NORTH AMERICAN QRP CW CLUB

# NAQCC NEWS

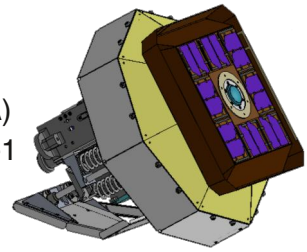
ISSUE 308 • FEBRUARY 2024

## KEY CLICKS

### IN THIS ISSUE

The Prez Sez... we have Sprints, challenges, and a 20th Anniversary party to plan; Converting an iambic Bencher to single-lever; QSO Parties are off to a great start; A tiny straight key rides piggyback; Polls; A Letter Challenge worth Exchequing out; Awards; and winners; Some serious dipole optimization; Double the Sprint results; Soapboxes; Nets; and more.

### QRP CW FROM THE MOON



The Japan Aerospace Exploration Agency (JAXA) ham radio club put a 1 watt beacon on their LEV-1 mini-probe and it's sending Morse on 437.410... while it lasts. It took a big radiotelescope to receive it, and then a little work to realize the signal was inverted before the "CQ CQ DE JS1YMG" message was copied. If you missed it, there's a chance the station will wake up again after lunar day returns on Feb 15.
*https://destevez.net/2024/01/trying-to-decode-lev-1/*

### RE-THINKING DIPOLE MODELS

You may remember David K8BYP #11325 from his 150,000 mi/watt QSO in the *Nov '22 Newsletter*. It was no accident. On page 12 of this issue he shows us the updated science of high-performance dipoles.

### 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

### UPDATE YOUR MEMBER INFO

Any time you change your QTH, email, or callsign, you can update your member info with a simple on-line form. First, check your information at *http://naqcc.info/memberlist.php* to make sure the rest of the fields are correct and then fill out the member update form here: *http://naqcc.info/member_updates.html*

### IN THIS ISSUE

# The Prez Sez...

## February Monthly Sprint #232

Tue Feb 13 8:30-10:30P EST which is:
Wed Feb 14 0130-0330Z

Bands - Frequencies:

80M - 3555-3565 kHz
(Be courteous to FISTS operating on 3558 kHz)

40M - 7030-7045 kHz

20M - 14059-14065 kHz

QSOs for our regular sprints are limited to the above three bands. However the frequency ranges are expandable up and down to allow for our greatly increased participation. Don't stray overly far though, or you may not be found.

## Monthly Challenges

It doesn't take long to realize that this NAQCC event creates a reason to get on the air on a regular basis..... and that's a good thing.

I suggest reading up on the General Challenge Rules, it may save you from starting over, don't ask how I know ;-(

I believe that January was a record month for participation in this event, Thank You to the team that keeps it running smoothly.

## 20th Anniversary and More Prizes

Our 20th Anniversary (Oct.) is ahead of us !

Hard to believe that 20 years ago the idea of NAQCC was born and now we have had 11,654 amateurs decide to give NAQCC a try!!

The plan for this year's anniversary is to have a prize list of around $1500 in QRP related equipment. The top three of the (13) prizes are awarded to those that have at least 9 Participation Points by October 1st. Points are earned for competing and submitting a log in the Monthly Sprints (1) and the Monthly Challenge (1) and if you do both in one month you get a Bonus Point for a total of (3). See last month's newsletter for an idea of what the prizes were for 2023.

## PayPal Funds

We have finally freed up our PayPal funds but still unable to use the account for contributions. It's not the desired outcome but one we will probably have to live with. We will explore other options going forward that will meet our needs.

## Board of Directors Annual Meeting

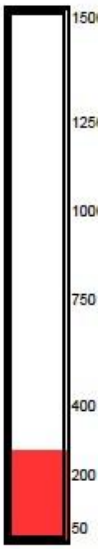
Our Annual Meeting and election of officers is tentatively scheduled for April 20th via ZOOM. If you are interested in being on the board, see the newsletter next month for the Nomination Committee persons to contact.

## Donations

Please mail your check to:

North American QRP CW Club, Inc
35 Heather Circle
Cave Spring, GA 30124

20th Anniversary Goals Donations




What will you do with your extra day this month?

Until next time,

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

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

# Converting an Iambic Bencher to Single-Lever Operation

BY PAUL W0RW #2500

I have found sending with a single lever paddle is much easier than iambic, if you have never tried a single lever paddle, try converting your old iambic Bencher to a single lever key.

I did a conversion to my old iambic Bencher and it works well.

## There are only two steps...

**Step 1 -** Cut a piece of solid plastic tubing 1/8 inch in diameter, about 5/16 inch long. This becomes a spacer that goes in between the two paddles.

**Step 2 -** Place the tubing in between the paddles and insert a piece of solid wire (Use an old 1/4W carbon comp resistor lead, 0.025 in. diameter) through the closest rivet hole on the paddle, through the spacer and then through the other paddle rivet hole.

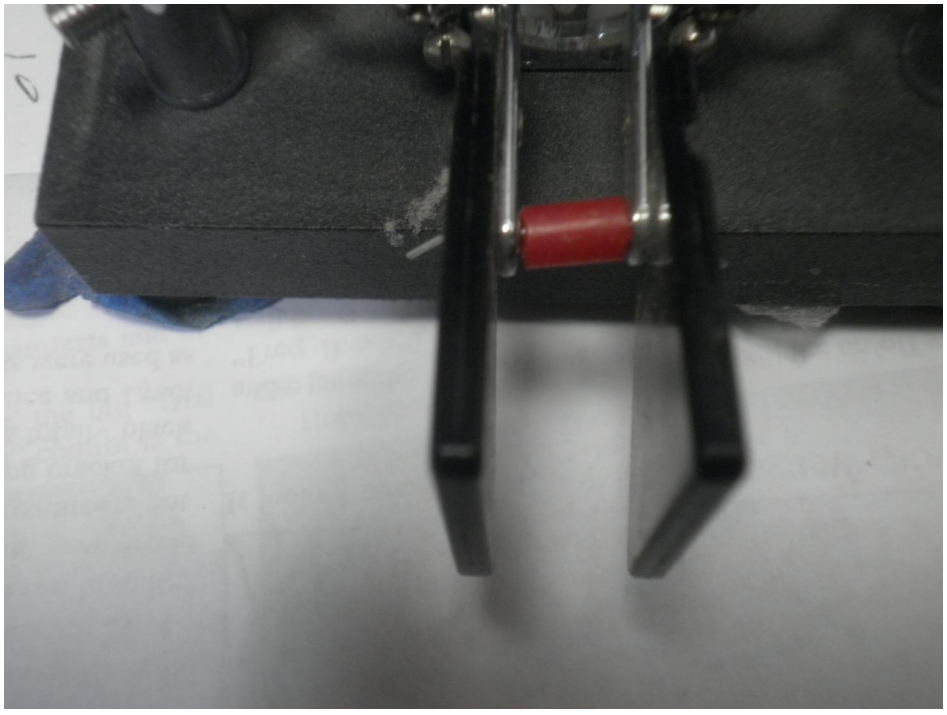
Bend the resistor lead ends over. This forms a spacer that will mechanically disable the iambic operation. Try it out.

## Fine Adjustment Option

If you want to obtain finer adjustment of the spring system, You can add a spring tensioner to the Bencher.

Here is how: Drill a hole in the rear spring post and insert a long screw that hooks the spring with a "J" hook.

The new adjustment screw hooks the spring and allows adjustment of the spring tension by moving the spring back and forth.



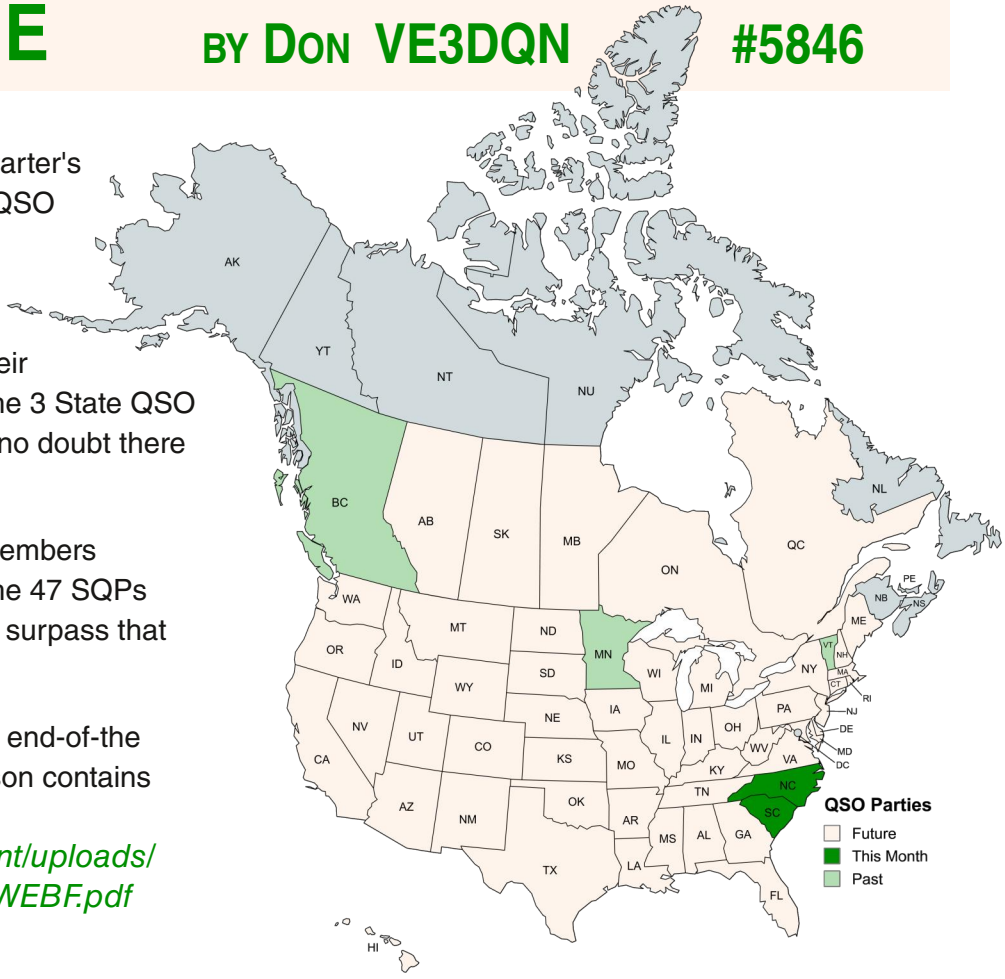
# NAQCC State QSO Party Challenge

## by Don VE3DQN #5846

BANG! That's the echo of the starter's gun for the 2024 season State QSO Party Challenge. As this Newsletter goes to press 19 NAQCC members have already reported on 3830scores.com their participation in at least one of the 3 State QSO Parties this past weekend. And no doubt there will be more reporting.

Last year we had 67 NAQCC members participating in at least one of the 47 SQPs operating CW and QRP. Will we surpass that number this year?

The SQP Challenge organizers' end-of-the year summary of the 2023 season contains interesting statistics. *https://stateqsoparty.com/wp-content/uploads/2024/01/2023SQPRESULTSWEBF.pdf*




| Member | Mult | QSOs | Score | Award | Pace |
|---|---|---|---|---|---|
| Nick W0NY, #11395 | 1 | 322 | 322 | - | |
| Chris KU4A, #1960 | 3 | 94 | 282 | - | 69,215 |
| Marty N9SE, #7425 | 3 | 86 | 258 | - | 63,325 |
| Mike W7LG, #10391 | 3 | 64 | 192 | - | 47,125 |
| Steve NI8W, #11335 | 3 | 64 | 192 | - | 47,125 |
| Anthony K8ZT, #412 | 3 | 46 | 138 | - | 33,871 |
| Will NQ2W, #4839 | 3 | 43 | 129 | - | 31,662 |
| Bob N2EIM, #10373 | 3 | 41 | 123 | - | 30,190 |
| Rick KY0Q, #9647 | 3 | 38 | 114 | - | 27,981 |
| Chris WB9G, #6311 | 3 | 34 | 102 | - | 25,035 |
| Kevin NN3E, #9851 | 3 | 29 | 87 | - | 21,354 |
| Don VE3DQN, #5846 | 3 | 19 | 57 | - | 13,990 |
| Brent WT4U, #9019 | 3 | 16 | 48 | - | 11,781 |
| Ray WB0SMZ, #3889 | 3 | 15 | 45 | - | 11,045 |
| Ernie N2DGQ, #11090 | 2 | 14 | 28 | - | |
| Stan K3PW, #9637 | 3 | 8 | 24 | - | 5,891 |
| John KE6K, #6655 | 1 | 10 | 10 | - | |
| Kevin KE3V, #855 | 2 | 5 | 10 | - | |
| Jeff N0MII, #7878 | 1 | 4 | 4 | - | |

## NAQCC Ops Are a Big Part of the Events

Of note for us is that there was nearly a 60% increase of QRP entries in 2023 compared to 2022, and a 200% increase from the 2021 season. In the list of club-related participants, the NAQCC, as a write-in entry, came in 3rd out of 245 clubs! Outstanding! I noted in an earlier Newsletter that we received a congratulatory letter from the SQP Challenge

| Upcoming QSO Parties | | | | | |
|---|---|---|---|---|---|
| | Start | | End | | Links |
| | Date | Time | Date | Time | |
| **South Carolina** | Feb 24 | 1500Z | Feb 25 | 0159Z | ***Rules*** |
| **North Carolina** | Feb 25 | 1500Z | Feb 29 | 0059Z | ***Rules*** |

organizers for promoting the Challenge among our members.

Did you know that the State QSO Party Challenge program offers certificates for your annual participation? I expect that some of you have overlooked that recognition for joining in the fun. *https://www.b4h.net/sqpchallenge/*

There's a lot more intriguing stuff on the *https://stateqsoparty.com/* page. Check it out.

## In the CWOps News

And finally, Dick N9EEE, an NAQCC and CWops member, wrote a fine article on the SQP Challenge for the January 2024 CWops newsletter Solid Copy (pp.28-31). *https://cwops.org/wp-content/uploads/2024/01/Solid-Copy_2024_January_FINAL.pdf* . Check it out too. Dick includes a clear overview of the program, eye-popping statistics, and helpful tips on participating with your own specific interests and goals.

## QSO Party Soapbox Sampler

**Chris KU4A -** The "season" is off to a good start for me. I improved my QSO count in all three (MN, BC, VT) vs. 2023. I'm hoping band conditions stay good so I can smash my totals from last year.

**Bob N2EIM -** MNQP - Was great. VTQP - very few stations heard in central NJ. BCQP - made most of my contacts in the last 2 hours.

**Ernie N2DGQ -** QSO Parties are a sign of warm weather to come, so therefore I'm glad to start the QSO Party season. I was able to work the MN and BC Parties, but I could not hear any VT on 40 Meters. I am in NJ so the higher bands will not work. I think most of them were working only phone QSO's. I was able to attain the silver level last year. I'm Looking to advance to the next level of Gold.

**Will NQ2W -** A busy weekend of SQPs. At times it was tough to decide where to concentrate my limited radio time. MN and BC were quite active. VT was a little sparse here but I was able to get it LoTW confirmed on 20 and 15m getting me closer to 5 band WAS QRP CW. Unfortunately, I was just too weak to complete a 10m QSO with a VT station. It's always fun trying. Thanks to the SQP organizers for the opportunity.

**See the full soapbox at *http://naqcc.info/qsoparties_soapbox.html***

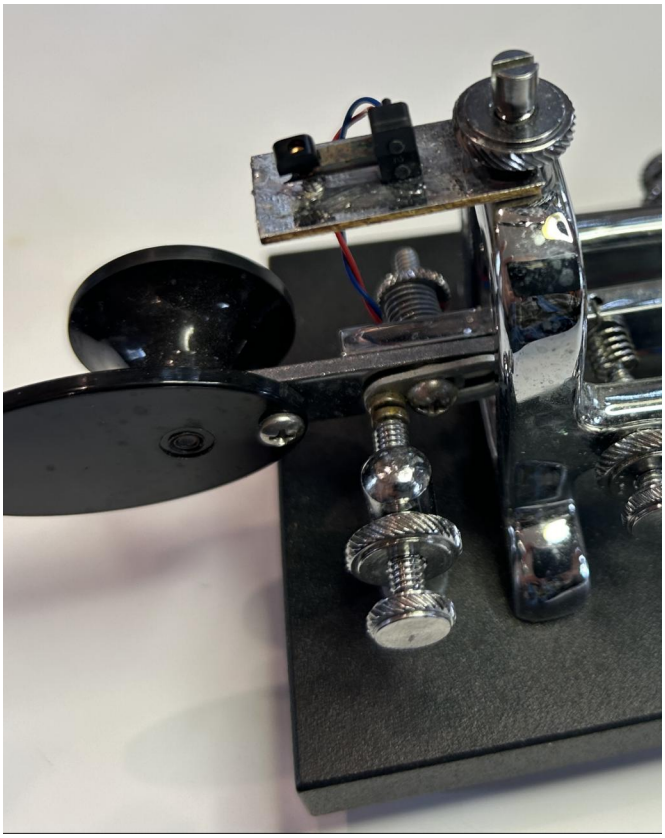
# A Micro Straight Key

## by Gene N5GW #5353

While digging in my junk box, I stumbled across a pair of microswitch variants on a vintage circuit board.

One of them resembled an ordinary telegraph key, but measured only about 1/2 inch long ( 1-1/2 cm.) and perhaps 3/16 inch wide (1/2 cm.). It struck me that it could be mounted as an interesting, whimsical miniature straight key.

After unsoldering it, I superglued it to a small, rectangular piece of PCB. I had to drill a hole in the bottom of the PCB and insert a screw in order to support the lower contact. Next I cut a notch in the PCB so it would fit under the fulcrum thumbscrew on top of my bug, soldered some connecting wires, and hooked it up to the terminals.

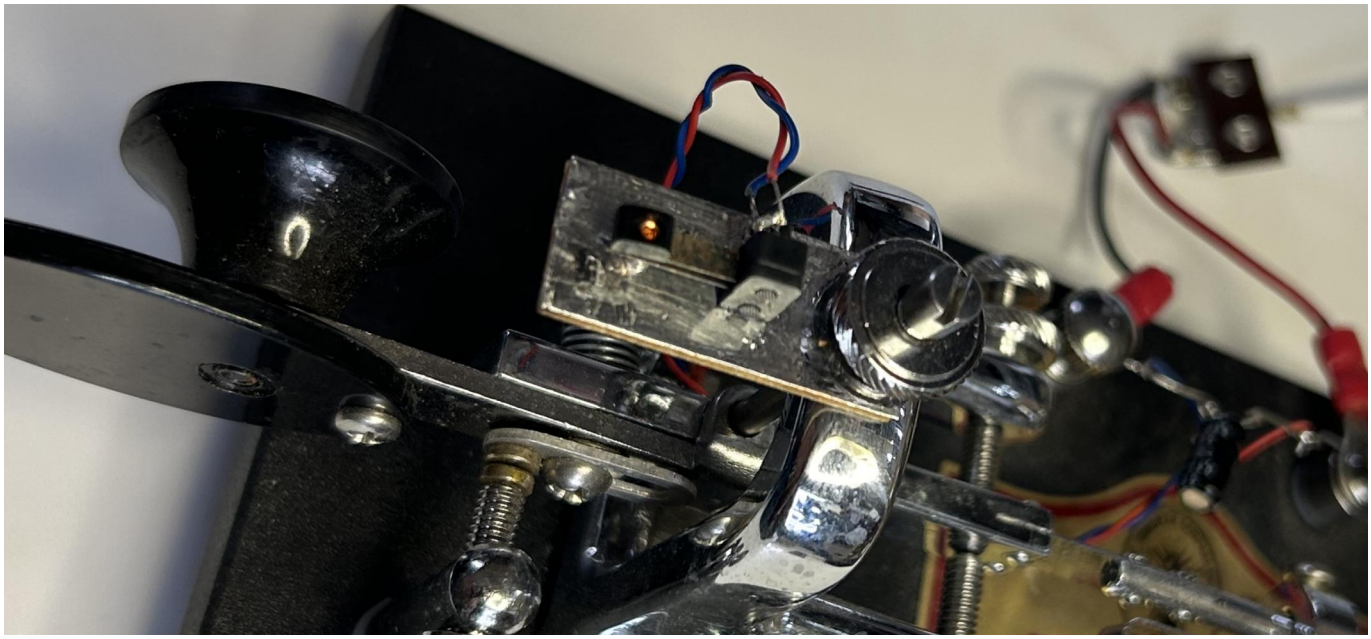


It worked great, but obviously could only be operated by using one finger. Even though I am in the shaky age group, I found I could send 7-8 WPM satisfactorily, fine for working QRS operators.

### A QRS-able Bug

The two pics show the key in some detail. I mounted it on my left-handed bug for two reasons: one was to avoid losing such a tiny device and having it swept out with the trash; the other was to have a straight key available to use when called by QRS operators such as with SKCC . It should be easier to send Morse using the microkey instead of the bug's dash paddle.

I do not recall if this is the smallest telegraph key I have ever seen, but it is cetainly the smallest one I have ever constructed!



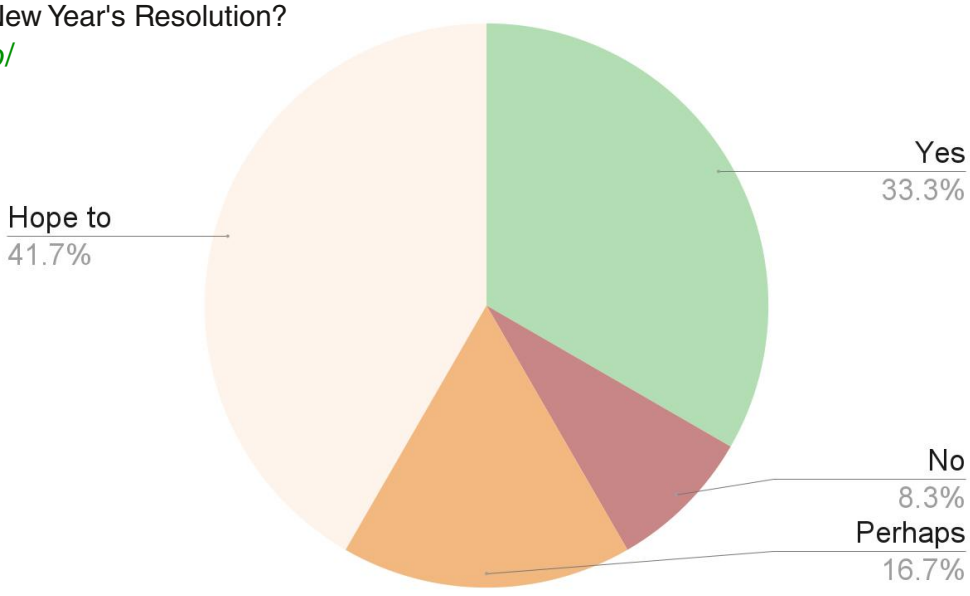
# MEMBER POLLS

## FEBRUARY POLL

When are you on the air with QRP CW? Let us know at *http://naqcc.info/poll_new.html*

## JANUARY POLL

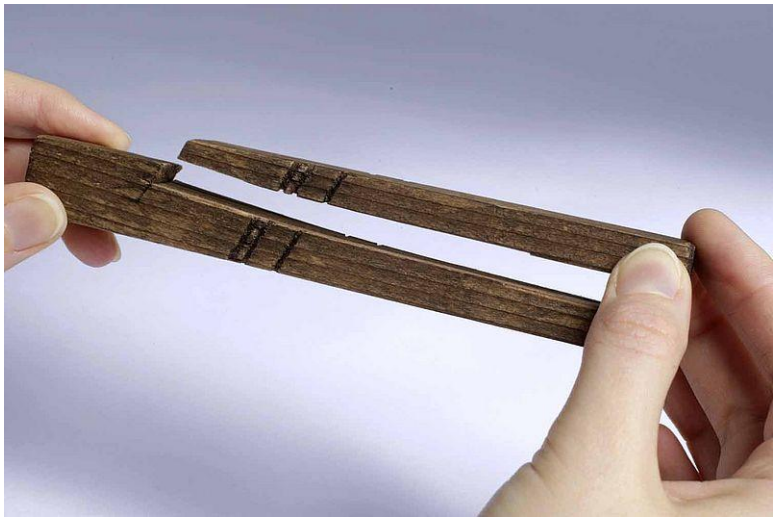
What's your QRP CW New Year's Resolution?
*http://www.naqcc.info/main_past_polls.html*



# NAQCC CHALLENGE BY GARY K1YAN #2365

## THIS MONTH'S LETTER CHALLENGE: THE TALLY STICK

If you are like me, you have a bunch of scratch pads around filled with notes to jog your memory. In ancient times there were no scratch pads but, they had tally sticks that did the same thing.



Take a stick or a piece of bone and carve in symbols or marks and you have an ancient sticky note. This was the single tally.

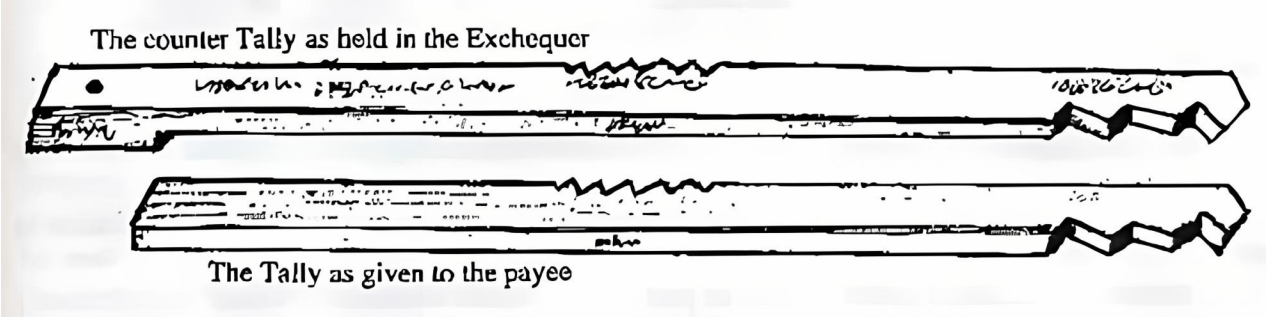
### SPLIT TALLY

As trade progressed there was a need for recording transactions. This resulted in the split tally. Take a stick and carve in the record of a transaction. Split it along its length, so that both halves show the same markings. Each party gets a half and there is the record. Put the two halves together and, if they match, the record is verified. In medieval England payment of taxes was recorded with the split tally.

### THE EXCHEQUER

The financial branch of government, the Exchequer, issued a system of recording in which cuts of various widths represented different amounts paid. A palm width was 1000 pounds while a little finger width was a single pound.

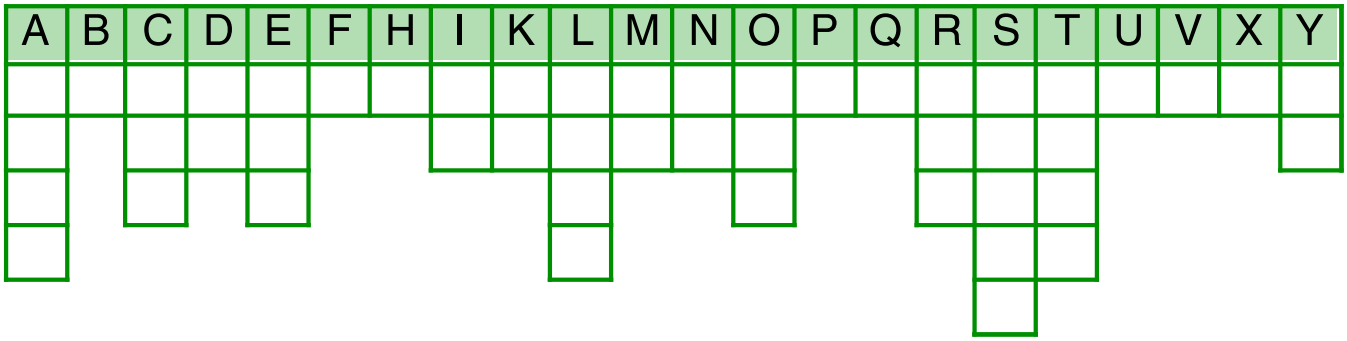
Each stick then had to have details of the transaction written on it, in ink, to be a valid record. The two parts were cut to different lengths. The longer part, the stock, was given to the party paying and the shorter part, the foil, was given to the party receiving payment. A tally was considered legal evidence in a medieval court of law.



## Words

- **TALLY STICK**
- **CARVED MARKS AND SYMBOLS**
- **TRANSACTION RECORD**
- **SPLIT TALLY SYSTEM**
- **FOIL AND STOCK**
- **EXCHEQUER**

## Challenge Tracker




X Every time you work a new station this month, mark off the lowest box under each letter of the call to track your progress and see what letters you still need. You can download a printable version of this month's tracker at: *http://naqcc.info/challenge_tracker.pdf*

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 charlie.wilber@gmail.com

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.")

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://naqcc.info/challenges_rules.html*

## Next Month's Challenge

Get squared away in next month's Roman Communications Challenge.
*http://naqcc.info/challenges/challenges202403.html*

## Last Month's Challenges

The deadline for submissions for the Mayflower 400 letter challenge is still a few days away. You can see what has been submitted so far at *http://www.naqcc.info/challenges/challenges202401.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+** | DK1VD AC2C KU4A KC5F N1JI WT4U K9OSC KA5PVB KD0V W2ITT AB9BZ NN9K N2EIM WY3H KI4IO WY7N KI8I NN3E VE3HUR ND9M W1BLU N1LU KD2MX K4KBL AD0YM W4LSV |
| **50+** | AK3X AH6AX VE3DQN KJ4R VE3FUJ NF1U WB4OMM KB1M N4OW G3JFS N9SE |
| **75+** | PA9CW PA0XAW WI5H WA2FBN W3IQ |
| **100+** | K1IEE |
| **125+** | K1YAN |
| **150+** | W2JEK K3WWP |
| **175+** | N8XMS |

### Challenge Soapbox Sampler

**N2GSL:** I have not subbmitted for a while. I thought It would be good to start fresh in the new yeart. Had a great time. 73 and good luck to all

**K4NE:** Improving band conditions and some days off work allowed me to add more DX calls than is usual for me.

**W4JL:** Another enjoyable Monthly Challenge! I had the pleasure of working all POTA (Parks on the Air) this month and got AK KL7AC in 3 different parks on two bands. Looking forward to next month! 72 Dave

**VE3DQN:** Curiously, my final letters to capture were A E I O U. Didn't succeed with all the I's and O's.

**N8XMS:** A fun mix of straight key, bug, and paddle QRP QSOs.

# NAQCC AWARDS

## FEATURED AWARD:

### SUFFIX WORDS

Many call letter suffixes form common words such as W3CAT, K3GO, EA1JAR, etc. This award is for working stations with such call letters. This award is adapted from a suggestion made by George KN2GSJ (now K2GHM). Sounds like a lot of fun - thank you George.

Work as many different stations as possible whose suffixes form two or three letter words. An arbiter is needed to decide what is a word and what is not. We've decided on a commonly used official Scrabble word list. See the end of these rules for the list which you may cut and paste into a text file for printing out if you wish. Working W2CAT and W3CAT counts as 2 stations, so there are a large number of available 'word calls' since the same word can be used with many different prefixes.

Only the whole suffix counts as a word - you can't get AT from W3ZAT or US from K2USN, and so forth.

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*.

### RECENT AWARD WINNERS

**QSO-A-DAY AWARD - 2023 FULL YEAR**

| Nr | Call | Total QSO's | Date | Notes |
|---|---|---|---|---|
| 0001 | K3WWP | 1,647 | 01/25/24 | |

**QSO-A-DAY AWARD - 2022 FULL YEAR**

| Nr | Call | Total QSO's | Date | Notes |
|---|---|---|---|---|
| 0001 | K3WWP | 2,105 | 01/25/24 | |

**QSO-A-DAY AWARD - 2021 FULL YEAR**

| Nr | Call | Total QSO's | Date | Notes |
|---|---|---|---|---|
| 0001 | K3WWP | 941 | 01/25/24 | |

**QSO-A-DAY AWARD - 2020 FULL YEAR**

| Nr | Call | Total QSO's | Date | Notes |
|---|---|---|---|---|
| 0001 | K3WWP | 990 | 01/25/24 | |

**WAS AWARD CATEGORY A (50 USA states QRP):**

0041 – WA7QCC 01/04/24

**WAVE AWARD BY K1YAN Category A:**

0010 – W8DXU 12/07/23

# Optimizing Dipole Antennas by Transmission Line Model (TLM) Principles

by David K8BYP #11325

Dipoles have classically been modeled and described by Maxwell's equations of summing up three-dimensional electro-magnetic (EM) fields, and their operation described by the Hertzian model of two oscillating charges. Modern science has thrown all that out and replaced it with TLM and quantum/nuclear physics.

## Time for a New Theory

The Hertzian model of sine waves oscillating between the dipole wires is totally erroneous.

This results in there being no way to correctly design and build the dipole without guessing, and leaves no way to understand its operation to optimize it.

Obviously QRP operation requires a very good antenna, especially with the poor to no propagation conditions we have now.

## Dipole Experiments

My antenna experiments and studies over the past seven years have included building and testing some extremely unusual and high performance vertical and dipole antennas; four dipoles for 80, 40, 20, and 15, and a wide-band HF vertical centered on 20M with roughly a 15 MHz bandwidth continuously. The 40-meter dipole is essentially omni-directional and is made of 8 AWG stranded copper. The 20M dipole is so extremely directional that it only works Europe, and North-South in the US with rather poor signal reports.

## Strange Patterns

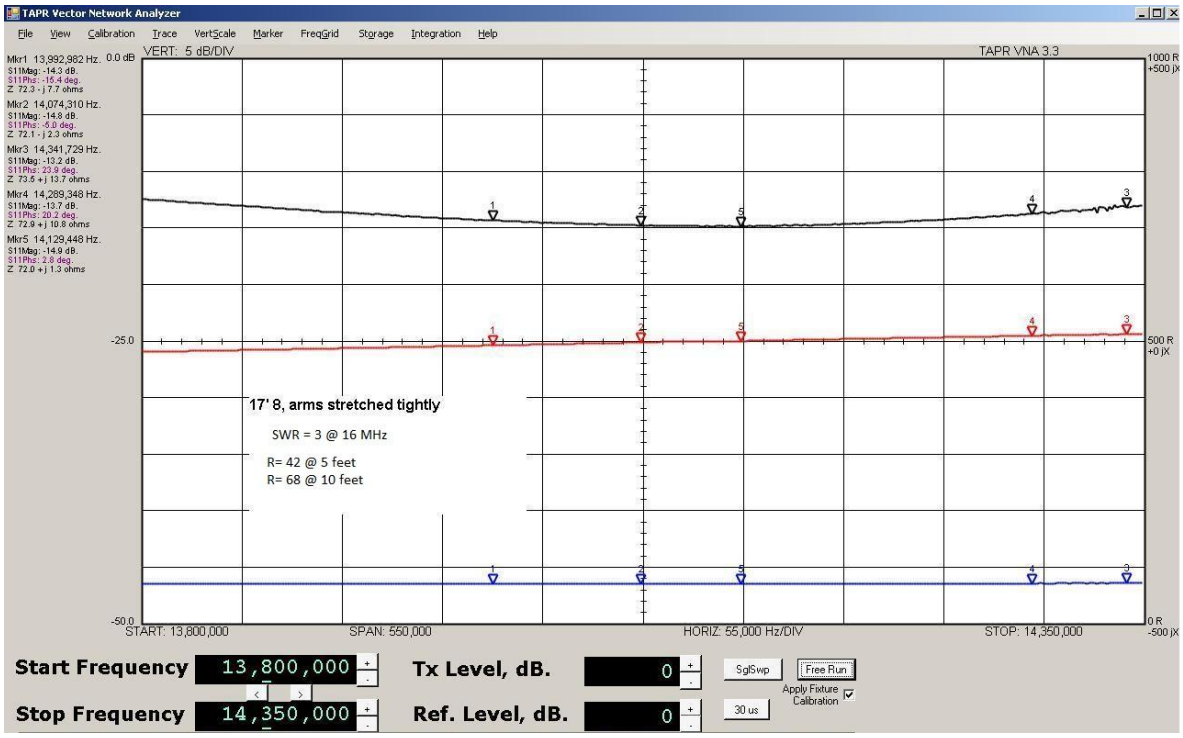
The 15M dipole of 6 AWG was recently built without enough time for meaningful testing. Both 20 and 15 M dipoles show very unusual field patterns between the wires and ground indicated by a FSM. At one-watt, the fields on the 20M dipole are spikes at the end of each wire, which completely contradicts Hertzian theory. The 15M dipole shows similar effects. It's so easy to work 6,000 airline miles plus on the 40 and 20M dipoles with less than one watt, that it is not even fun any more. The verticals are shunt-fed, with significant directionality. The 20M vertical has an S-5 directionality and the wide band HF vertical won't work to the south.

## The Old Way

Dipoles are often constructed by first choosing a wire diameter and height at random, or based on available wire sizes or trees or other supports. Then the wire lengths are approximated by a formula of 468 / frequency and the wires lengthened or cut to try to get a proper match. Unfortunately this dooms the antenna to poor performance forever.

## Optimizing the Process

The following process begins with calculating the wire lengths based on well known physics principles, then selecting the wire diameter and height. It is a process to separate out the variables to show what effect each has. After that, the process can be optimized.




19 Jan 2021
Measured by
K8BYP
David Campbell
Oak Ridge TN

Flatness of impedance due to dipole wires being pulled horizontal.

Antenna was raised in horizontal orientation from 1.5 M to 5.4 M above ground

The feedpoint R was from R42 to R73 varying with height.

6 gauge solid wire. (4.1 mm)

Extreme directionality not consistent with dipole theory.

The first step is to calculate the wire length. The first experiment was of a 77/80-meter low, thin wire dipole of 22 AWG enameled copper wire. The wires were cut to the 468' length and the antenna put at a six-foot height. The match was a perfect 50-ohms at 3.5036 MHz.

By transmission line principles, it is known that a wire above a plane ground is a transmission line whose dielectric is air. So the length of wire as initially cut, with a known optimum frequency was compared to the wavelength at the speed of light for the same frequency, and a correction factor of 0.951 calculated. This is the amount to shorten the wires for a given frequency. The result is exact with no further cutting.

## Wire Diameter Matters

The very small diameter wire is a known starting assumption in antenna engineering- it has the effect of being 'vanishingly small' so as to basically have no diameter. This has to do with the distribution and strength of the E-fields between the wire and ground.

It is known there is a relationship between wire diameter and the height of the dipole feedpoint (see Radio Engineers Handbook, p. 791, Fig. 24). I have not been able to find research data on the exact action of diameter and height in any published literature back to the 1910s. So, it becomes an experiment.

## 20m

The 20m dipole is of 6 AWG solid copper. It was tested with an old TAPR VNA attached directly to the feedpoint, connected to a laptop PC thru a powered USB extension cable. Sweeping the antenna across several MHz showed that the feedpoint resistive value was controlled by height above ground, and the bandwidth controlled by how far the feedpoint sagged due to being unsupported. The feedpoint was about 42 ohms at five feet and a final value to match a 75-ohm CATV coax was found at 17 feet, eight inches up.80m

The low-wire 80-75 dipole has a BW of about 330 KHz at SWR = 3. Switches installed in the wires at the appropriate distances from the

feedpoint allow closing both switches for the low end of 80 CW(3503), opening both for 75 (3875ish) , and closing one mid-band (extra class voice) with a slight SWR. This loss in match with one switch open shows the problem with off-center fed designs. Open both switches = shorter wire lengths = higher frequency.

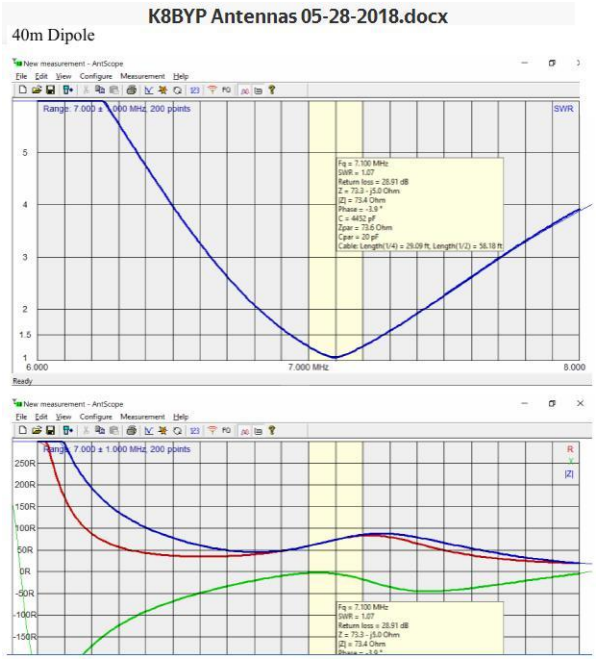
## 40M

The 40M dipole is about 1 MHz wide at SWR = 3. The 20M dipole has a SWR = 3 at 16 MHz. Both work the entire Amateur band with only a trivial indicated SWR across the band due to slight reactance. The 40 M dipole was used to work central GA last year at 1 mW.

Following this method allows the dipole to be correctly made with a perfect feedpoint match for efficiency, and to then go on to attempt to change the pattern.

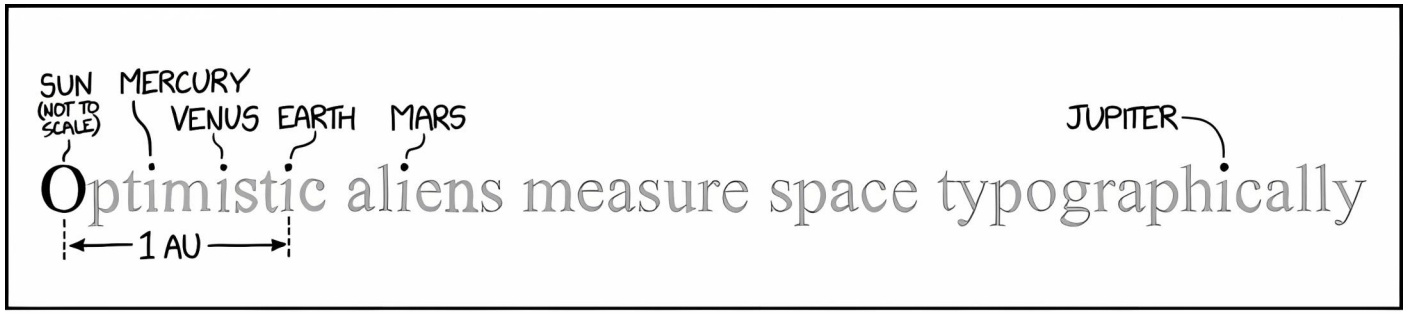
## So, My Observations Are:

- The wires must be cut for the velocity of propagation thru air and both wires must be exactly the same length,
- The wire diameter increases with frequency,




- The wires MUST be as close to the same height above ground across their entire lengths as possible to minimize feedpoint reactance and maximize bandwidth,
- The feedpoint resistive value is determined by wire heights to match the characteristic of the transmission line from the transmitter.

QRP ~~~~~~~~~~ QRP




SPACE TIP: IF YOU'RE EVER LOST IN THE INNER SOLAR SYSTEM, YOU CAN JUST TYPE OUT THE PHRASE "OPTIMISTIC ALIENS MEASURE SPACE TYPOGRAPHICALLY" IN TIMES NEW ROMAN AND USE THE DOTS AS A MAP.

xkcd.com

# NAQCC Sprints

## February Sprints

Our regular Sprint this month will be on Wednesday, Feb 14, 2023 0130-0330Z. That's the evening of Tuesday, February 13th in North America.
Complete information at *http://naqcc.info/sprint/sprint202402.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*.

## January Sprint Results:

Complete Sprint results, including all of the soapbox comments, can be found at *http://www.naqcc.info/sprint/sprint202401.html*. High scores can be seen in the tables on the next page.

| January Sprint | | | | |
|---|---|---|---|---|
| | Current Month | Previous Month | All-Time Record | Record Date |
| **Logs** | 82 | 90 | 217 | 4/17 |
| **Participants** | 113 | 131 | 269 | 2/13 |
| **Total QSOs** | 970 | 1,006 | 3,154 | 4/17 |
| **Hour 1 QSOs** | 616 | 588 | 1,704 | 4/17 |
| **Hour 2 QSOs** | 354 | 418 | 1,450 | 4/17 |
| **20m QSOs** | 100 | 25 | 1,232 | 8/13 |
| **40m QSOs** | 527 | 660 | 2,203 | 4/17 |
| **80m QSOs** | 343 | 321 | 1,417 | 2/13 |
| **Avg QSOs/Station** | 11.8 | 11.2 | 19.3 | 9/11 |

| SWA STRAIGHT KEY CATEGORY | | | |
|---|---|---|---|
| **Division** | **1st** | **2nd** | **3rd** |
| **W1** | K1MZM | KN1H | K1YAN |
| **W2** | KA2KGP | KN2G | W2SH |
| **W3** | KC3MIO | K3JZD | AK3X |
| **W4** | K4JPN | WG8Y | K7EK |
| **W5** | N5GW | AC5BX | KE5YUM |
| **W6** | K6GPB | - | - |
| **W7** | N7KM | - | - |
| **W8** | NF8M | - | - |
| **W9** | K9NUD | WB9HFK | K9QEW |
| **W0** | N0TA | W1TM | AA0W |
| **Canada** | VE3IIM | VE3SIF | - |
| **DX** | - | - | - |

| SWA BUG CATEGORY | | | |
|---|---|---|---|
| **Division** | **1st** | **2nd** | **3rd** |
| **W1** | WB1GYZ | - | - |
| **W2** | N2DGQ | - | - |
| **W3** | NN3E | - | - |
| **W4** | AA2MX | K3RLL | KJ4R |
| **W5** | - | - | - |
| **W6** | - | - | - |
| **W7** | N7QR | - | - |
| **W8** | K8NGW | - | - |
| **W9** | - | - | - |
| **W0** | - | - | - |
| **Canada** | VE3HUR | - | - |
| **DX** | - | - | - |

| SWA KEYER/KEYBOARD CATEGORY | | | |
|---|---|---|---|
| **Division** | **1st** | **2nd** | **3rd** |
| **W1** | W1TER | KB1M<br>N1DN<br>(TIE) | - |
| **W2** | K2OID | N2ESE | WA1GWH |
| **W3** | K3ES | K3WWP | KQ3Z |
| **W4** | KR4AE | N4MJ | AF4PX |
| **W5** | KN5EE | - | - |
| **W6** | KD0FNR | - | - |
| **W7** | WA7QCC | - | - |
| **W8** | WI8J | WA8SAN | - |
| **W9** | N9EEE | N9SE | - |
| **W0** | - | - | - |
| **Canada** | VE3DQN | - | - |
| **DX** | - | - | - |

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

## STATS:

**Logs submitted: 82**

**Total participants: 113**

**Total QSOs: 970**

**States + Provinces represented: 34 + ON**

**Hour 1 QSOs: 616**

**Hour 2 QSOs: 354**

**20m QSOs: 100**

**40m QSOs: 527**

**80m QSOs: 343**

# 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+ | KF7WNS KC7DM VE3GNU WD4OHD KB0ETU K1IX K2YGM AA7CU AA5LH N8HWV KC2MJT N8QY WY3H VE3HUR K6CSL W5UAA KC2EGL KE9DR AB8FJ NN9K W4HH WK6L K2HT KC3RN KD9EBS K3JZD WT4U KD0DK AB9BZ K4ORD K5GQ N1JI WA2NYY K8NGW KB4QQJ KB9ILT VA3NU K9QEW W4NLT |
| 75+ | K9EYT KB1M WA1GWH K4NVJ VE3DQN WB9HFK WA2FBN WB1GYZ WB4OMM NQ2W VE3FUJ K9OSC N2CN WD0K N8BB AA0W NN0SS KJ4R K6MGO N7QR NF5U WI5H N8APO K4KBL |
| 100+ | KL7IEE N5GW KN1H NA4O W4DUK KA9FQG NO2D N4MJ AA9L WB8ENE N8LA KD2MX KD3CA KQ1P |
| 125+ | WX4RM WA8SAN WG8Y N0TA N4FI K4KRW AK3X |
| 150+ | K3RLL NF8M K4BAI W9CC N8XMS K2CWM KD0V K4JPN N2ESE KU4A KE5YUM |
| 175+ | W8GG |
| 200+ | K3WWP KA2KGP W2JEK W2SH |

## Sprint Soapbox Sampler

**N9SE -** First sprint in a quite a while. Forgot how much I enjoy them!

**K3RLL -** RBN was pretty kind to me but the QRZ Propagation Chart sure didn't match my conditions this evening. 20m: Didn't hear a peep. On 40m, Happy for my five contacts. I think this is my 173rd regular NAQCC Sprint. You'd think I'd be more successful at it by now. (GRIN) 72, ... Don

**WT4U -** My 40 meter noise went away. Fixed or just snowed in? Anyway, first Sprint in a while I've made contacts in all 3 bands. Welcome our newest member, Jake KC7WXD #11676 who heard folks calling "CQ NA" and looked it up. The Sprints are a great advert for the club. See ya on top band!

**N1DN -** Good to get back on the air after being away for some time. Thanks to all for the contacts. 72 Phil

**K9QEW -** Fun Night. All QSOs on 40 meters using my Homebrew rockbound "FUNMITTER". This little jewel does the job. Band gave out after the first hour. 72/73s & STAY TUNED! Daryl

**KN2G -** I have been working on my paddle to make it less crunchy. It lasted most of the sprint but got rough again in the last bit. I may have to silver solder the contacts since stainless to stainless has never worked out that well for me. My weakest contact tonight was N8LA. Fine work to get me! 20 lasted only a little while, 40 was nice until it faded and 80 was noisy but active. See you next week at the most amazing sprint of the year!

# JANUARY 160M SPRINT RESULTS:

Complete Sprint results, including all of the soapbox comments, can be found at *https://naqcc.info/sprint/sprint202401_160.html*

| SWA STRAIGHT KEY CATEGORY | | | |
|---|---|---|---|
| **Division** | **1st** | **2nd** | **3rd** |
| **W1** | KN1H | K1MZM | WB1GYZ |
| **W2** | W2SH | KN2G | AA2VG |
| **W3** | W6WU | KC3MIO | - |
| **W4** | WG8Y | W4NLT | WT4U |
| **W5** | N5GW | - | - |
| **W6** | K6GPB | - | - |
| **W7** | - | - | - |
| **W8** | K8NGW | NF8M | - |
| **W9** | WB9HFK | K9NUD | - |
| **W0** | KD0V | - | - |
| **Canada** | VE3IIM | - | - |
| **DX** | - | - | - |

| SWA BUG CATEGORY | | | |
|---|---|---|---|
| **Division** | **1st** | **2nd** | **3rd** |
| **W1** | - | - | - |
| **W2** | - | - | - |
| **W3** | - | - | - |
| **W4** | AF4PX | - | - |
| **W5** | - | - | - |
| **W6** | - | - | - |
| **W7** | N7QR | - | - |
| **W8** | - | - | - |
| **W9** | - | - | - |
| **W0** | - | - | - |
| **Canada** | - | - | - |
| **DX** | - | - | - |

| SWA KEYER/KEYBOARD CATEGORY | | | |
|---|---|---|---|
| **Division** | **1st** | **2nd** | **3rd** |
| **W1** | - | - | - |
| **W2** | WA1GWH | WA2FBN | - |
| **W3** | K3WWP | KQ3Z | - |
| **W4** | N4MJ | - | - |
| **W5** | - | - | - |
| **W6** | - | - | - |
| **W7** | - | - | - |
| **W8** | WI8J | - | - |
| **W9** | N9SE | - | - |
| **W0** | - | - | - |
| **Canada** | VE3DQN | - | - |
| **DX** | - | - | - |

## 160M STATS:

**Logs submitted: 35**

**Total participants: 44**

**Total QSOs: 250**

**States + Provinces : 22**

**Hour 1 QSOs: 192**

**Hour 2 QSOs: 58**

## 160m Sprint Soapbox Sampler

**WD4OHD -** Couldn't hang around long tonight but managed to make a couple of QSOs in the first half hour. Quick signal fades in and out, from fairly strong to unreadable. My first 160m NAQCC Sprint. Wish I could have stayed on frequency longer. Best regards to all.

**WB1GYZ -** I'm wondering if my hearing will ever recover from tonight's Sprint ?

**K9NUD -** Wow, very tough night. I need a better 160M antenna! Storms in TX lit things up noise-wise. Thanks for the contacts!

**KN1H -** Had a great time playing on Top Band with the QRP faithful tonight. Some really big signals helped by an S-zero noise level. Thanks to all for the Qs. 72, John KN1H, IC-7300 Nye Viking Master Key.

**K1MZM -** A real mix of signals tonight: some folks were very loud here in Vermont and some were very deep in the noise. Thanks especially to N9SE for digging me out of the noise; I appreciate your patience.

**WT4U -** Great Sprint! Not the best cdx, with lots of QSB, but the noise level was reasonable and I got to work a few familiar calls. Apologies to K1MZM (I think) who tried so hard but kept fading out halfway through the call.

**WG8Y -** Hi all, Used a 77ft. coil shortened inverted L. I pulled my butternut hf6V vertical up in the back and attached the inverted L to the base. Top was app. 60 ft up. About the best I could do this year. Not enough room. Hi Hi. Thanks all for the repeats and sorry I couldn't pull a couple out of the QRM. Worked 5 non members and 1 member that was running some smoke! Hi Hi. He was the only S9 tonite. 72 all from N.C. Mark WG8Y

**W2SH -** This is the 17th NAQCC 160m sprint in which I've participated. Perhaps my modest score results from fewer participants; this to be determined when results are posted. I miss the sizable inverted L antennas I used to have to book more distant QSOs. KN1H, who uses an end-fed 400' horizontal wire was the loudest of those stations I worked, but he is only 200 miles away.

**KA8VZB -** My end fed wire antenna is not long enough to load up on 160m so I've never been able to give the band a try. On a whim I connected the rig to a wire running down to an outside cold water faucet and found that loaded up just fine!

**WA1GWH -** Worked 10 members and 8 SPC. Had to wait for my roving interference to makes its way across my frequency and disappear a number of times. Thought the sprint was not well attended until I realized I was positioned at the upper edge of the activity (1815 kHz) and there were quite a few ops below me!

**KN2G -** Got a late start so I missed the opening frenzy.... Got some easy ones and then a few hard ones too. The band closed in on me so I shut down a bit early. HOWEVER though it seems redundant and that I just might say this every time I participate--WHAT FUN! Plus I used the IC 718 turned down and measured at 4.75 watts with my new qrpguys wattmeter that I received in the mail Monday and assembled Monday night. Very cool little widget.. 72s

# 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://naqcc.info/cw_nets.html*. Questions should be directed to Net Manager Mark, W8EWH.

| NAQCC Net Schedule | | | | |
|---|---|---|---|---|
| **Net** | **Local Time** | **UTC** | **Freq +/-** | **Primary NCS** |
| **East Texas QRS Net (ETN)** | Monday 7pm CST | Tuesday 0100 Z | 7067 kHz Summer 3566 kHz Winter | Allen KA5TJS (TX) |
| **Midwest QRS Net (MWN)** | Monday 7:30 CST | Tuesday 0130 Z | 7031 kHz | Bob W0CC (KS) |
| **Pacific Northwest 80m QRS Net (PNW80)** | Thursday 5 PM PST | Friday 0100 Z | 3556.5 kHz | Stewart KE7LKW (WA) |
| **Wyoming Daily QRS 80 Meter Net (WY80)** | Off the air | | | Steve KE7UUJ (WY) |

**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 PM PST, which is Friday 0100 UTC on 3556.5 kHz +/-
Main NCS - Stewart KE7LKW (Washington State)

Jan 05 – QNI (7) NCS KE7LKW, WB4SPB, KB7DYP, N7QR, AB7BP, W6KPJ, K7JUV

Jan 12 – QNI (5) NCS KE7LKW, WB4SPB, AB7BP, WB7WHG, K7JUV

Jan 19 – QNI (7) NCS KE7LKW, WB4SPB, AB7BP, WB7WHG, KJ7KDB, K7JUV, N7QR

Jan 26 - QNI (8) NCS KE7LKW, WB4SPB, WB7WHG, KB7DYP, K7JUV, AD7BP, N7TB, KC7CW

## NAQCC MIDWEST QRS NET (MWN)

Monday evenings 7:30 PM CST, which is Tuesday 0130 UTC, on 7031 kHz +/-
Main NCS - Bob W0CC (Kansas) — Assisted by Dave AB9BZ

Jan 01 – No Net Tonight
The household power went out 30 minutes prior to the start of the NET. Although, I frequently use batteries, my XYL, KE0HZG, thought that I should QSO with the Utility Company. After they laid temporary cables, the power was restored. Hopefully, next week will be less eventful!

Jan 08 – QNI (1) W0CC
Had an incomplete contact with Dick, N9EEE. There was quite a bit of static and signal shifting in the middle of a snowstorm that is causing a lot of closures and probably not helping with my signal!

Jan 15 – QNI (2) W0CC, N9EEE
There were a lot of stations with broad signals and it was a challenge to find a spot for 5 watts. The best seemed to be up 25 to 7.03125 and Dick, N9EEE, was able to weave his way through the maze. It was GREATLY Appreciated!

Jan 22 – No Net Tonight

Jan 29 – QNI (3) W0CC, WB9HFK, N9EEE
WB9HFK, had an undisturbed signal; then the QRN cut in and Dick, N9EEE, did a GREAT Job navigating through the QRN.

## NAQCC EAST TEXAS QRS NET (ETN)

Monday evenings 7PM CST, which is Tuesday 0100 UTC,
on 7067 kHz +/- (Summer) or 3566 kHz +/- (Winter)
Main NCS - Allen KA5TJS (Texas)

Jan 02 – QNI (3) NCS KA5TJS, KE5YUM, N5MHI
FB first net of 2024! Have to get used to using that year HI HI. Both were 599 and great to hear Jon from Austin again. HNY and hope to hear you all soon.

Jan 09 – No Net (Weather)

Jan 16 – No Net (Weather)

Jan 23 – QNI (3) NCS KA5TJS, KE5YGA, N4NN
Band was down but copied both about 559. They had some trouble with QRN. Lots of rain so wet antenna.

Jan 30 – QNI (2) NCS KE5YGA, KA5YUM
There were 2 that night but I was not there! They had a good QSO wondering where I was!

# NAQCC Chapters

## Start a Local Chapter

The North American QRP CW Club currently has six local chapters - 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.

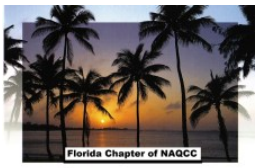
The chapter’s web site is *https://www.facebook.com/groups/967110089994401/*.

## 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/naqccillowa2/*.

## 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*.

QRP QRP

# NAQCC Prize Sponsors

MFJ Enterprises, Inc.

https://mfjenterprises.com


https://www.arrl.org/


http://www.4sqrp.com


http://zaarc.org/gsqrp.html

KB3IFH QSL CARDS
& Ham Radio Gifts

https://www.kb3ifhqslcards.com/

# 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.

| NAQCC CONTACTS | | |
|---|---|---|
| NAQCC President | John KK4ITX | jleahy00@yahoo.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<br>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

308 R1.00