 9-band endorsements



Awards earn you participation points so you're eligible for the best prizes in the annual aniversary drawings.



ROCKBOUND

BY KEVIN KI4DEF #247

This month's state QSO Parties are now in the books. It was lots of fun, if for only a few contacts. I'm not much of a contester, but I enjoy these events because it gives me an opportunity to test various QRP (or QRPp) setups, especially modified or unusual antennas, with lots of OMs out there listening for every dit.

FIRESIDE "PORTABLE"

The first weekend of the month I operated the Minnesota, Vermont, and British Columbia QSO Parties. I was using one of my portable rigs, a Mountain Topper MTR3b, set up inside by the fire (an acceptable alternative when you're itching to get outside in February!). I'd put up a portable antenna—a 67 ft EFHW wire strung as an inverted L in a backyard pine tree—run in through a bathroom window. The rig was powered by 8 AA rechargeable batteries, which gives it about

2W out. I managed three QSOs with OMs in MN, but never heard anyone in VT or BC.

A BIT MORE OF A CHALLENGE

The last weekend of the month I operated the South Carolina and North Carolina QSO Parties. Here, I wanted a bit more of a challenge, NC being my home state, so I decided to run rockbound QRPp.

I used my Tuna Tin 2 with a 7038 kHz xtal, and my 20m Rockmite (attached pics). Powered by a Bioenno LiFePO4 battery, each rig puts out about 0.3W to one of my regular antennas, a 44 ft doublet at 35 ft.

Although I heard lots of 20m signals, and my CQs were spotted, I wasn't able to make any contacts on 20m. However, using the TT2, I had three contacts during the SCQP, and five—count

'em!—during NCQP. The NC contacts included an old friend, Howie N4AF, and one of the Special Event Stations, N4W, operated by event organizer Marc W4MPS from the Wright Brothers National Monument in Kitty Hawk.

As is often the case when I operate this sort of event, my most memorable contacts came before the actual event. This month's highlight was two QSOs with Ron KE2SD/4 in FL. Both QSOs were made using the TT2, one on Saturday and one on Sunday. Conditions were

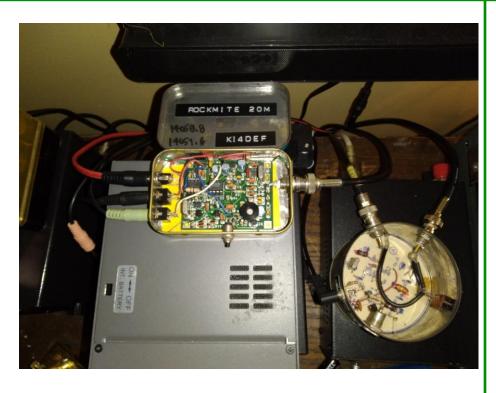


MARCH 2023

good enough Saturday for a bit of a chat; we were both RST 559. On Sunday, conditions were not as good: QSB took away a lot of my signal (my RST 349) so we cut it short.

A Few Choice QSOs

Is this making lemonade from lemons, or blind pigs finding acorns? Lots of contacts doesn't have to be the point. For me it's enough to be able to run tests knowing lots of OMs are listening. A few choice QSOs are icing on the cake!





A TOP FLOOR OPERATION

BY ERNIE N2DGQ #11090

My wife and I are down in Florida for a month. For the first three weeks we are staying at a Hilton resort in Orlando, where I worked the South and North Carolina QSO parties this weekend. I am fortunate to be on the top floor where I put up my QRP Guys tri-



band vertical antenna. Pictures of the antenna installation and my operating space is included. My QRP rigs are the QCX-Mini for 40 and 20 Meters.

This is my first venture into QSO parties. I use the N3FJP log which makes it very easy to work other operators. Looking forward to the other QSO parties coming up.



NAQCC CHALLENGE BY GARY K1YAN #2365

THIS MONTH'S LETTER CHALLENGE: GUINNESS® WIDGET

A draught of Guinness Stout, dark, creamy, full flavored and a head that other lesser brews envy. A good pub can pull that perfect pint complete with a beautiful tan head.

How about those of us who have to make do at home with a canned draught? While not quite "pub quality" it is still a fine drink.



Oh, by the way, if you shake that empty can and hear something rattle don't panic. It is not a mistake or a sinister addition to your brew.

Open that can up and you will find a small, plastic ball, known as the widget. It is around an inch in diameter and is made of two moulded halves each of which has a small hole. It is placed into the empty can. Once the top is in place, the can is filled with beer and some liquid nitrogen.

The nitrogen vaporizes and creates pressure in the can. This forces some nitrogen and beer into the ball. When the can is opened the nitrogen gas comes out of the ball as small bubbles. These bubbles rise and help to form the head and add to the creamy "mouth feel."

Cheers and beers ... enjoy!



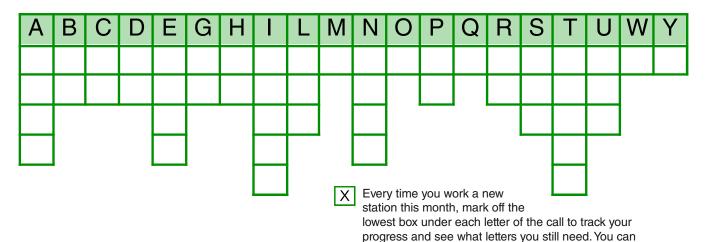
https://www.flickr.com/photos/slworking/446992870

Words

- GUINNESS STOUT DRAUGHT
- PULL A PINT
- CREAMY TAN HEAD

- PLASTIC SPHERICAL WIDGET
- TINY LIQUID NITROGEN BUBBLES

CHALLENGE TRACKER:



T T

Entering the Challenges earns you participation points so you're eligible for the best prizes in the annual aniversary drawings.

SUBMITTING YOUR ENTRY

The easiest way is to use the great tool hosted by Robby WB5RVZ. Create an account, choose this month's challenge, and paste in all the elligible calls you worked. It will apply the letters, tell you what you're missing, and fill out the email for you. http://naqcc.wb5rvz.org

If you want to do it by hand, or got some but not all of the words and want to pick up a participation point, send an email to

Subject: (your call) NAQCC (month year) Challenge

Body: your call:

word1 - call1 call2 call3 word2 - call1 call2 call3

RULES:

Just make ALL the words from calls of stations you work subject to the General Challenge Rules. (Any spaces in the phrases should be ignored. For example the challenge phrase "INVERTED V ANTENNA" should be treated as if it is the single word "INVERTEDVANTENNA.")

download a printable version of this month's tracker at:

http://naqcc.info/challenge_tracker.pdf

Each letter in a callsign you work during the month can be used twice to complete the challenge words. Complete rules, information, and a helpful tutorial on how to organize your work for an alphabet challenge along with detailed general rules and submission instructions can be found at

http://nagcc.info/challenges_rules.html

NEXT MONTH'S CHALLENGE

Next month's April MASK Facility Challenge is sure to float your boat. http://nagcc.info/challenges/challenges202303.html

LAST MONTH'S CHALLENGES

The deadline for submissions for the Q-Code letter challenge is still a few days away. You can see what has been submitted so far at http://www.naqcc.info/challenges/challenges202302.html and final results will be posted on that page shortly after the 10th of the month.

CHALLENGE HONOR ROLL

We honor the following members for their outstanding participation over the years in our monthly challenges. Exact counts can be seen at http://naqcc.info/challenges_schedule.html.

Number of Challenges	Members
25+	N4OW KB1M KU4A N1JI K9OSC KA5PVB AC2C KD0V DK1VD WY3H WY7N VE3HUR KC5F KI4IO KI8I WT4U ND9M W2ITT AB9BZ N1LU NN9K KD2MX
50+	VE3FUJ WA2FBN W3IQ NF1U AK3X KJ4R VE3DQN AH6AX WB4OMM G3JFS N9SE
75+	PA0XAW PA9CW WI5H
100+	K1IEE
125+	K1YAN
150+	W2JEK N8XMS K3WWP

CHALLENGE SOAPBOX SAMPLER

KC5F - I've never seen 10m CW like this - great signals and reports from three continents. Plus some POTA and a couple of SKCC and it was done much sooner than I expected. Thanks, all!

W1BLU - Doing POTA, (frequently), I thought all of those Q's would be troublesome. It turned out the I's were harder to obtain. Go figure. Lots of fun! Thanks. 73

K2CWM - My 2nd month at this and did it again. This can be addictive (hi hi). Thanks all

KB5ILL - First challenge for me. Good time. Completed after 2 pota activations. Looking forward to next month. de KB5ILL

VE3DQN - Appropriately the letter "Z" was last one needed to complete this month's Challenge. The highlight however was a 10m QSO with Alaska POTA activator KL7AC @4700km distant from me. He was putting 30 watts into a vertical, I was QRP 5 watts into a 40m dipole up 20ft. Oh, the magic of radio. And signs of improved propagation



Using WSPR to Evaluate Antennas and Propagation

BY RICH KC3MIO #9942

EVALUATING ANTENNAS

On QRZ, one of their columnists discussed an antenna for use where space and supports were limited. It was a popular off-center-fed (OCF) dipole, and he reported good results with it. But others disagreed, and another thread quickly filled with vehement objections, especially from one ham who posted a very detailed critique. His conclusion was that the antenna was expensive and irreparably compromised.

The columnist was a bit rattled by these negative comments. He should probably have realized that arguments about specific antennas are only slightly less contentious than political debates.

He found my positive review of this antenna on another site and sent me an email asking for my comments. I read through the thread, which extended to seven pages and wondered what useful commentary I could offer. Several commenters presented SWR measurements along with the results of EZNEC antenna modeling. Interesting data, but how do you evaluate the essence of an antenna; how well it radiates?

WEAK SIGNAL PROPAGATION REPORTER (WSPR)

I am sure many of you are aware of the popularity of digital modes. Within the software implementing some of these modes, WSJT-X, is WSPR (pronounced "whisper"). I believe that

WSPR is worth investigating, even for us QRP CW ops, as I explain below.

According to the WSJT-X user guide: "WSPR is designed for probing potential radio propagation paths using low power beacon-like transmissions. WSPR signals convey a callsign, Maidenhead grid locator, and power level using a compressed data format with strong forward error correction and narrow-band 4-FSK modulation. The protocol is effective at signal-tonoise ratios as low as –31 dB in a 2500 Hz bandwidth."

Unlike the other modes, WSPR is not a mode for QSOs; instead, it is a two-way beacon. You transmit and other stations report detection and you detect other stations' transmissions. In my experiments, I have run 1-2.5 watts on WSPR, and it is designed to be used as a QRP mode.

BACK TO THE **QRZ** ANTENNA CONTROVERSY

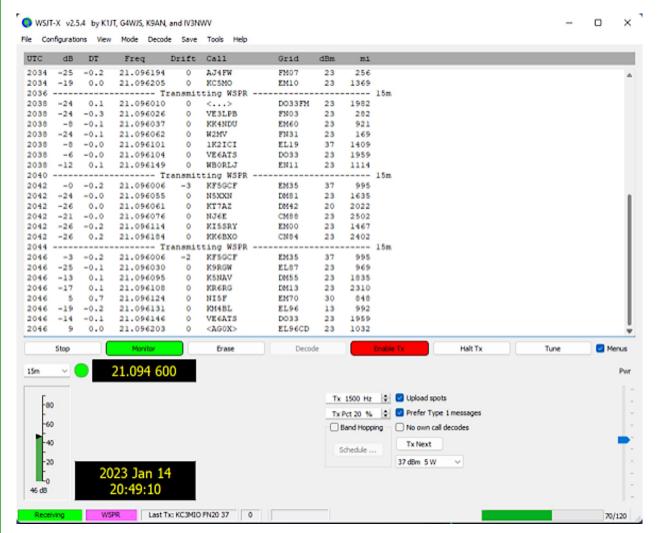
After I had reviewed the thread, I wondered what I could add to the discussion. I have three fixed antennas at my QTH. Besides the controversial 135' OCF antenna running roughly E/W, I have two 125' doublets running roughly N/S and NE/SW. Since I had already installed WSJT-X and run some preliminary WSPR tests, I decided to compare results with each antenna on 15 meters. My tests were run on January 14, 2023 between 1940 Z and 2052Z, running two watts (IIRC). The Solar Flux index was 209 and the Sunspot Number was 172.

Each antenna was tested for roughly 20 minutes. My purpose was to compare each antenna on the same band, at the same power, in a short time so that the underlying propagation did not change significantly.

WSPR can run automatically, switching between TX and RX. The WSPR control panel will show the stations that you receive, with the call signs, distances, and dB signal strength in relation to the noise level. Below is a sample of the output.

According to my research, an SSB signal can be detected at the noise level, but a CW signal can be detected below the noise level at -13 dB. This figure is consistent with John Shannon's (K3WWP) analysis at http://k3wwp.com/cw_ss.html I concluded that any WSPR signals with signal reports of -13 dB or higher (less negative or positive) could also be detected if they were CW signals, so a WSPR report will give you an idea of how far and in what direction a CW QRP signal can reach.

Signal reports can be uploaded to the WSPR-Net (http://www.wsprnet.org/drupal/) and maps of your signals (received and receiving) can be generated. So, I decided to run each antenna in turn, same power level, same frequency and compare results.



Sample WSJT-X WSPR Output

MARCH 2023

FIRST THE OCF:



THEN THE N/S DOUBLET:



FINALLY, THE NE/SW DOUBLET:



What did I find? The performance of the doublets was comparable, with some (expected) variation in directionality due to different orientations. The OCF was a very respectable performer. I posted my findings to the QRZ forum. At least one op gave it a like.

CONCLUSIONS AND FURTHER INVESTIGATIONS

We can measure the SWR of an antenna, we can model it with EZNEC, but the real test is how it gets out. We can watch for spots on the RBN or other clusters. WSPR provides a way to test your antenna in a very thorough way; you can set it to run while you do other things and return to see the results. WSPR allows you to generate maps that are far more detailed than those generated by RBN, even with a few watts. My tests have shown me the strengths and weaknesses of each of my wires. Furthermore, it can be set up to switch bands automatically allowing you to compare conditions before you operate.

Besides antenna comparisons, WSPR can be used to test propagation on any band. For example, before each month's sprint, my first question is: will 20 be open? If I have the time, I listen around 14.060 and maybe send out a few CQs to see if I can raise anybody. I might check the Reverse Beacon Network (RBN) to see who is hearing whom. But then the sprint starts, and you find out for sure. WSPR can be used to answer a question like this.

RESOURCES

The software for running WSPR is implemented in WSJT-X which is available at http://pul-sar.princeton.edu/wsjtx.html. That site also provides user guides and other support.

You will need a computer to run WSPR. The Icom 7300 and 705 will both run WSPR will minimal parameter tweaks. Setup and operation are beyond the scope of this article, but you can easily find YouTube videos and advice on the internet.

If you have any questions, comments, or complaints, email me at hamberger@ptd.net.

NAQCC SPRINTS

MARCH SPRINT

Our regular Sprint this month will be on Thursday, March 16th at 0130-0330Z. That's the evening of Wednesday, March 15th in North America.

Complete information at http://nagcc.info/sprint/sprint202303.html.

RULES

Complete sprint rules and instructions on how to submit your log can be found at http://naqcc.info/sprint_rules.html. On that page you will also find information about the different computer loggers that are supported for our sprints. The membership data files for those supported loggers can be downloaded at http://naqcc.info/contests.html. Please be sure to always get the latest membership data for your logger about a day before the Sprint. A complete schedule for our upcoming sprints can be found at http://naqcc.info/sprint_sked.html.

FEBRUARY SPRINT RESULTS:

Complete Sprint results, including all of the soapbox comments, can be found at http://www.naqcc.info/sprint/sprint202302.html. High scores can be seen in the tables on the next page.

We would especially like to welcome our first-time regular sprint loggers and hope that they will return to participate often: KJ4ASE, KN4ZXG, N8DD, & W2ECK

February Sprint					
	Current Month	Previous Month	All-Time Record	Record Date	
Logs	98	79	217	4/17	
Participants	140	105	269	2/13	
Total QSOs	1220	967	3154	4/17	
Hour 1 QSOs	707	638	1704	4/17	
Hour 2 QSOs	513	329	1450	4/17	
20m QSOs	196	67	1232	8/13	
40m QSOs	807	709	2203	4/17	
80m QSOs	217	191	1417	2/13	
Avg QSOs/Station	12.4	12.2	19.3	9/11	

SWA	SWA STRAIGHT KEY CATEGORY					
Division	1st	2nd	3rd			
W1	AC1KV	WB1GYZ	K1YAN			
W2	KA2KGP	KN2G	W2SH			
W3	КСЗМІО	K3JZD	W6WU			
W4	KC5F	WG8Y	WT4U			
W5	N5GW	KE5YUM	-			
W6	W6 -		ı			
W7	KC7DM	KI7LW	-			
W8	W8 W8GG		N8DD K3CTN (TIE)			
W9	WB9HFK	K9QEW	KA9FQG			
W0	N0TA	NN0SS	N8LA			
Canada	VA3KRJ	-	-			
DX	-	-	-			

	SWA BUG CATEGORY					
Division	1st	2nd	3rd			
W1	-	-	-			
W2		ı	-			
W3	W3IPA	NN3E	K3WWP			
W4	KY4ID	K3RLL	AA2MX			
W5	-	-	-			
W6	-	-	-			
W7	-	-	-			
W8	ı	ı	Ī			
W9	K9DRP	-	-			
W0	WU0A	WU0A -				
Canada	VE3IDS	-	-			
DX	-	-	-			

SWA K	SWA KEYER/KEYBOARD CATEGORY				
Division	1st	2nd	3rd		
W1	KB1M	NR1D	K1IX		
W2	WA1GWH	N2ESE	WA2FBN		
W3	KQ3Z	-	-		
W4	K4BAI	K4KBL	K2OID		
W5	-	-	-		
W6	KD0FNR	-	-		
W7	N7QR	-	-		
W8	K8TJ	WI8J	WA8SAN		
W9	AB9BZ	-	-		
W0	W1TM	KC2MJT NO2D (TIE)	-		
Canada	VE3DQN	VE6VIC	VE3GNU		
DX	DK1VD	-	-		

GAIN CATEGORY				
KEY	1st	2nd	3rd	
SK	NQ2W	VA2IW	-	
BUG	-	-	-	
K/K	-	-	-	

FIRST-TIME ENTRANT HIGH SCORE				
Key Type 1st 2nd 3rd				
SK	KJ4ASE	KN4ZXG	N8DD	
BUG	-	-	-	
K/K	W2ECK	-	-	

SPRINT HONOR ROLL

We honor the following members for their outstanding participation over the years in our regular sprints. Exact counts can be seen at http://naqcc.info/sprint_dates.html.

Number of Sprints	Members
50+	KJ4R KF7WNS AA0W NN0SS N7QR KC7DM KB0ETU K2YGM AA7CU VE3GNU WD4OHD K4KBL N8QY WY3H K6CSL W5UAA AB8FJ NN9K WK6L KC2EGL K2HT KE9DR K1IX K4ORD K5GQ AA5LH N8HWV N1JI W4HH KB4QQJ KC3RN VE3HUR KB9ILT WA2NYY KC2MJT
75+	N8LA KQ1P K4NVJ KD3CA K9EYT WB4OMM K9OSC VE3FUJ WD0K N8BB KB1M N2CN WA1GWH VE3DQN WA2FBN WB9HFK K6MGO NF5U NQ2W WB1GYZ WI5H N8APO
100+	K4KRW K1IEE W4DUK AK3X AA9L N5GW KD2MX NO2D NA4O KN1H WB8ENE KA9FQG N4MJ
125+	K2CWM K4JPN KD0V N2ESE KE5YUM N4FI WX4RM WA8SAN WG8Y N0TA
150+	W9CC K4BAI N8XMS NF8M K3RLL KU4A
175+	W2JEK W2SH W8GG
200+	K3WWP KA2KGP

SPRINT SOAPBOX SAMPLER

K7ZI K4KBL - Great time as always, worked some old friends and many new calls. Seems like 40 meters started to fade some around 10pm local tonight. Welcome to all new members!!

K3RLL - 20m was THE band this evening with good, strong signals and not much background noise. This was really fun tonight making good contacts some OTs in spite of my antenna limitations here. Thanks to all. 72/73 ... Don

KN1H - Operating portable tonight from a campground on Lake Marion in South Carolina. Was able to get 28' of wire up supported by the MFJ fiberglass mast on the back of the camper. Couldn't get it to work on 80 (not surprising) but was OK on 20 and 40. Local noise was troublesome on 20 but 40 was pretty quiet. Great to hear everyone tonight! KX-2, Electrovoice KY 605/U straight key, 12V battery. 72, John

KD0FNR - Wow! The 12 year old kid and I had a blast! We set up our antenna near Deadman's Point at Lands End on the edge of San Francisco, looking right at the Golden Gate bridge. The kid logged while I operated. I forgot to ask for nonmembers power, or we would have had 7 contacts, but 2 is twice as many as last month! This is a lot of fun!

KN2G - I saw that KC5F made 66 contacts.... I was excited with my 16! Maybe I need a few lessons. Anyway I still had a blast rooting out sigs in the muck and mire. March seems so far away. Thanks for the patience N0TA and WT4U.



NAQCC NETS

We have a number of nets (QRS = slow speed, QRQ = higher speed) designed to help people build up their CW operating skills. Complete information about these nets can be found at http://nagcc.info/cw_nets.html. Questions should be directed to Net Manager Mark, W8EWH.

NAQCC Net Schedule					
	March 12 changes for Daylight Time in red				
Net	Local Time	UTC	Freq +/-	Primary NCS	
East Texas QRS Net (ETN)	Monday 7PM CST 7PM CDT	Tuesday 0100 Z 0000 Z	7066 kHz Summer 3566 kHz Winter	Allen KA5TJS (TX)	
Midwest QRS Net (MWN)	Monday 7:30PM CST 7:30PM CDT	Tuesday 0130 Z 0030 Z	7031 kHz	Bob W0CC (KS)	
Pacif & Northwest 80m QRS Net (PNW80)	Thursday 5 PM PST 7 PM PDT	Friday 0100 Z <mark>0200 Z</mark>	3556.5 kHz	Stewart KE7LKW (WA)	

Note: On the rare occasions that there is a conflict between one of our scheduled nets and one of our regular sprints, the sprint will take precedence.

NET CONTROL STATION REPORTS

NAQCC Pacific Northwest QRS 80 Meter Net (PNW80)

Thursday evenings 5:00 PM PST / 7 PM PDT, which is Friday 0100/0200 UTC on 3556.5 kHz +/- Main NCS - Stewart KE7LKW (Washington State)

- Feb 03 QNI (8) KE7LKW NCS, WC7CW, KI7SJE, WB4SPB, WB7WHG, K7JUV, AD7BP, N7TB
- Feb 10 QNI (8) NCS WB7WHG, KE7LKW/P, KC7CW, KG7KKE, KI7SJE, W4SPB, K7JUV, AD7BP
- Feb 17 QNI (7) KE7LKW/P NCS, WC7CW, WB4SPB, WB7WHG, K7JUV, AD7BP, N0DA
- Feb 24 QNI (9) KE7LKW NCS, WC7CW, WB7WHG, KI7SJE, N7TB, W7ANM, AD7BP, N0DA, K7JUV

NAQCC East Texas QRS Net (ETN)

Monday evenings 7PM CST / 7PM CDT, which is Tuesday 0100 / 0000 UTC, on 7066 kHz +/- (Summer) or 3566 kHz +/- (Winter) Main NCS - Allen KA5TJS (Texas)

Feb 07 - No Net

- Feb 14 QNI (4) NCS KA5TJS, KE5YGA, N5MHI, KE5UM Good signals tonight. Band in good shape. Everyone running between 12 and 14 wpm.
- Feb 21 QNI (5) NCS KA5TJS, KE5YGA, KE5UM, N4NN, KD5ZCQ Signals were real good tonight. Warm WX all over and good Terry cleaned out his garage and Andy is getting ready for a trip to MI. Allen did not do any POTA last week. Welcome to John in Atlanta, TX. Another POTA guy!
- Feb 28 QNI (3) NCS KA5TJS, KE5YUM, N4NN
 Light turnout tonight. Signals were good and everyone heard everyone else. CU
 all next month.

NAQCC MIDWEST QRS NET (MWN)

Monday evenings 7:30 PM CST / 7:30PM CDT, which is Tuesday 0130 / 0030 UTC, on 7031 kHz +/-

Main NCS - Bob W0CC (Kansas) — Assisted by Dave AB9BZ

Feb 06 - QNI (3) W0CC, WB5CTS, N5EEE

Both Steve and Sharon noted QRN and QSB. There was a close station that could be filtered out with a 500 Hz filter. Worked from a farmhouse in central Kansas with a 9:1 UNUN wire antenna using my FT-817. WB5CTS was also running 5 watts. After the NET ended, was able to several other stations with same rig.

Feb 13 - No Net

Feb 20 - QNI (1) W0CC

Had to "swap out radios" at the last minute. I was able to fix the initial rig and make some QSO after the NET; but, unfortunately, none during the NET.

Feb 27 - QNI (1) W0CC

Reportedly, the 40 M band is POOR tonight. Did not hear anyone on the NET; however, was able to work FL, right afterwards.

NAQCC CHAPTERS

The North American QRP CW Club currently has seven local chapters - Western Pennsylvania, West Florida, Illowa, Downeast Maine, Long Island, Florida, and Green Swamp WCF—but we would be more than happy to expand on that list. Chapters are more or less independent local gatherings organized by NAQCC members in a geographical area and subject to a list of guidelines from the NAQCC. They provide opportunities to have fun and to promote our parallel passions of QRP and CW. If you are interested in forming a local chapter please contact club president John KK4ITX.

If your chapter is planning a portable operation activity and would like to have it promoted on the club email list or in the newsletter, send an email with the subject "NAQCC Portable Operation" and with the exact wording of the announcement to Steve, at the email address listed on the last page about a week before the operation. Please be sure to include the UTC time for the event and not just the local time.

A report about your chapter activity should appear here. Please send them to KD2MX at the email addresses listed on the last page.

NAQCC chapters located in the United States are welcome to use the NAQCC Club call, N3AQC for their special operations. Please contact call sign trustee Please contact call sign trustee, Club President John KK4ITX, to schedule the use of N3AQC.

NAQCC WEST FLORIDA CHAPTER



Items in this section are from the West Florida Chapter unless otherwise credited. Questions and comments should go to Ron, N9EE.

The chapter's web site is https://www.facebook.com/groups/967110089994401/.

WFL WINTER FIELD DAY

We in NAQCC-WFL worked Winter Field Day QRP. I made 60 CW QRP QSOs. Here are some photos of our QRP setup.

We did have one other QRP station with G90, but he was using SSB.

My rig was my IC705, EleCraft T1 tuner, Bioenno 12V 9AHr battery and End Fed Wire on my 20ft portable flag pole. Other op was Doug, N8QY with his G90 and 65ft end fed wire.



Ron's EFW on a 20' portable flag pole

N9EE's WFD battle station





We plan on doing event March 25th at one of our local parks.

73, Ron, N9EE NAQCC-WFL



Doug, N8QY caught red-handed doing not-CW

NAQCC WESTERN PENNSYLVANIA CHAPTER

Items in this section are from the Western Pennsylvania Chapter unless otherwise credited. Questions and comments should go to John, K3WWP.

NAQCC LONG ISLAND CHAPTER



Items in this section are from the Long Island Chapter unless otherwise credited.

Questions and comments should go to Howard, WB2UZE.

NAQCC FLORIDA CHAPTER



Items in this section are from the Florida Chapter unless otherwise credited. Questions and comments should go to Nikki, KM4SBQ.

The Florida Chapter website is http://wb4omm.com/naqcc-fl-chapter.

NAQCC DOWNEAST MAINE CHAPTER



Items in this section are from the Downeast Maine Chapter unless otherwise credited. Questions and comments should be directed to Jeff, KA1DBE.

The chapter is located in the Hancock and Washington counties area of Maine.

NAQCC ILLOWA CHAPTER



Items in this section are from the Illowa Chapter unless otherwise credited. Questions and comments should go to Tim, N9BIL.

The Illowa Chapter operates in the "Quad Cities" area of Davenport, IA / Moline, IL.

The Illowa Chapter website is at https://sites.google.com/site/nagccillowa2/.

NAQCC GREEN SWAMP WCF



Items in this section are from the Green Swamp WCF Chapter unless otherwise credited. Questions and comments should go to Gary N3OS.

The chapter's website is *https://www.zaarc.org*.

NAQCC PRIZE SPONSORS

















KB3IFH QSL GARDS & Ham Radio Gifts



NAQCC CLUB INFORMATION

STATEMENT OF PURPOSE

Amateur radio has something for everyone. For a growing number of folks, the challenge of "doing the most with the least" makes QRP (and QRPp) CW operating the greatest thrill available in amateur radio. The North American QRP CW Club Inc. exists to promote and pursue designing, information sharing, building, and operation of low power, Morse Code enabled Amateur Radio (FCC Part 97) equipment with simple wire antennas for both emergency and personal communications purposes, an exciting facet of the hobby.

The NAQCC provides numerous opportunities for hams to operate in QRP/CW activities. For contester types we have a popular monthly 2-hour sprint that runs at relatively low CW speeds and at a fairly relaxed pace to increase code skills and experiment with different antennas. Three special sprints also take place during the year for 160-meter and QRPp (less than 1W of power) operators. For a month-long activity we offer our members a Monthly Challenge that can be anything from forming a list of words from the calls of stations worked, to making a prescribed number of contacts using home-brew gear. There is also an extensive awards program to recognize the significant QRP/CW accomplishments of our members.

We also serve as a resource for people who are just getting started in QRP and/or CW, sharing information on low power Morse operations. Our slow-speed CW nets are a great place for beginners to practice Morse code under real on-air conditions. Beginners will also find a wealth of helpful information on these web pages and we are more than willing to answer any questions about QRP, CW, and simple wire antennas that you might have. An extensive monthly newsletter is filled with useful projects and news from fellow QRPers.

A number of local NAQCC Chapters offer opportunities to get together for in person socializing and QRP/CW activities. Portable operations are especially popular with the local chapters.

Whether you are a veteran ham radio operator who is looking for a new challenge in the hobby, or a beginner who is intrigued by the possibilities of QRP/CW communication, we cordially invite you to join us. Membership is free and the benefits and fun are significant.

REPRINT POLICY

Unless otherwise stated in the article, local clubs and other ham radio organizations are free to reprint featured articles from this newsletter, provided appropriate credit is given to the North American QRP CW Club and the author of the article. If at all possible a link to the club website at http://www.nagcc.info/ should be included.

NAQCC CONTACTS		
NAQCC VP/President	John KK4ITX	jleahy00@yahoo.com
NAQCC Secretary	Gary AF7T	gary.af7t@gmail.com
NAQCC Treasurer	Dennis W4DWS	w4dws@arrl.net
Downeast Maine Chapter	Jeff KA1DBE	j.hanscom@gmail.com
Florida Chapter	Nikki KM4SBQ	nickies1130@aol.com
Illowa Chapter	Tim N9BIL	n9bil@arrl.net
West Florida Chapter	Ron N9EE	n9ee55@gmail.com
Long Island Chapter	Howard WB2UZE	wb2uze@yahoo.com
Newsletter Submissions Member Spotlight	Paul KD2MX	kd2mx@arrl.net
Newsletter Editor	Brent WT4U	brentWT4U@naqcc.radio
NAQCC CW Nets	Mark W8EWH	mark.yergin@gmail.com

NOTE: These email address are not automatic links.

They are given here in graphic form to avoid harvesting by spambots.

The North American QRP CW Club Inc., is organized exclusively for scientific purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, and the Georgia Nonprofit Corporation Code to advance, promote, and pursue designing, information sharing, building, and operation of low power, Morse Code enabled Amateur Radio (FCC Part 97) equipment with simple wire antennas for both emergency and personal communications purposes. No dues or membership fees - open to any licensed radio amateur or shortwave listener (SWL) worldwide with interest in CW/QRP operation. Encouraging the use of CW and helping all hams increase CW speed and proficiency is a top club priority. Club activities are dedicated to QRP/QRPp operation, using CW and emphasize using simple wire antennas.

The North American QRP CW Club was founded in 2004 by WY3H and K3WWP and now has over 9500 members world wide. Membership is free and anyone interested in CW/QRP operating is welcome. Complete information about the NAQCC, including a membership application, activities schedule, and useful resources, can be found on our website at http://www.naqcc.info.

Inquires can be sent to:

Club President John Leahy KK4ITX 3513 Aquamarine Way Zephyrhills, FL 33540 USA **AMERICAN**