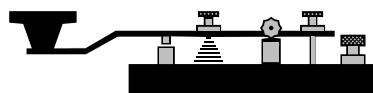


NAQCC NEWS

ISSUE 270 • DECEMBER 2020



KEY CLICKS

• TWO SPRINTS THIS MONTH

Our regular Sprint this month will be on Wednesday, December 9, 2020, 0130-033Z. That's the evening of Tuesday, December 8 here in North America.

The Milliwatt Sprint this month will be on Wednesday, December 16, 2020, 0130-0330Z. That's the evening of Tuesday, December 15.

• CHALLENGE DRAWING REPORT

On November 12 the final event for our NAQCC 16th Anniversary Celebration was held - the prize drawing for the participants in our October Anniversary Challenge. Thirty-six members submitted challenge reports and were entered into the drawing. Here are the results:

1. An MFJ 40m Cub Transceiver Kit == NN0SS
2. A DX Engineering \$50 Gift Certificate == W2ITT
3. A 4SQRP Cricket Transceiver Kit == K4KBL

The complete list of all of our anniversary sprint and challenge winners can be seen at http://www.naqcc.info/prize_drawing_16th_anniv.html and a summary report about all of the anniversary events was published in the November newsletter.

• IN THIS ISSUE

- Gene N5GW beats back the low-band noise with a shielded receiving loop
- Dejan, SA3BOW "wraps up" his series of innovative ideas for portable QRP gear
- Member Spotlight on John KK4ITX
- Stan, WB2LQF gets into the details of a top-quality bug
- This month's Challenge goes deep, very deep
- A 3D-printed answer to toroid hassles
- Net reports, Chapter trip reports, and more!

• YOUR CONTRIBUTIONS NEEDED

Drop us a line, and maybe a few pictures, to let us know what you're doing: kd2mx@arrl.net

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THE PREZ SEZ...

Greetings NAQCC Members!

2020 has been anything but “normal.” Wow. Who could have known?

COVID-19 has changed our landscape forever. But, looking for that silver lining in the black clouds, it appears it has allowed more of us ham folks to get on the air! And KUDOS to all of those folks that organize and administer the various contests and on-the-air activities; they adapted and STILL we had the ARRL Field Day, all kinds of QRP contests, our Anniversary Celebration, monthly Parkpeditions, the NJQRP Skeeter Hunt, and many other QRP events... albeit with new, “home” locations and some crafty rules, “modifications.” Just goes to show how easily adaptive we can be!

NAQCC changed significantly this year and became a non-profit organization. While many may question this move, it allows us to now solicit donations effectively and keep us a no dues Club. This was evidenced by some of the commercial vendors that donated to our Anniversary Celebration - wait for next year, we should be even better! Coming soon —a “PayPal donation button” on our home page, and Amazon’s Non-Profit Share Program participation.

We established a Twitter account and enhances our presence in Facebook—social media applications that allow us to advertise and announce.

We also now have a highly capable Board of Directors that geographically represent our group and most of our “positions” that work behind the scenes have “backup” folks—just in case.

Meeting our next challenge is in progress: updating and making our web presence graphically appealing and easier to navigate.

My sincere thanks to all of those members that work behind the scenes tirelessly providing a great environment for our members to participate in.

Our Newsletter Editor Brent WT4U is always looking for submissions for the Newsletter—anything related to NAQCC, QRP CW. Send Spotlight Editor Paul K2DMX an e-mail if you have something to submit or need more information: kd2mx@arrl.net

To all of our members, a heartfelt wish for a safe and Merry Christmas and a prosperous and HEALTHY 2021!

Stay safe, KEEP YER DISTANCE, WASH YER HANDS, and get radio-active!

72/73!
Steve Szabo WB4OMM #5913
NAQCC President



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



MEMBER POLLS

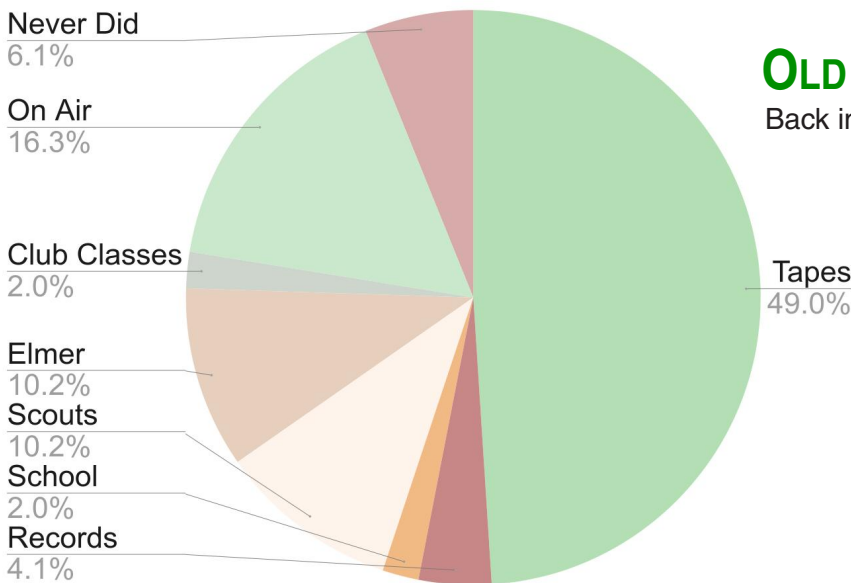
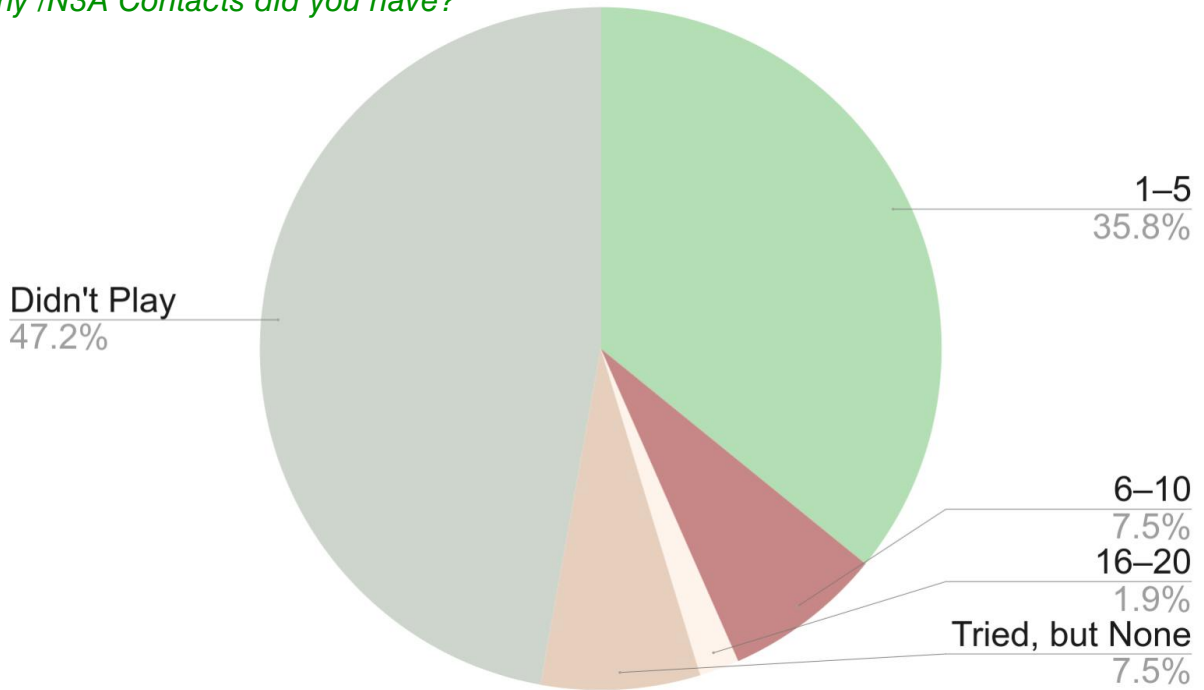
DECEMBER POLL

As the Next Solar Cycle is gearing up, are you planning on getting more active with NAQCC?
Let us know at http://naqcc.info/poll_new.html

NOVEMBER POLL

Results confirm what our N3A ops told us last week: Rough conditions for our /N3A challenge this year!

"How many /N3A Contacts did you have?"



OLD POLL

Back in 2015 we asked NAQCC members:

"How did you learn CW?"



MEMBER SPOTLIGHT

Each month one of our members is randomly selected and asked to share their ham radio biography with all of us. Questions or comments should go to Paul, KD2MX.

DISCLAIMER: Any views expressed in this section are those of the submitting member and may or may not be those of the NAQCC or its officers.

JOHN LEAHY KK4ITX #7249

Like so many of you I was fascinated with both AM and shortwave radio heard over my grandparents floor model set. My stepdad was a High Speed Operator during WWII in the Philippines and let me string wire to my hearts content when I was a kid.

WHY QRP FOR ME ?

QRP is not a one size fits all activity, pigeon holes don't work well here because of the overlaps of other facets of the ham radio "hobby" and the conditions under which you have to operate. The uniqueness of QRP is that you get to decide which parts YOU want to include in your operation and your success is dependent on your abilities to cope with the conditions.

What am I talking about? Radios, build or buy? Antennas build or buy? How about tuners, SWR meters, power supplies, solar panels, and the never ending add-ons, even CW keys, build or buy are always the options. The level that you find yourself at is usually determined by your own choices; finances, creativity and construction abilities... it all fits as long as it works!

ON THE WORKBENCH

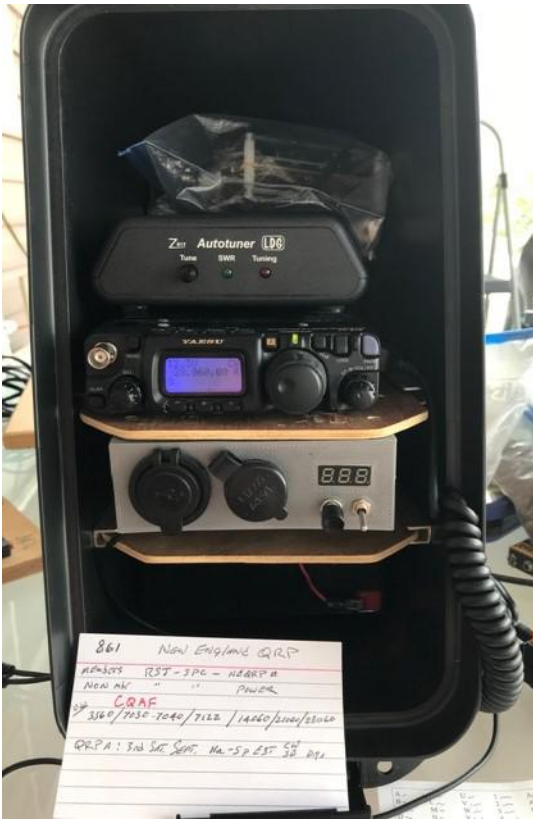
Myself, I just enjoy building something with minimal tools, fit and finish as good as needed and when "it" actually works I am ecstatic to say the least. During this Covid thing I worked mostly on kits such as the Murania AM radio, QRP-O-Meter, SOTABeams WSPRLite 40/80/160m filter, several EFHW and other EF matchboxes, along with a



Capacitor Meter, O-scope, plus several other projects to be remembered later and now I have slid into Arduino and Raspberry Pi projects also.

OPERATING OUTDOORS AND SPREADING THE WORD

I truly enjoy the outdoors and operating from wherever I can drive to. My favorite places are the beach parking lots along the Atlantic, particularly in Maine. I take with me some business cards and a two sided "Rack Card" that explains what I'm doing and what Amateur Radio is about today. Hardly ever do I not get two or three interested folks to talk to and promote this great hobby. Some operators don't want to be interrupted but I enjoy it.



Our lifestyle offers me the opportunity to enjoy the winters in Florida (talk about beaches), trips to Minnesota to visit “most of the grand-kids,” and to Maine for some more beach and mountain time. I retired sixteen years ago for health reasons and actually have gotten better in most respects so life is good, at least today I can walk enough to get the job done.

CW has grown on me partly due to the respect I have for what my stepdad went through in WWII and because it IS a skill that not many have today. I have found that the QRP/CW community is incredibly helpful, and with the multitude of clubs to belong to one runs out of free time quickly. Note the 3x5 index card in the rig photo, I have over 15 of these, one for each of the clubs/events that I belong to because each one usually has a unique number and a different exchange, not to mention frequencies.

VOLUNTEER SPIRIT

I also have been a volunteer all my life so when Steve (WB4OMM) was looking for a VP and a Club License Trustee I stepped up. I see that we need someone to take over for Joe (KW1K) who is retiring from the Swap and Shop listing... please step up too and keep this going.

Email me (Call@arrl.net) if you would like more detail on any facet in this article.

72/73, John

861 NEW ENGLAND QRP
 MEMBERS RST-SPC-NE&RP#
 NON mbr " " POWER
 CW CQAF
 3560/7030-7040/7122 / 14060/21060/28060
 QRP A: 3rd SAT. SEPT. 11a-5p EST CW 3B D.91

11603 FOUR STATES QRP
 SSS = RST/SPC/#
 NETS WED 9pm EST & 9:30 7.122 & 3564 WQSRP

7249 NAQRC 3560 10106 21060
 7030- 10116 24906
 7045 14060 28060
 7122 18096 58096
 *CQ NA KKA1TX
 Exch: RST/SPC/NUMBER or PWR
 SPRINTS WED EVE 3rd JAN-MAR MAY-JUL-SEP-NOV
 2nd FEB APR JUN AUG OCT DEC
 0030-0230Z STD TIME 0130-0330Z 7030-7045
 14059-14065

A TOUR OF THE SL-170IN BUG

BY STAN LEVANDOWSKI WB2LQF #4740

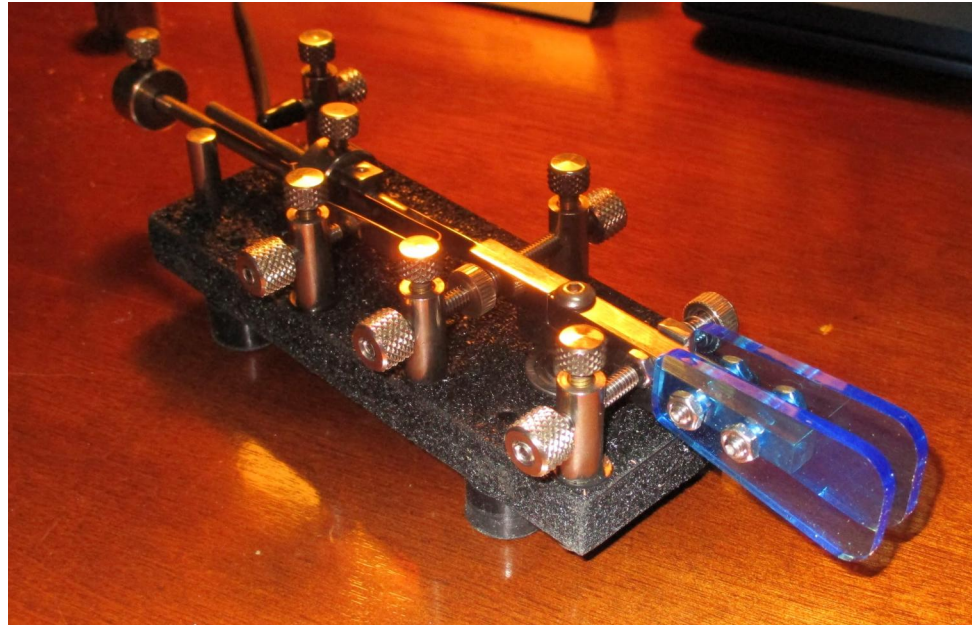
KN4YB just introduced his latest in-line bug with some innovations worth exploring. Tom Devoe, a professional machinist with over 30 years experience, lives in Florida and is a CW junkie. In 2018 he set out to create a line of high quality keys that offered lower cost, innovative design and ease of adjustment and maintenance.

The SL-170IN is his newest offering. Based upon my experience with it, he has met every one of his goals. At \$170, the instrument is about half of what many other well known key makers charge. The SL-170IN is also much smaller than the standard size defined by the Vibroplex Original and other similar keys. It measures 2 inches by 5 inches and the base is ½" thick cold rolled 1018 steel finished in an attractive black crinkle.

MATERIALS

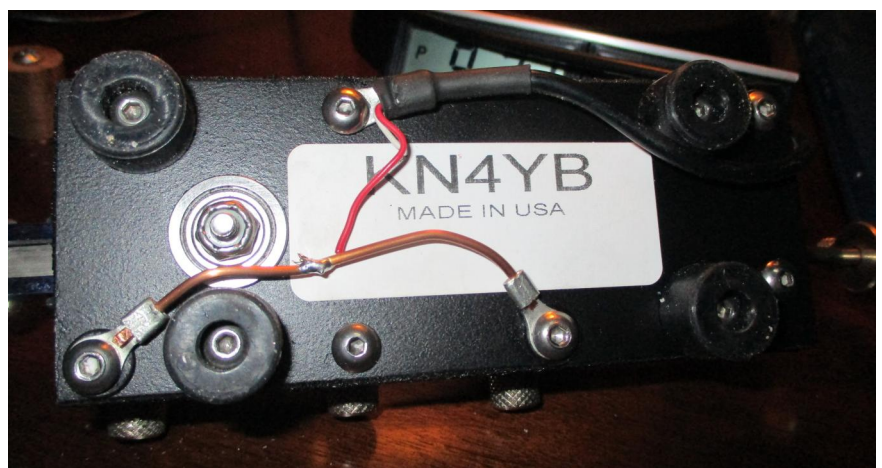
The top parts are brass and the buyer can ask for either original brass finish or nickel plating at no extra charge. Tom uses an old fashioned nickel plating method based on vinegar. I ordered the nickel plating because it does not tarnish.

Beginning with the bottom of the key, you can see that Tom pays as much attention to detail here as he does with the top. Notice the oversize bearing. It is an F688 which is commonly available so if it ever needed to be replaced, you could do it yourself using the Allen wrench kit that Tom includes with every purchase.



There are four oversized soft rubber feet and all the connections are carefully executed.

The top of the bearing is shown below. Tom makes all of his own parts except for the bearing and the two 4 lb. conical stainless steel springs which he purchases. Tom is a thoughtful, master craftsman. His approach is to keep his costs low by designing his line of bugs, paddles and sideswipers to share the inventory. The buyer benefits.





Bearings are far superior to the older “post and cup” method of bug design such as Vibroplex has used for over 100 years. There is no adjustment or alignment required, play is no longer an issue and friction is far lower on the rolling surfaces of balls. Makes sense to me!

INNOVATIVE DETAILS

Another innovation is the supplemental vibrating arm extension (below). This provides an impressive speed range that ranges from about 10 wpm to between 40 and 50 wpm. The most effective way to slow down a bug is to extend the weight beyond the damper and this is precisely what Tom’s design does here. The supplemental arm is secured by a thumbscrew and it can be extended with added weights for slow speeds and entirely removed for higher speeds. Tom supplies two weights as standard.

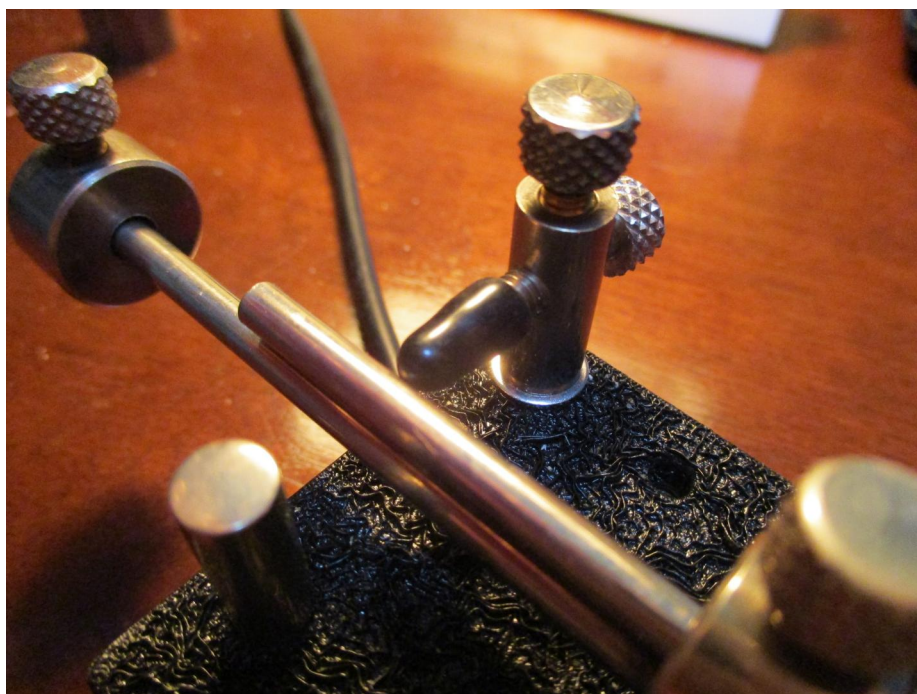
In the preceding picture, note that the damper arm has a black

vinyl bumper which eliminates the annoying clacking of most bugs. The damper is also free to swivel out of the way when adjusting the weights and the supplemental arm.

What really makes the SL170IN stand out is the adjustable flat spring pre-loader. Ted McElroy invented the dot stabilizer. Jim, W0EB used to (and perhaps still does?) sell his version for round and flat arm Vibroplexes. Neither of these were adjustable.

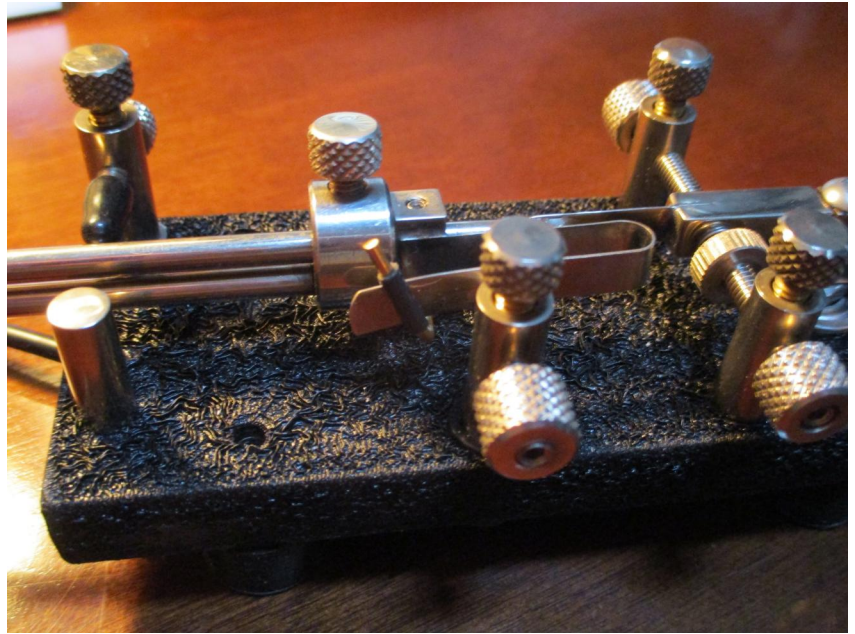
Hams have designed electronic debouncers, many of which can be found in the archives of QST

and in various online sources. WB9KZY sells his “Bug De-scratcher III” kit which is an electronic debouncer. One frequent low cost approach is to stuff some foam into the flat spring. Some CW operators shrug off contact bounce. They insist that poorly formed dits and scratchies are nothing more than the result of poorly adjusted keys.



The issue has been that even when the operator solves the problem, it always seems to reappear.

What Tom has done is unique. He produced a flat stainless steel spring with a bit of an outward bend to it as shown in the photo. Then he developed a method to vary the pressure on the spring from “full on” to “full off” and every point in between. It can be adjusted on the fly. So far, I can’t get it to fail.



This key is elegant. It is easy to adjust. The finger pieces are attractive and can be requested in red, black, clear, blue or glass-edge green. I found that I can vary the speed range widely without having to readjust the dits. The ninety degree locking hardware ensures that whatever adjustments I make stay right where I put them. This has become my favorite key of all time!

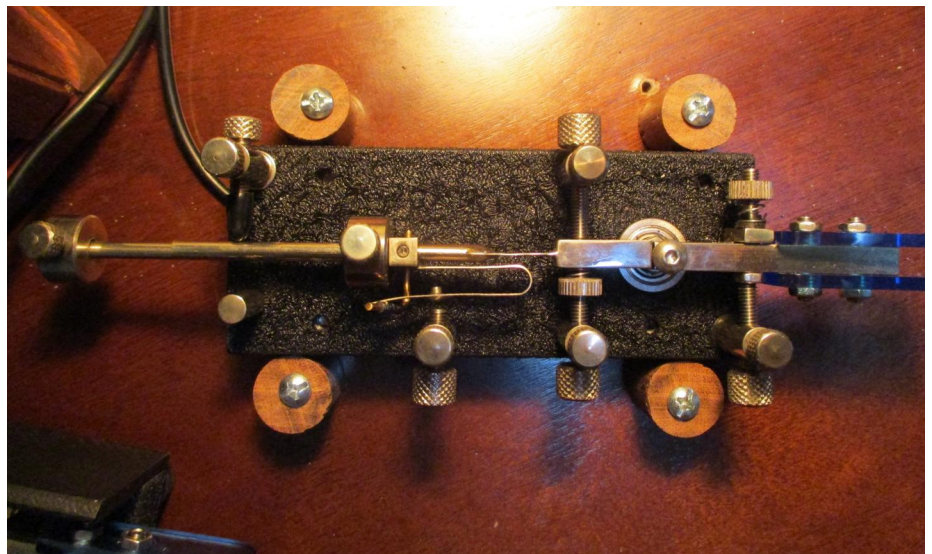
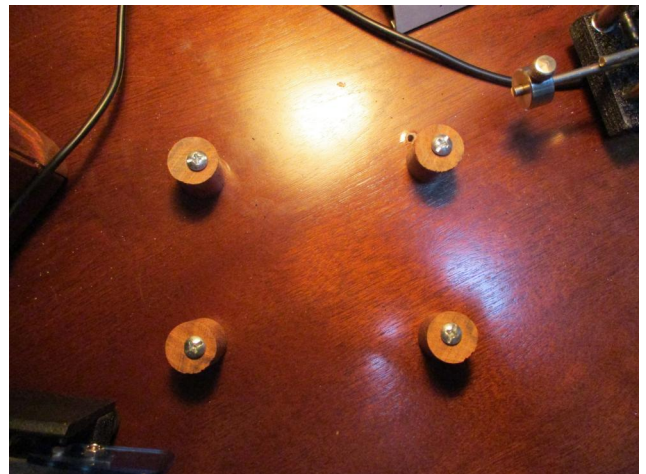
If you are in the market for a new bug, the SL170IN is worth exploring.

MY INSTALLATION

As an aside, let me mention my method for keeping my bug on the desk. I’m a “slapper” and rubber feet, no matter how large, are no match for my violent whacking.

I drilled off-center holes through four one-inch wooden dowels and screwed them to my operating surface in my preferred angle and position.

Then I just laid the key inside and turned the dowels to capture the key!



73, Stan WB2LQF #4740

NAQCC SPRINTS

DECEMBER SPRINT

Our regular Sprint this month will be on Wednesday, December 9, 2020, 0130-033Z. That's the evening of Tuesday, December 8 here in North America.

Complete information at <http://naqcc.info/sprint/sprint202012.html>.

DECEMBER MILLIWATT SPRINT

Our Milliwatt Sprint this month will be on Wednesday, December 16, 2020, 0130-0330Z. That's the evening of Tuesday, December 15 here in North America. Operate at 1 watt or less (the lower the better) to be eligible for any awards or prizes. Others welcome to participate and submit check logs.

Complete information at <http://naqcc.info/sprint/sprint202012.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.

LAST MONTH'S SPRINT RESULTS:

Complete sprint results, including all of the soapbox comments, can be found at <http://www.naqcc.info/sprint/sprint202011.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: KA5NKD, KJ7KDB, & WB7GR

November Sprint				
	Current Month	Previous Month	All-Time Record	Record Date
Logs	95	97	217	4/17
Participants	145	142	269	2/13
Total QSOs	1005	1142	3154	4/17
Hour 1 QSOs	557	563	1704	4/17
Hour 2 QSOs	448	579	1450	4/17
20m QSOs	0	19	1232	8/13
40m QSOs	341	443	2203	4/17
80m QSOs	664	680	1417	2/13
Avg QSOs/Station	10.6	11.8	19.3	9/11

SWA STRAIGHT KEY CATEGORY

Division	1st	2nd	3rd
W1	KN1H	K1MZM	W1PQO
W2	W2SH	KA2KGP	W2JEK
W3	K3JZD	AK3X	KC3MIO
W4	N4PIR	K4JPN	KC5F
W5	N5GW	K5MBA	KA5HZV
W6	K6GPB	-	-
W7	WB7GR	KF7WNS	WY7N
W8	AB8RL	NF8M	KI8JY
W9	WB9HFK	KA9FQG	W9CC
W0	NN0SS	AA5LH	AA0W
Canada	VA3NU	-	-
DX	-	-	-

SWA BUG CATEGORY

Division	1st	2nd	3rd
W1	-	-	-
W2	WA2FBN	WB2LQF	-
W3	NN3E	K3WWP	-
W4	KJ4R	K3RLL	-
W5	NF5U	-	-
W6	-	-	-
W7	N7QR	-	-
W8	K8NGW	N8XMS	-
W9	K9DRP	KB9ORH	-
W0	KD0V	-	-
Canada	-	-	-
DX	-	-	-

SWA KEYER/KEYBOARD CATEGORY

Division	1st	2nd	3rd
W1	W1ND	K1IX	KB1M
W2	WA1GWH	K2OID	N2ESE
W3	-	-	-
W4	KB9ILT	WB4OMM	K4BAI
W5	N5AAS	K5WX	WI5H
W6	-	-	-
W7	-	-	-
W8	WI8J	WA8SAN	-
W9	AB9BZ	-	-
W0	N0TA	N8LA	K0NIA
Canada	VE3DQN	VE3GNU	-
DX	-	-	-

GAIN CATEGORY

KEY	1st	2nd	3rd
SK	-	-	-
BUG	KF6C	-	-
K/K	W3KWH	-	-

FIRST-TIME ENTRANT HIGH SCORE

KEY	1st	2nd	3rd
SK	WB7GR	-	-
BUG	-	-	-
K/K	-	-	-

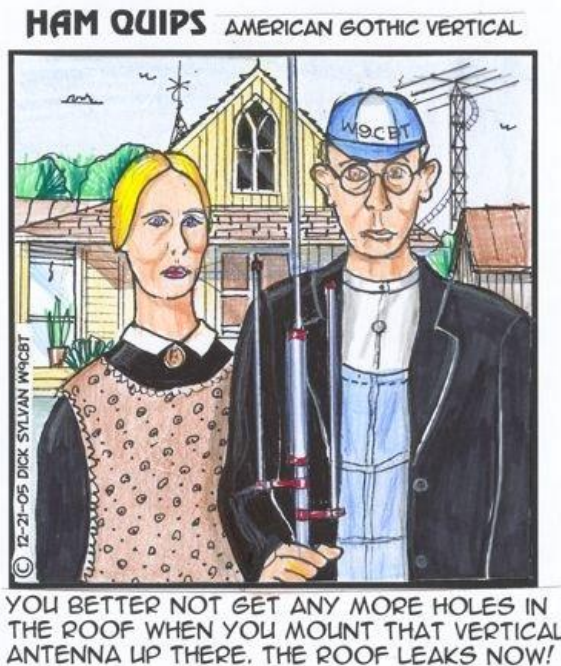
SPRINT PRIZE DRAWING WINNER

K2CWM

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+	NU7T(SK) K9EYT KF7WNS KD3CA KB0ETU N2CN K2YGM AA7CU NQ2W KC7DM NF5U N8QY WY3H WI5H WA1GWH WB4OMM K6CSL AA0W KB1M WK6L KC2EGL W5UAA WA2FBN VE3DQN K4ORD AB8FJ NN0SS K2HT WB1GYZ VE5BCS(SK) VE3GNU WB9HFK KJ4R
75+	AA9L K4NVJ NO2D AK3X KB3AAG(SK) KA9FQG VE3FUJ NA4O WD0K N8BB N5GW KQ1P KN1H K6MGO K9OSC N4MJ N8APO N8LA
100+	KE5YUM KD2MX K1IEE KD0V WA2JSG N4FI W4DUK N2ESE WB8ENE WX4RM WG8Y W8SAN N0TA K4KRW
125+	K4BAI KU4A NF8M K3RLL K4JPN
150+	W2JEK W2SH W9CC WB8LZG N8XMS
175+	KA2KGP K3WWP



Dick Sylvan, W9CBT, #2062, has been a QRP/CW operator for a long time. He is also a very accomplished ham radio cartoonist and his work has appeared previously in the K9YA Telegraph newsletter. His book "HI HI - A Collection of Ham Radio Cartoons" is available at www.lulu.com.

NAQCC CHALLENGE

BY GARY, K1YAN #2365

THIS MONTH'S LETTER CHALLENGE: SUBMARINE ELF COMMUNICATION

Trying to communicate with a submerged submarine poses a serious problem at normal radio frequencies. Seawater shields submerged boats from radio signals, cutting off vital communications. As transmission frequency decreases into the Very Low Frequency and Extremely Low Frequency spectrums, radio waves will penetrate seawater and support communication with a submerged boat. VLF frequencies of 3 to 30 kHz are capable of penetrating water to depths of about 10 to 30 meters.

To utilize these frequencies a boat must rise to this shallow depth and risk detection. ELF frequencies of 30 to 300 Hz, can however, reach down to hundreds of meters allowing communications at preferred operating depths.

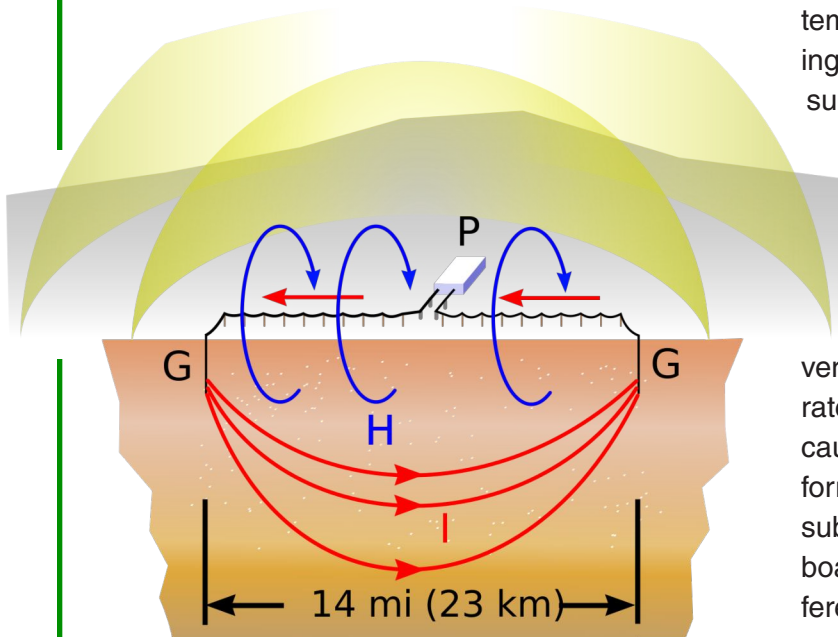
BIG ANTENNAS AND QRSS

ELF operation is not without its problems. A half wave dipole for ELF would be around 300 miles long, so any physically practical antenna is very



small in terms of wavelength and extremely inefficient. Antennas known as ground dipoles have been used. Resembling power distribution lines built on 40 foot poles, they are grounded at the ends of the 14 mile long legs and are in the shape of a cross with the transmitter in the center. For one installation, 2.6 megawatts of input power radiated only about 8 watts of ELF signal. Signal attenuation of only 1 to 2 dB per 1000 km at ELF does, however, allow communication over half the globe with this low power (QRP works!). The system transmits continuously, 24 hours a day, sending an "idle" message when not in use, so that submarines can verify they are within communication range. Shipboard ELF transmitting systems are not practical, so the communication is in one direction only.

As a result of the very low transmitting frequency, bandwidth for data transmission is very small. The resulting slow data transmission rate makes long text messages impractical. Because of this limitation, the system is used to perform a "bell ringer" function, alerting the submarine that there is a message for them. The boat must then receive their message using a different communications system.



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 eligible calls you worked. It will apply the letters, tell you what you're missing, and fill out the email for you. <http://naqccletters.azurewebsites.net/>

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) 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

WORDS

- EXTREMELY LOW FREQUENCY
- 30 TO 300 HZ
- BELL RINGER FUNCTION
- GROUND DIPOLE
- NARROW DATA BANDWIDTH
- 24 HOUR IDLE

DECEMBER CHALLENGE TRACKER:

0	2	3	4	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	T	U	W	X	Y	Z

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.



NEXT MONTH'S CHALLENGE

You are a deck hand on an ocean going cargo ship or a supertanker, and want to become an officer. Perhaps, you are a harbor pilot or a ships officer in charge of a navigational watch and want to hone your skills. The ships you are trying to master handling can be over 900 feet in length and cost many millions of dollars. This is not the kind of vessel someone is going to hand over to you and say "Take her for a spin and see how you do." A solution is to board a 37 foot long, 1/25th scale supertanker or an ocean-going cargo ship. They are scale models, from actual ships plans, accurate in every detail that effects how they handle. <http://naqcc.info/challenges/challenges202101.html>

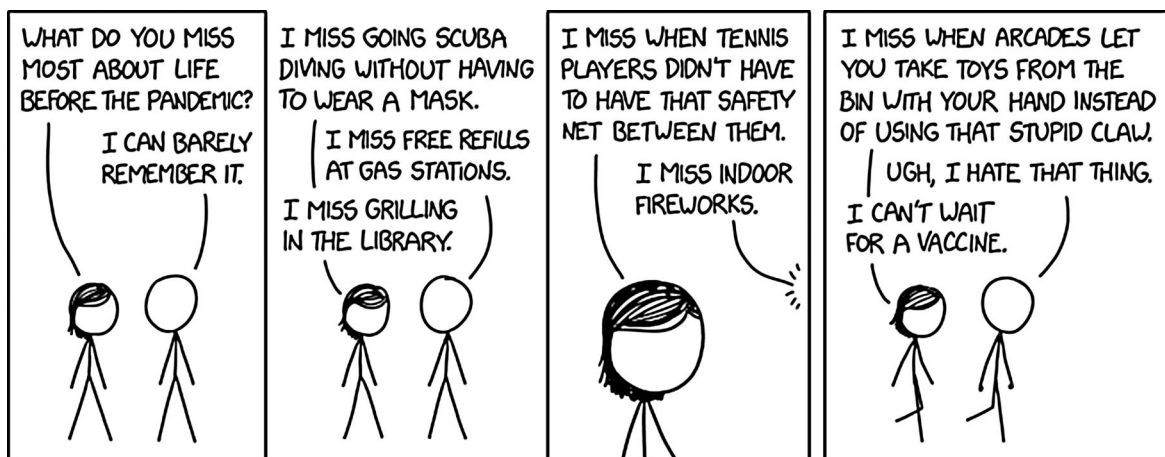
LAST MONTH'S CHALLENGE

The deadline for submissions for our November *Great QRP Scavenger Hunt* Challenge is is still a few days away. You can see what has been submitted so far at <http://www.naqcc.info/challenges/challenges202011.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_sdchedule.html.

Number of Challenges	Members
25+	W3IQ KU4A K9OSC KD0V WA2FBN WI5H WY3H N1JI VE3HUR G3JFS N1LU KJ4R KD2MX AK3X VE3DQN KA5PVB AH6AX WB4OMM KB1M
50+	PA0XAW VE3FUJ NU7T(SK) N9SE PA9CW NF1U
75+	
100+	K1IEE K1YAN
125+	N8XMS
150+	K3WWP W2JEK



3D PRINTERS' ALLEY

TOROID COIL WINDING AIDS

Paul KL7FLR's toroid winding aid was featured on the *Solder Smoke Podcast* a while back. He made the original out of wood on a lathe, but his friend, Jim Sheldon, sketched it up as a 3D file and now you can print your own.

“Winding consists of passing the wire up (or down) the slot, lifting the toroid up and rotating slightly and back down on the spindle for the next winding. This has proved to be a very useful fixture when needing to wind some toroid coils.”

We've used it to wind a few and it definitely takes a lot of the excitement out of the process. Pressing down keeps the previous turns in place and the wire goes through the slot right where you need it.

It's sized a bit too small for some larger toroids. Those aren't so hard to do by hand, but you might play around with scale in your slicer and make a 2nd copy to wind that FT140-43 for your EFHW transformer.

<https://www.thingiverse.com/thing:4335326>



ON THE OTHER HAND...

If you'd rather have something 100x more complicated, this contraption has 18 printed parts plus a few screws and springs. We're not even sure if it works, but it was designed to be motor-driven and put 100+ windings around a specific size toroid.

If you make one we'd love to see it!

<https://www.thingiverse.com/thing:2410466>



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:

PARTICIPATION

This award is renewed annually. See the 'Expired' awards link in the left column for results from previous years. To encourage participation in club activities, points are awarded each time someone enters and submits a log for a challenge or a regular monthly sprint (In months where there is also a mW/160M sprint, a member earns a point for one or the other, but not both). At the end of the year, the MEMBER in each division with the highest point total is awarded a beautiful color certificate. In case of ties, duplicate certificates will be awarded. Non-members can earn points, but must become a member before the end of the year to be eligible for the award.

There are 12 divisions, one each for the 10 USA call areas, one for Canada, and one for the rest of the world. KH6 is part of the 6th call area and KL7 part of the 7th for purposes of this award.

The member with the highest overall score from the twelve divisions will receive a FREE one-year

membership in FISTS -or- if the winner is already a FISTS member, a FREE one-year renewal of their membership. FISTS is donating this to the NAQCC. Thanks to all the FISTS officers and members for their kindness and generosity. It is wonderful our two clubs can work so well together in the common cause of preserving CW on the ham bands. So make plans to be active in and report your results from as many of our monthly sprints and challenges as you can. Say thanks to FISTS by participating in their events also. No points for that, but it will be a nice gesture on our part to help them get more participation in their events.

All previous winning members are eliminated since the prize can now only be won once by a member. If there are still more than one member left, a random computer drawing will be made among the remaining members.

Complete details on this award can be found at http://www.naqcc.info/awards_participation.html.

RECENTLY ISSUED AWARDS:

1000 Miles per Watt:

Nr	Call	Stn worked	MPW	Award Date	Antenna
0567	N1BRD	EA7GB	1046	11/18/20	EFHW 20/30/40



NAQCC QRS/QRQ 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
FarnsWord QRQ Round Table Nets (FRN)	Sunday	Monday		
	4PM PST	0000 Z	5332 kHz (ch1) Alt = 5348kHz)	60m JB NR5NN (CA)
	5PM PST	0100 Z	3553 kHz	80m Rick N6IET (CA)
	Tuesday	Wednesday		
	5PM PST	0100 Z	7046 kHz	40m Rick N7HRK (MT)
East Texas QRS Net (ETN)	Monday 7pm CST	Tuesday 0100 Z	7066 kHz Summer 3566 kHz Winter	Allen KA5TJS (TX)
Midwest QRS Net (MWN)	Monday 7:30 CST	Tuesday 0130 Z	7031 kHz	Bob W0CC (KS)
Rocky Mtn Regional/ Continental QRS	Tues/Thurs 10:00 AM MST	Tues/Thurs 1700 Z	7062.5 kHz	Dale WC7S (WY)
Pacific Northwest 80m QRS Net (PNW80)	Thursday 4 PM PST	Friday 0000 Z	3556.5 kHz	Stewart KE7LKW (WA)
West Coast QRS Net (WCN)	Suspended			
The 1 Land QRS Net (1LND)	2nd & 4th Sundays of the month 7pm EST	Monday 0000 Z	3560 or 3565 kHz	Ed K1RID (ME)

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 FARNsWORD QRQ ROUND TABLE NETS (FRN)

Sunday evenings 4:00 PM PST which is Monday 0000 UTC, on 5332 kHz (Ch 1)

Sunday evenings 5:00 PM PST, which is Monday 0100 UTC, on 3553 kHz +/-

Tuesday evenings 5:00 PM PST, which is Wednesday 0100 UTC on 7046 kHz +/-

60m NCS - JB NR5NN (CA); 80m NCS - Rick N6IET (CA)

40m NCS - Rick N7HRK (MT)

The NAQCC FarnsWord QRQ CW round table nets ...

... promote head copying skills while encouraging participants to send good, properly-spaced code at 21-25 wpm. We typically go two rounds after check-ins, including signal reports and topical commentary about the weather, the pandemic, recent contests or other CW events, antenna experimentation and/or catastrophes, and HF QRP and portable CW operations.

Anybody who can copy and send at least 15 wpm is welcome to participate – you don't have to be a member of NAQCC.

We've enjoyed a resurgence in solar flux, with the SFI reaching as high as 115, this past month and MUFs close to 10 meters (at least for trans-equatorial contacts into South America). Sunspot Cycle 25 has taken off like a rocket! Yay! The sun is looking like it suffers from a bad case of acne.

Below are the lists of stations who checked into each net, each week. Dates are UTC.

FRN/60 FarnsWord QRQ Round Table Net QNS - JB NR5NN NCS

Sunday 4pm PST (Monday 0000 UTC) on 5332 kHz (Ch 1)

Nov 02 - QNS (8) NR5NN NCS, K6GVG, K6JJR, KW6G, N6IET, N6VN, AI6SL, K0DTJ

Nov 09 - QNS (8) NR5NN NCS, AI6SL, K0DTJ, K6GVG, K6JJR, KW6G, N6IET, W6MK

Nov 16 - QNS (8) NR5NN NCS, K6JJR, N6IET, N6VN, K0DTJ, K6GVG, KW6G, AI6S

Nov 23 - QNS (9) NR5NN NCS, KW6G, K6JJR, W6MK, K6GVG, AI6SL, N6IET, WJ7S, AI6U

Nov 30 - QNS (8) NR5NN NCS, WB6PGJ, N6IET, K6GVG, KW6G, K0DTJ, W6MK, N6VN

FRN/80 FarnsWord QRQ Round Table Net QNS - Rick N6IET NCS

Sunday 5pm PDT (Monday 0100 UTC) on 3553 kHz±

Nov 02 - QNS (7) N6IET NCS, K6JJR, N6VN, KW6G, AI6SL, NR5NN, AI6U

Nov 09 - QNS (6) N6IET, KW6G, K6GVG, K6JJR, NR5NN, AI6SL

Nov 16 - QNS (7) N6IET NCS, K6JJR, K6GVG, N6VN, AI6SL, W6MK, KW6G

Nov 23 - QNS (7) N6IET NCS, K6JJR, K6GVG, AI6SL, KW6G, W6MK, NR5NN

Nov 30 - QNS (5) N6IET NCS, W6MK, N6VN, AI6SL, K6GVG

FRN/40 FarnsWord QRQ Round Table Net QNS - Rick N7HRK/M NCS Tuesday 5pm PDT (Wednesday 0100 UTC) on 7046 kHz±

We're not posting QNS reports for FRN/40 because of its informal and indefinite times. Conditions vary a lot, these days, and I often find Rick's signal marginally copyable from Libby, Montana, at the best of times. Stations heard joining the fray in November include KW6G, WI6O, W7XP, NR5NN, N6IET and KK0ECT.

Polar Bear Rick (N7HRK/M) has been giving some of us great QRQ practice during FRN/40 (up to 25 or even 35 wpm). Rick embodies the best in proper CW letter- and word spacing. I find his code to be easy to copy up to 35 wpm.

Send at whatever speed you're comfortable, and he'll match it. If conditions aren't favorable for a roundtable, he will "work" each person checking in one at a time for a few minutes and then go onto the next. You might find him on other evenings at other times, and most mornings after 1500z, as well. He is always willing to send at whatever speed is both comfortable and challenging for you.

72, 73 and 77

NAQCC EAST TEXAS QRS NET (ETN)

Monday evenings 7:00 PM CST, which is Tuesday 0100 UTC, on 7066 kHz +/- (Summer) or 3566 kHz +/- (Winter)

Main NCS - Allen KA5TJS (Texas)

Nov 03 - QNI(3) NCS KA5TJS KE5YGA N4NN

80 meters was good last night. Both stations were hitting 599. YGA was QRO at 100 watts and NN was at 10 watts. Great start to the winter season I hope.

Nov 10 - QNI(1) NCS KA5TJS

Wow, conditions were very bad tonight. No check ins. Tuned around and heard almost nothing on 80 meters and QRN was S9+.

Nov 17 - QNI(3) NCS KA5TJS N4NN W4VLL

Signals were long on 80 meters tonight. Got a 339 from N4NN and a 579 from W4VLL. First time for Vic and he is not a member but very good slow fist. Thanks for the effort and hope to CU both soon.

Nov 24 - QNI(3) NCS KA5TJS KE5YUM KE5YGA

Signals were pretty good tonight with QSB

Dec 01 - QNI(3) NCS KA5TJS N4NN KE5YUM

Band was very long tonight. Light copy on both stations even when QRO. Winter is proving interesting!

NAQCC MIDWEST QRS NET (MWN)

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

Nov 02 - QNI W0CC

QRN - S-9. Only heard one station on CW portion of band (7.011) except for another local CW Net and he was not having any success either. Must be a good Monday Night Football Game!

Nov 09 - QNI W0CC

Did NOT hear a single other station on 40 meter CW. Tried to find spotted stations, without success, and could not even receive W1AW. Thought that the rig was bad; however, was able to copy stations on 80 meter CW. Next week, it will be 40 meter's turn!

Nov 16 - QNI W0CC

Lots of QRN, few stations audible on 40 meters. Spotting had most stations working FT8. After the Net, went down to 80 meters and that was where everyone was working. Will need to convince them to "move-up" to 40 meters!

Nov 23 - QNI W0CC

Very few stations are heard on 40 meters. Must b a good Monday Night football match-up! Looking forward to next week.

Nov 30 QNI W0CC

No one was home on 40 Meters tonight! Must be a good Monday NightFootball match-up! Did very well making 40 Meter DX

NAQCC PACIFIC NORTHWEST QRS 80 METER NET (PNW80)

Thursday evenings 4:00 PM PST, which is Friday 0000 UTC on 3556.5 kHz +/-
Main NCS - Stewart KE7LKW (Washington State)

Nov 06 - PNW QNI (6) NCS KE7LKW, WB4SPB, WZ5L, AD7BP, N7TB, N7IMI

Nov 13 - PNW QNI (5) NCS KE7LKW, WB4SPB, AD7BP, N7IMI, N7TB

Nov 20 - PNW QNI (6) NCS KE7LKW, WB4SPB, AD7BP, N7IMI, N7TB, VE6CCM

Nov 27 - PNW QNI (5) NCS KE7LKW, WB4SPB, AD7BP, WB7WHG, W7ANM

NAQCC 1 LAND QRS NET (1LND)

Second and Fourth Sundays of the Month at 7:00 PM EST, which is Monday 0000 UTC on 3560 or 3565 kHz +/-
Main NCS Ed K1RID (Maine)

Nov 08 - None

Nov 22 - None



NAQCC CHAPTER NEWS

The North American QRP CW Club currently has six local chapters - Western Pennsylvania, West Florida, Illowa, Downeast Maine, Long Island, and Florida - 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 Paul, N8XMS.

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 Vice President John, N8ZYA, 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 or N8XMS 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 Paul, N8XMS, to schedule the use of N3AQC.

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.

This was a beautiful day. Who would have thought we could have 70°F on November 10? We went down to **Robert Moses State Park** right near our other location Captree, so that we could give a new POTA number K2128 to the Club.

It was so warm we were comfortable in our T-shirts. Set ups were fast and we spread out nicely to keep the inter-QRM down. Peter AA2VG went right down to the beach and set up on the sand about 40 feet from the water. What a relaxing set up that was, doing CW right by the



ocean. The salt water acts like a mirror and the take off angle is amplified. Its always curious to note that hardly anyone ever stops by to ask us what we are doing.

Here's who came down:

Kevin KC2KC: TS480 into a random wire vertical held down by a his car tire. Kevin worked worked France and some USA stations

Bob W2OSR: FT817 and a 40m inverted Vee

Walt W2TE: KX2 to a vertical and he got as far as Texas with his 5W

Lou NO2C and Salli K2RYD: Set up an IC7100 into a Buddypole and made about 20 QSOs as far as Italy and the west coast

Peter AA2VG: IC 7300 into a Sotabeam 3 band linked dipole. This set up got out great and Peter made 67 POTA QSOs.

Those that came without rigs to say hello and commune: Bob K2TV, Tom KA2D and myself WB2UZE

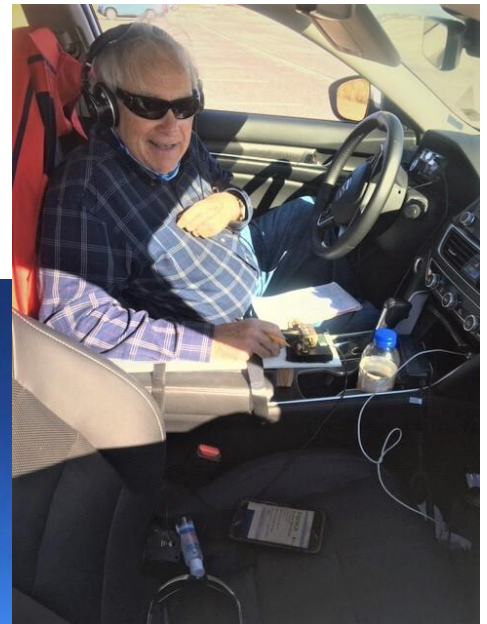
This will probably be the warmest day we have until next May if you can believe that...oh well. Wouldn't it be nice to have above 50F all winter. I guess not in this lifetime here on Long Island. 11 photos are attached, including the usual over the Great South Bay bridge. I brought down my 1956 Olds again and some wanted to see some further photos so 2 are included

Regards,

–Howard WB2UZE



WB2UZE



Kevin KC2KC





W2TE, K2TV, KA2D



W2OSR



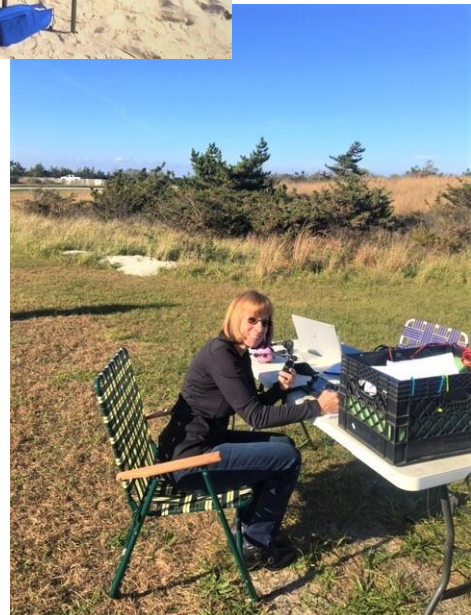
W2OSR



AA2VG



AA2VG. WB2UZE



K2RYD

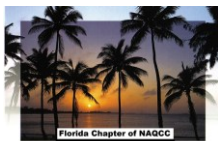


Howard WB2UZE's
1956 Oldsmobile



NO2C, K2RYD

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>.

On Friday, November 20, 2020 the Florida Chapter of NAQCC returned to a local park favorite for our monthly adventure. We held our "Parkpedition" at Bethune Point Park in Daytona Beach, Florida.

Bethune Point Park includes the first skateboard park in Daytona Beach, built in 2009. Ideally located just off the water, the park also offers a picnic area, playground, pavilion, and boat ramp with fishing dock.

Park Facilities include:

- 229 parking spaces
- Playground
- Restrooms
- Picnic Pavilion
- Boat ramp & Fishing pier
- Skateboard park

This trip we had a total of 5 members/operators in our group to include: Steve WB4OMM #5913; Nikki KM4SBQ #8749; John KM4JTE #7966; Rick AA4W #1628; and new member Steve K8SR #10527.

Most of us arrived between 9:30 - 10:00 am (EST local). We quickly set up the equipment in the “reasonable” conditions—it was 75 degrees on arrival with a pretty stiff breeze coming off the Halifax River, making it a bit chilly). By 10:30 am we had 3 stations on the air - WB4OMM, AA4W and KM4JTE.

The signals were pretty good, some QSB, but propagation was fair. The weather was great!

Steve WB4OMM

#5913 Steve used an Elecraft KX-3 with a ground mounted 20M Hamstick; he worked the following members on 20M - K2CWM #3457 in NJ; WA2FBN #3054 in NY; NF5U #142 in TX; AJ8S #6829 in OH; K0KEX #3737 in MO; N5GW #5353 in MS; KB1M #805 in NH; KD3CA #6602 in PA; and KG9HV #327 in IN.

Rick AA4W #1628

Rick also used an Elecraft KX-3 but with a Bud-dipole vertical; he worked the following members on 20M - KB1M #805 in NH; K2CWM #3457 in NJ; KD3CA #6602 in PA; and WA2FBN #3054 in NY.

John KM4JTE #7966

Using his KX-2 with a 35-foot end fed antenna with a 9:1 UNUN, he worked one non-member on 17M, K3UVT in PA.

Many thanks to those who listened for us and



helped make this another successful NAQCC-FL event!

NEXT MONTH'S SCHEDULED EVENT:

Friday, December 18th, 2020 starting at 10:00 AM EST

Candace Strawn/Lake Dias Park (5320 State Road 11, DeLeon Springs FL 32130)

WHO: “The Usual Suspects” – Art WB4MNK, Steve WB4OMM, Rick AA4W, Don K3RLL, Wally KG4LAL, Bob W2EJG, John KM4JTE, John KD4JS, Phil NW4X, Nikki KM4SBQ, John W2IV, Doug W4DBL (and whoever else can make it).

Visit our Web Page:

<http://wb4omm.com/naqcc-fl-chapter/>

Look for our announcement!

72/73 to all – Steve WB4OMM, #5913

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/>.

No Report

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/>.

No Report

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.

The WPA Chapter has suspended all its activities until further notice because of the virus situation.

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.

No Report



MEMBER SUBMISSIONS

This section is a forum for you to tell other members what you've been up to on the ham bands or to submit a short article dealing with some aspects of CW and QRP operation or equipment. Just about anything that would be of interest to our members would be welcomed. Send your items to our News Editor Paul, KD2MX.

DISCLAIMER: Any views expressed in this section are those of the submitting member and may or may not be those of the NAQCC or its officers.

GENE, N5GW

A SHIELDED RECEIVING LOOP

At a new QTH last winter, I had problems with receiving rfi on some of the hf bands and also 160 meters. Using a portable receiver I found much of the noise coming from my new house, mainly due to modern LED lighting and also various appliances using switching power supplies. Another noise source was coming from the direction of one of my neighbor's houses.

After consulting my antenna books, I decided to construct a shielded receiving loop. The first pic shows the schematic for such a loop which I found on page 5-20 of the 18th edition of the ARRL Antenna Book (reproduced with permission, courtesy ARRL). I used RCA connectors and a 12 foot length of RG-58 attached to a minibox containing the tuning capacitor. The loop was mounted on a defunct Christmas tree stand using U-bolts, aluminum angle and four short pieces of bamboo pole (second pic).

While it's not beautiful, it surely does work well. When I attached a 100 foot length of RG-174 and placed the loop broadside between my house and my

neighbor's house, the noise level dropped dramatically on 160 meters. Also I found the loop would reduce noise on 80 and 40 meters as well, but did not seem to affect sky wave signals.

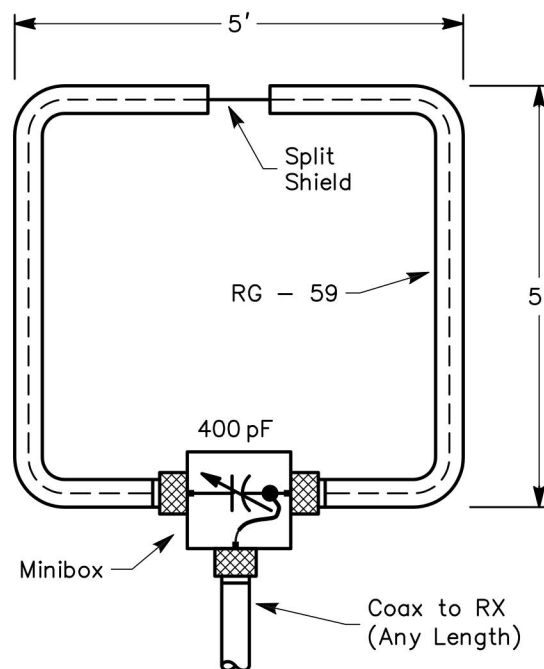


Fig 26— Schematic diagram of the loop antenna. The dimensions are not critical provided overall length of the loop element does not exceed approximately 0.1λ . Small loops which are one half or less the size of this one will prove useful where limited space is a consideration.

Used with permission, ARRL Antenna Book, 18th Edition.

According to the *Antenna Book*, the loop should not be greater than 0.1 wavelength to allow it to be tuned to resonance. However I have found it will work at reduced gain even if non-resonant. A nice feature is that since the loop is shielded, nearby objects do not seem to affect its performance. It can be placed on a porch, in a garage or carport or even in your living room (with xyl's permission!). If used out of doors, weatherproofing will be needed.

There are numerous other kinds of noise reducing receiving antennas. If needed you can pick one which fits your situation. When the holidays end and artificial Christmas trees go on sale, maybe you can build one like mine!

72, Gene, N5GW

FROM JOHN N8ZYA #2279

Hello all...

It's been a long time coming but I finally had back surgery in November. I had two disc decompression items implanted in my spine. The procedure went well.

I was very sore at first but should be back to normal in four to six weeks.

Hello to the gang. I still have little time for radio but I do think of the club very often.

Sincerely yours,
-John N8ZYA



DEJAN SA3BOW #6395 "WRAP IT UP!"

Time to wrap things up after a series of tidbits, hints, and suggestions. This newsletter of ours has been kind to publish my contributions. From a how-to box a small transceiver with an ATU to the simplest of gear. Time to shoot the big picture and wrap it all up.

If you missed any of Dejan's previous articles you can find them in the newsletter archives. Just search for SA3BOW and you'll find links old issues and page numbers for a portable table, lunchbox radio with all the fixings, and much more! http://www.naqcc.info/newsletter_archive.html



To give some protection to this lunch box radio, is a DIY wadmal (a coarse wool fabric or similar) cover. This cover will slow down temperature changes and reduce any condensation when moving the set between outdoors and indoors during the cold seasons. The winders are slightly larger than the lunch box and add protection from accidental drops.



This and any additional gear is then packed in a DIY "haversack." The bottom has a layer of water proof fabric. The lid is double and holds log papers. With this bag and, possibly one or two telescopic masts, one is all set to go out in the great outdoors for a spot of radioing. 📻

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 contest 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.naqcc.info/> should be included.

270R1.00



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Member Submissions Member Spotlight	Paul KD2MX	kd2mx@arrl.net
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 Steve Szabo, WB4OMM
536 Central Park Blvd
Port Orange, FL 32127 USA

