NCJ NATIONAL CONTEST JOURNAL
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NAQP RTTY and Sprint RTTY Results!

- Youth on the Air (YOTA) Americas is now accepting applications
- NAQP Dates and Rules for 2026
- Dennis, W1UE: It all began with a broken AM radio...
- Hilltopping in the CQ WW VHF Digital Contest

Top: Grace, K8LG, operating 40 meters at K3LR.

Bottom: KTØW, using the WØSD station in 2BSIQ.

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From the Editor

For Every Season, Turn That Rotor, Turn, Turn…

Here in the Washington, D.C., area, October 1 has long been known as "Fiscal New Year's Day," ever since 1974 when the federal budgetary year was changed from starting in July. October is also the unofficial transition of the contest seasons — the California QSO Party and six other states close out the State QSO Party season, and the CQ WW SSB starts the next DX contest season. In the northern hemisphere, the cooler weather indicates the end of the summer doldrums and thunderstorm QRM — with current solar flux indices, the low bands and the 10/15/20 take turns giving us high run rates almost 24 hours a day.

The CQ WW SSB has the highest log count of the major contests, while CQ WW CW has the highest QSO count and highest average log size. Like many — probably most — contests, logs have increased in CQ WW over the years, but CQ WW has grown faster. The placement in NA fall prime time certainly helps, but what can we learn from the features of the CQ WW that could help other contests as sponsors think about changes to attract more entrants?

CQ WW SSB	CQ WW CW
10,094 logs	8,313 logs
5M QSOs	5.4M QSOs
500 QSOs/log	650 QSOs/log

2025 CQ WW Statistics from **CQWW.com**

Some thoughts:

- "Everyone can work everyone on every band" rules.
- More loud DXpeditions attract casual DXers.
- Simple exchanges (i.e., complete autofill) are preferred over complex/unique (like serial numbers).
- More score result overlays are better than fewer.
- Strong log adjudication may attract DQRM but is overall positive.
- Online line scores and results are acceptable.
- Size matters — "Everyone goes there because it is so crowded."

All contests are more fun when there are more ops on the air, but that doesn't mean all contests need to be cookie-cutter copies. Scoring overlays to allow ops to compete against peer subsets of ops can go a long way without rule changes that can impact overall scores and historical records, and they can easily just go away if they don't work.

With a wide variety of contests to choose from, getting more ops exposed to contesting through various means (like clubs, FD, remote operating access, POTA, etc.) is probably still a bigger factor than rule changes for increasing activity in most contests. There will always be room for a range of skill demands in contests and legacy contests that pay tribute to amateur radio history.

When we talk about change in contesting, it reminds me of the old quote: "There's no there there." (Originally about Oakland, CA, I think…) There is no "Contesting Command Center" or global contest elections. There are a few big contest sponsors (like WWROF, ARRL, national contest clubs, etc.) that run multiple contests, but change in one doesn't mean change in all or even many contests. Change in contesting starts with motivated contest ops spending time to help drive change.

Contesting clubs can play a key role in driving up both the number of contest ops and the number of QSOs per op in a number of ways, without new contests or rule changes:

- Many contests have overlays for team entries where teams in one club can compete with each other and against teams from other clubs.
- For contests without team overlays, clubs can hold "contests within the contest" and publish the results internally.
- Club meetings, online or in person, are great ways for experienced contesters to help educate and motivate newbies.
- Many contest clubs are "Contest/DX" clubs and can provide incentives for DXers to provide scores to help the club totals.
- Clubs can sponsor youth operators — see this month's Next Generation Contesters column by W4IPC and K8LG.

Also, through simple polling, clubs can get behind ideas for rule changes and present contest sponsors with a consolidated opinion from dozens or hundreds of ops.

So, for your personal "contesting New Year's resolution," let the contest sponsors know your thoughts and ideas (WA7BNM's Contest Calendar site provides links to the rules for every contest). Better yet: volunteer to help out in your favorite contest processing logs, publicizing the event, etc. Even better: write an article for *NCJ* and send it in!

John Pescatore, K3TN / jpescatore@aol.com

Cybersecurity for the Shack

It is pretty rare today to find a contester's shack that is *not* connected to the internet. In the same way putting up an antenna brings risk from lightning strikes, connecting to the internet exposes your shack — and possibly your entire home — to attacks from vandals, criminals, and even espionage agents looking to steal sensitive financial and personal information, or just make headlines by crashing as many computers and networks as possible. This year alone, several contesters have been knocked off the air and suffered financial losses from cyberattacks. Every ham needs to think about protecting their shack from cyber damage with as much rigor as preventing lightning damage.

Internet Security Basics

The internet itself is very secure. It is actually all the endpoints (PCs, servers, home routers, WiFi access points, etc.) that are vulnerable to attackers! The internet just carries traffic, both good and bad — it is up to us to make sure our endpoints are secure enough to deter attackers. In order to do so, there are a few bits of terminology to understand:

- **Internet Service Provider (ISP)** — Usually a telephone or cable TV company, your ISP provides your connection to the internet through the ISPs own network. ISP's provide some limited security services for your connection, but users always need to add to that in order to stay safe.
- **Local Area Network (LAN)** — In your shack (and probably your house) you will have multiple devices connected to form a wired or wireless LAN, where services like printers and the internet connection can be shared.
- **Internet Protocol (IP) Address** — Every connection to the internet has a public IP address, something like "123.45.678.910". Your ISP will assign this to you when you start up your service and this essentially acts as your telephone number for connections on the internet. On your LAN, you will have private IP addresses that look like "192.168.1.11". These are like private extensions on a telephone system; they do not work over the internet, only on your LAN.
- **Domain Name System (DNS)** — Your ISP will provide DNS services that convert human-readable names (like **www.irs.gov**) into computer-readable IP addresses (84.106.62.251).
- **Router** — To connect to the internet, you need a router between your home network and the internet. ISPs will provide a pre-configured router, or you can usually buy your own and configure it to the ISP's specifications.
- **Wireless Router** — Some routers contain a Wireless Access Point which allows you to connect WiFi enabled devices, like mobile phones, tablets, or PCs with WiFi adapters.
- **Firewall** — A firewall limits connections between your systems and the internet to reduce your exposure to attackers. All routers have firewalls built in that can protect your LAN, and all modern PC operating systems have firewall and other security services built-in as well.

Threats

You know how you can call "CQ CQ URCALL," and within seconds a dozen skimmers worldwide will spot you whether you are loud or not? Bad guys on the internet have the criminal equivalent of the Reverse Beacon Network, with networks of bots constantly scanning internet address ranges and social media looking for vulnerable computers. They *will* find you, just as lightning finds your antennas!

The most likely attack you will see is a phishing attack, typically in the form of a bland email trying to trick you into clicking on a link and entering your password, or forcing you to download malware onto your PC to capture your password the next time you login. Common ruses are a fake party invite from a friend or an update on shipping status — even emails from seemingly reputable sources, like major corporations or government services, can be phishing attacks!

If you use credit cards, have a bank account, or have any friends you communicate with via email, internet scammers *will* find you, and when they do, they *will* cause you and/or your friends financial harm.

A Secure Shack Starts from the Inside

There is a truism in security: a soft and squishy interior can never be fully protected, no matter how crunchy the exterior. A secure shack begins at your PC, or PCs. Some simple guidelines:

- **Ideally, only use your shack PC for ham radio operating**. If at all possible, have a dedicated shack PC, and don't do your finances on it or let your kids use it!
- **Always use a supported operating system**. You don't have to al-

ways use the latest version of Windows, Apple iOS, or Linux, but you should always use a version that is still supported by the OS vendor. For many hams, this translates to: *move off of Windows 7!* Windows XP and Windows 7 are no longer supported by Microsoft. Windows 10 is much more secure but will only be supported through October 2025, though you can pay for one more year of patches. Windows 11 is even better.

- **Turn on the security features built into the operating system and browsers**. Auto-update for patches, firewall services, and anti-phishing/anti-spyware functions should always be enabled. If there is a choice of security levels, go for at least medium, if not high. Use a password for booting up your PC and don't use this password anywhere else — write it down and leave it in your shack.
- **Install an anti-virus program — free ones are fine**. Don't waste your money on the high-end programs from the major vendors. Free versions from AVG, Avast, Malwarebytes, Microsoft, and others work just as well and cause many fewer problems in the long run.
- **Back up your data**. Use an external hard drive or cloud backup service, or ideally both. Use a unique login method for backup.
- **Break the habit of clicking on links in emails or in social media**. The vast majority of malware gets on PCs because someone clicks on a link in an email or other message that really isn't from who it appears to be from, and the link doesn't really take you where you thought you were going. If you can't resist, do it on your smartphone or tablet — not on your PC.
- **Don't believe everything a search engine or AI chatbot tells you**! If you have a problem with your PC or software and do an internet search to look for solutions, *don't trust all the answers you see*! This especially applies to a search for software drivers. Bad guys are very active in perverting search engine results to point to their own "solutions," which will often hijack your browser settings or install malicious software on your PC.

Those six steps will greatly reduce the likelihood of your PC getting trashed or your bank accounts being compromised. Now it is time to make that exterior as crunchy as possible.

A Note About Passwords

Phishing attacks succeed by tricking us into giving away our passwords. Reusable passwords are kind of like the deep-fried candy bars of the internet: we know they are bad for us, there are healthier alternatives, but they are *so* addictive. AI has made phishing attacks even harder to recognize — securing your shack has to start with eliminating reusable passwords wherever possible.

If available, turn on two step verification or other strong authentication alternatives. Use a different set of passwords for your shack accounts than you use for your bank accounts or other important services. Use hard-to- guess and hard-to-remember passwords — and write them down and store them in a drawer in your shack somewhere. If you use your call sign as part of your password, mix in special characters or mixtures of upper and lower case — ham call signs are not unknown to hackers, and they show up on cracked password lists all the time.

Your Internet Router is Your Front Door — Lock It

The internet was a friendly place in its early days, but all that changed in November 1988, when the Morris Worm was launched from computers at MIT by a Cornell graduate student. That piece of malicious software caused more than 10% of the systems connected to the internet to crash, and it resulted in the development of what became known as a "firewall."

An internet firewall is designed to implement a simple approach to security, with kind of a bandpass filter philosophy: "Block everything unless I specifically allow it." That's fine for simple or very restrictive environments, but in real world use most firewalls are configured to try to limit connections that are obviously dangerous while allowing other forms of access to proceed. A firewall is essentially like the front door to your house, with a deadbolt lock that will keep out most attackers — but not all. Just like that front door, they don't provide security if you leave a window open, or if your other doors just have spring latches on them.

For most hams, the internet firewall is built into the router provided by your ISP. The ISP will have given you some documentation with the IP address of the router and an administrator access account name and password. *Change the admin account name and password from what the ISP provided, and write it down!*

Most home firewalls will give you the options of selecting from high/medium/low levels of security. If you are only using the internet for email, LoTW, and web surfing, the high security setting is a good choice. If you are doing remote operating, Echolink, video calls, or anything else, the medium level of security will allow you to use these advanced capabilities but still stop unsolicited external access. Never use the low setting — it is like removing your front door completely.

All firewalls also allow you to define exceptions to these security policies, either to allow more open access or to be even more restrictive:

- **Access control** — You can restrict the level of internet connectivity for any device on your network. This can be useful if you have a print server or network disc drive that is only used internally, or to limit

what internet access children's PCs will have.

- **Port Forwarding** — Many applications (games, remote operating, Voice over IP) may require a more direct connection to a device on your network. Port forwarding allows you to selectively enable such connections. This should only be done when the instructions for a trusted device or application require port forwarding to be enabled.
- **Demilitarized Zone (DMZ)** — Firewalls will allow you to logically place an internal device *outside* of the firewall, completely exposed to the internet. This should never be done with any personal computer, but it's sometimes required if you are setting up a remote access server or other special purpose device.
- **Virtual Private Network (VPN)** — If you want to remotely operate your station or let others do so, a VPN is a secure way to protect that access and maintain a log of all connections from the outside.

Port forwarding, DMZ, and other advanced firewall capabilities should only be used when absolutely necessary — many of them are essentially like hiding a key to your front door under the welcome mat and hoping the bad guys don't look there.

WiFi Is Like Your Upstairs Windows — Don't Leave Ladders Leaning on Your House

The majority of homes with internet connectivity also have wireless (WiFi) network capabilities, and all smart phones and tablets have WiFi built in. Most routers today come with a built-in Wireless Access Point, or you may still be using a stand-alone WAP in addition to your router. WiFi connectivity is very useful, but since it is based on the use of radio frequencies (2.5/5 GHz), it brings its own set of risks: anyone within range can see your WiFi traffic and possibly connect to your network. Most households have an increasingly large number of devices on the WiFi network, each of which can provide a way into your network if WiFi is not secured.

The simple "lock your WiFi front door" approach is to always enable WiFi Protected Access 2 (WPA2) on the WiFi access point. You may end up with a long password that has to be entered into every WiFi device in the house (and given to every family member or visitor) that needs access — write it down and add it to that password list you've stashed in a drawer.

Final Thoughts

The Pareto Principle has long shown that 80% of the value comes from 20% of our actions. The above steps will generally keep your shack secure and the computers in your house safe. However, attackers are clever and have a lot of time at their disposal to develop new tricks. The references at the end of this article provide pointers to additional steps you can take to raise the bar and make sure you are QRV to say QRU to attackers.

References

https://www.staysafeonline.org/articles/online-safety-basics

https://phas.ubc.ca/sites/default/files/shared/it-service-catalogue/ouch/ouch-201401_en.pdf

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NCJ Profiles: Dennis Egan, W1UE

Like many ham radio operators, Dennis Egan, W1UE, got his start as a shortwave listener (SWL) but soon embraced the exciting world of radiosport. First licensed in 1969 while in high school, Dennis began contesting in 1971. Over the years, he has established himself as a serious all-mode contester — operating from his own station or as a guest operator at several top multi-op contest stations. He also competed at WRTC 2022 as I46C with his longtime friend, Jeff Briggs, K1ZM. How did Dennis become such a prolific contester? It all started with a broken Bakelite AM radio. Here is his fascinating amateur radio story.

In the Beginning

I was somewhere in the area of 7 years old when I discovered the magic of broadcast band DXing. My mother had let a Bakelite case radio fall off the table, and the case broke into several pieces when it hit the floor. She was going to toss it, but I asked if I could have it. A roll of electrician's tape later, the case was taped up and I had my first radio! I remember spending hours documenting which stations I could get during the day and how far away they were. My first out-of-USA station was CJOC in Lethbridge, Alberta, 10 kW on 1220 kHz. Soon I discovered the best times to receive AM radio stations farther away, and I quickly heard 20 states; all were west of the Mississippi.

As I grew older, AM radio was no longer enough for me. My dad worked at the post office, where he had a friend who fixed radios. He brought me home my first shortwave radio, a Hallicrafters S-20R! Yowee! I quickly threw a hank of wire out the window, strung it over the house and into a tree, and listened to shortwave broadcasting from all over the world. This was exciting stuff for a 10-year-old! Radio Moscow, Radio Havana, Radio Peking — they were all at my doorstep.

Getting My Ticket

My first Field Day was with the West Valley Amateur Radio Association (WVARA, or W6PIY) club in 1967. I was amazed at watching the station go up. The CW guys had their tent, the SSB guys had their tent. I remember we were category 4A, with 2 stations on each mode. It was amazing hearing everyone call CQ, and to hear the answers — *lots* of answers, from all over the US. That gave me the impetus to get my own license.

In my junior year of high school, I took the Novice class license course from WVARA. The theory was easy, but the code was another matter. I practiced and practiced, failed the code test, then finally passed it. What seemed like an eternity later, my license arrived in the mail: WN6HWQ. What a key-ful on CW! But I actually had a license. Now, all I wanted to do was get on the air!

I don't remember how I found out about it, but the father of a friend of mine was a ham. He had purchased a DX-35 transmitter and constructed it with his son. The son showed little interest in it, so the dad was willing to sell it to me for $25. For another $25, he had a BC348L WWII receiver, so a few weeks later that was also mine. I knew I needed an antenna, so I looked around and finally settled on a Hy-Gain 18 VS vertical. I didn't know anything about radials, so the vertical antenna was erected without them. I also didn't know anything about coax, so I used a single wire feeder from the back of the DX35. Still, once it was all assembled, I tuned the DX35 into a light bulb (didn't everyone do

Dennis Egan, W1UE, operating the NAQP CW contest at K1VR. [Dennis Egan, W1UE, photo]

that?), and started to send CQ. And send CQ. And send CQ. I called CQ for several hours for 4 days in a row, then finally got an answer! A station in Campbell, maybe 4 miles away, answered me. I remember he was 599+, but he gave me 529. I was in the log, but the difference in our signal strengths told me I had to make some changes.

QST To The Rescue

About this time, I discovered that the local library had a subscription to *QST*. I started checking out as many as I could at one time and devouring the articles. This is where I found out about coax, and why I needed to use it. I also discovered antennas — *real* antennas — and built myself a 40-meter dipole. After several months of 40 meters only, I had 40-50 QSOs all over the states of California, Nevada, Oregon, and Arizona, nothing farther. Then, one day, I bought an *ARRL Handbook* and found an article on building a 15-meter receive converter (the BC-348L tuned only to 18 Mc). This was exactly what I needed! I could then make contacts on 15 meters. A couple of paychecks later, I had the parts together and built the receive converter. Wow! There was *lots* of DX on 15 meters! Using the

40-meter dipole as my antenna, my first long-range QSO was with a station in Bristol, Tennessee. Not quite DX, but getting there!

Time To Upgrade

I wanted to work DX, but I saw that most of the DX didn't hang out in the Novice bands, so I decided an upgrade was in order. I took the WVARA General course. Being technically minded, the theory was easy, but I still struggled with the code. When I finally conquered the code, I took the General and Advanced test in San Francisco in 1970; I passed the General code and theory but failed the Advanced. Since I had spent zero time studying the Advanced theory, I wasn't disappointed. In late 1970, I became WB6HWQ. Still a bad CW call, but I was mostly a phone op at this time, so I could handle it. In early 1971, I followed it up by passing the Advanced test, and all was well. I celebrated by going out and purchasing my first new rig — a Swan 500CX! A good SSB rig, not so hot on CW, but it fit my operating back then. I got many hours of enjoyment using that rig.

In 1978, I took my third and last trip to the FCC office in San Francisco and passed the Extra test! I requested a 1x2 call sign and received N6QW.

The Contesting Bug Bites

I discovered contesting in 1971, when the California QSO Party was just getting started. My parents had a cabin in Truckee, California, and I went there for my first contest. It was *my* opportunity to be DX, as I think I was the only op in my county. I called CQ and worked hard, and I came out with a couple of hundred Qs. After that, I was hooked. I joined the Northern California Contest Club, and started learning. Participation in the CQP was a must every October, and I put on a lot of rare counties in the '70s. I recall working my first DL on 40 meters from the big N6RO station and actually hearing Europeans on 80 meters there.

1970 also started my college career at San Jose State University (SJSU). First thing I found about the school was that it had an amateur radio station (W6YL) with real Collins equipment! And a large beam at 80 feet! Other than some W6YL time, this was not a time of intense amateur activity. I was taking a full course load at school and working the overnight shift at the post office.

Career Destiny

I was finally able to graduate in 1976 (6-year plan) and continued to work at the post office, where I was already earning more money than an entry-level computer programmer. I landed my first promotion in 1977, and I met my future wife, Carolyn.

Over the next several years, I received several promotions at the PO and put my computer programming skills to good use. My goal was to become a postmaster, and in 1984, I was named Postmaster of Wayland, Massachusetts. Not only was it a postmaster job, but it was also a cross-country move! I served in that capacity for 20 years. Life was good; I lived 2 miles from work, didn't leave town for weeks at a time, and was able to respond to a rare DXpedition at odd hours. Radio contesting was at a minimum; with a wife and two young children in tow, it was basically one or two big ones a year. After my retirement in 2007, I finally had time to really ham it up! Trips to India/Thailand/Israel, WRTC 2018, WRTC 2023, VP2E, and HQ9X all took place.

Stations

I had various radios over the years, including a Drake C-Line, a Collins S-Line, and a Heathkit HW-101. My station in Wayland, Massachusetts, was an FT-101MP to a C3 at 60 feet. Linears were never a big part of my home stations, as I found out the incidence of TVI went way up with an amplifier. My current home station is mostly a remote link to the W1KM station in Fairhaven, Massachusetts. In the early aughts, we started working on remoting the Fairhaven station.

Contest Activity

After discovering contesting in the 1971 California QSO Party, it has been a constant stream of contest activity for me. I would operate low power from home or HP when serving as a guest op. I've operated from K1XM/VP2E, PJ4X, HQ9X, AH7DX, LZ5R, AT2T, 4XØY, and SJ2W. During the WRTC in Boston, I ran the warehouse, making sure everything was prepared as each team arrived for their towers, rotor, feed lines, guys, etc. I came close but failed to qualify for both the 2014 and 2018 WRTCs; finally, in 2022, I made it! Due to my physical condition at the time (and the fact that I was coming down with Covid while the competition was on), the result was less than anticipated, but it was a thrill nonetheless! In the early '90s, I discovered RTTY and digital communications, and I started entering RTTY contests. I was able to make top score in several RTTY Roundups, and I came close but could never quite get to #1 SO in CQWW RTTY. With the advent of FT4/8, I've now become active in FT contests, achieving top score in class in a number of contests. Today, I contest for the sheer joy of it; there is nothing like being in the middle of a 150+ rate on CW, where time seems to just stand still. I get the same thrill when doing RTTY SO2R at a 125 rate, or doing FT4/8 at a 100 rate. It's all a game, with the mystery of propagation to make every contest a unique event.

If you hear me on, please give me a Q! I might be W1UE, KM1W, VE3WUE, or HQ9X, but I'll be calling CQ just to work you!

Thanks, Dennis, for sharing your story with us. It's always fascinating to learn how successful operators get their start in ham radio and contesting. We wish you continued success in radiosport.

Mike Goldstein, VE3GFN / mgold@pathcom.com

The Little Pistol Pages

Here are contesting insights by Ted Rosen, VA3TAR, one of the newer Little Pistol competitors in the Toronto area. Ted has managed to arrive independently at the use of contesting tactics I've employed for years. — VE3GFN

Building Skills with CW Mini-Contests

My first mini-contest experience came when I was accepted to the CW Ops CW Academy advanced CW course. The curriculum recommended that CWA students participate in the weekly CWT operating events. While challenging at first, the weekly activity built my skills.

At the conclusion of the course, our advisor, Hanz, YL3JD, considered a number of us sufficiently skilled to be recommended for CWops membership. Due to my active participation in the CWT over the past months, I was pleased that my membership application was immediately supported by members I had contacted during contest activities. I received my CWops member #3504.

I soon realized that, in addition to the CWT, there were other mini-contests, each with its own character. The ICWC Medium Speed Test (MST) operates in the 20-25 wpm range, and the K1USN Slow Speed Test (SST) goes up to 20 wpm. Each offers a different practice experience.

My approach to each mini-contest varies. In all cases, I use the N1MM Logger+ software. A Telnet connection to VE7CC updates the band map window, displaying call signs of active stations for each band.

As the software is integrated to my Icom IC7300 transceiver, scrolling through the band map also tunes the transceiver to the station's frequency. Using the <Ctrl> and <Arrow> keys, it is possible to shift from station to station. My use of the keyboard varies, depending on the contest. The entry window, with call history activated in assisted mode, displays the relevant station information for each contest type, reducing the necessary keyboarding. Fortunately, my touch-typing skills allow effective call sign entry.

Future Goals

I admire the skills of the higher speed CWT operators. It will be quite a while before I can "head copy" CWT contest speeds consistently. For the CWT mini-contest, I use the history display to confirm the running station's information. I use the F2 and F4 function keys to send computer quality code for my call sign and member number. Using the function keys assures high-quality sending at contest speed, in consideration of the skill level of the other CWT contest operators. Eventually, I would like to send and receive high speed CW exclusively using a key, but for CWT, my skill level is not there yet.

Contesting Variations

CWT: For this mini-contest, I only operate in Search and Pounce mode (S&P), seeking running stations and replying to their calls.

MST: In this mini-contest, with the 20-25 wpm speed, I am more comfortable sending with my key and combining S&P with Run mode. Typically, I will start the MST with S&P mode to activate my brain and assess the band conditions. Am I receiving strong signals and prompt replies? Which band is more successful for the particular time? When I have worked as many stations as possible, I switch to Run mode. I increase the receive filter width to hear more adjacent activity and avoid interfering with nearby stations. If I hear another station start transmitting near my frequency, I will change frequency to maintain a clear signal. In the MST, I can usually enter the responding station's call sign in the entry window on my first try.

Otherwise, I send the partial call as received and ask for a repeat. The call history information confirms I have it

Ted Rosen, VA3TAR, sits at his well-organized contest station. [Mike Goldstein, VE3GFN, photo]

right, but the MST exchange includes the contact sequence number, so attention needs to be maintained. Every successful contact is a victory.

SST: This mini-contest feels a lot more relaxed. Sending and receiving speeds are manageable. While I will use the S&P mode at first to get a sense of band activity, my aim is to run as much as possible and gain skills using the key exclusively. A greeting is more common with the SST exchange, making for a friendly atmosphere. Here, the quality of the contest exchange is more important to me than maximizing contacts.

Tactical Considerations

Choosing which band will be more productive is part of the skill set. I typically operate on 20 and 40 meters. If I plan to run in a mini-contest, I display the Reverse Beacon Network (RBN) on one computer monitor and observe both how well and where my transmit signal is being heard by the beacons, as well as how this changes through the hour. I am often surprised at how rapidly conditions can change.

Having selected an initial band for operation, I'll tune through the frequencies, working as many stations as possible. I'll move up and down a number of times, bypassing pileups, expecting that the station will be more approachable later. Having worked as many stations as possible on one band, I'll move to an adjacent band and continue the search. It is not unusual for changing band conditions to open up new contact opportunities. If I decide to run, I move to the more active band and find a clear transmit frequency near the middle of activity.

As I progress in my amateur radio CW contesting, I am gaining greater appreciation of that community. Many stations I hear operate on all three mini-contests, and hearing their familiar calls reinforces my sense of being part of the community. Perhaps over time my call will be recognized as a regular.

Neil Rapp, WB9VPG / wb9vpg@arrl.net

Next-Gen Contesters

The Future of Youth Contesting in the Americas

In this edition, Youth on the Air (YOTA) Americas Youth Contesting Program (YCP) managers Grace Papay, K8LG, and Connor Black, W4IPC, explain the revival of the program in YOTA Region 2 and exciting updates to take YCP even further. YOTA regions are defined as:

- *Region 1: Europe/Africa/ Middle East*
- *Region 2: The Americas*
- *Region 3: Asia/Pacific*

The future of contesting is youth. Inspired by the efforts of YOTA Region 1's YCP, as well as Team Exuberance, we hope to inspire young hams to become the greatest contesters of the 21st century. The Americas YCP is coordinated by Grace, K8LG, and Connor, W4IPC, both active young contesters with a passion for radiosport.

Tim Duffy, K3LR, has said many times, "I believe it is important that large and small station owners — contesters all over the planet — become involved and offer their help, mentoring, and assistance to youth." The YCP is exactly that. It allows young amateur radio operators to participate in contests like CQ WW, ARRL DX, ARRL Sweepstakes, and more. Youth gain experience in contest operating, logging, propagation strategy, and teamwork while operating from high-performance stations, either in person or remotely. Station owners directly affect the future of contesting.

What's Happening Now

YOTA Americas is now accepting applications for both young operators and host stations. YCP connects licensed amateur radio operators under the age of 26 with contest station owners for mentored operating experiences during contests (Figure 1). We are looking to pair youth operators and station owners within a reasonable driving distance to reduce costs for the youth and make these opportunities more accessible.

Figure 2. Grace Papay, K8LG, operating 40 meters at K3LR. [Doug Papay, K8DP, photo]

Figure 1. Connor Black, W4IPC (foreground), and Jim Nitzberg, WX3B, (background). [Connor Black, W4IPC, photo]

Wanted: Host Stations and Youth Operators

We are seeking contest station owners, perhaps like yourself, to host one or more youth operators during select contests. As a host, you can offer in-person or remote access. We also ask that you provide mentorship and basic operating guidance. The program is flexible; station owners may choose the contests and level of hosting they can support. Every station, large or small, can make a difference by opening its doors to the next generation of contesters. If you'd like to sign up, please go to **https://youthontheair.org/ycp** and complete the station owner form.

We are also seeking licensed amateur radio operators under age 26 (Figure 2) who can now apply for placement at a participating station. Prior contest experience is not required, but it is recommended. Due to this, the amount of mentoring will vary. Youth applicants are matched with

host stations based on location, operating interests, contest availability, and technical capabilities. Remote operating options are also available for those who cannot travel. If you'd like to participate, please go to **https://youthontheair.org/ycp** and complete the youth participation form.

Why It Matters

Every station owner who opens their station and every young operator who takes that mic or key contributes to preserving and advancing amateur radio. As youth participation grows, so does the strength of our contesting community.

Connor notes that his journey into contesting wouldn't have been possible without the incredible mentorship he received early on. Barry Priddy, K5VIP, and Vic Culver, W4VIC, were instrumental in getting him started. They introduced him to the world of contesting, brought him into the Potomac Valley Radio Club, and even helped him acquire his first real contest radio, a Yaesu FT-1000MP. Their guidance gave him the foundation that was needed to grow as an operator. Later, Jim Nitzberg, WX3B, became a major influence as well, generously inviting him to operate from his top tier multi-multi station countless times, even giving him the opportunity to run as a single op. Jim also made the formal introductions that led Connor to be invited on his first trip to PJ2T. "These mentors not only shaped my skills but also instilled in me a deep appreciation for the contesting community," Connor said.

About the Organizers

Grace, K8LG, is an 18-year-old contest and satellite enthusiast from Michigan. She has participated in many contests both as a single op and a multioperator team member, operating from stations including J62K and K3LR. Connor, W4IPC, is a 23-year-old from Virginia with years of HF contesting experience and a passion for helping newcomers. He has operated from such stations as WX3B, LZ5R, NP4Z, and PJ2T.

Together, Grace and Connor coordinate YCP logistics, outreach, and mentoring across the Americas. You can reach them at **ycp@youthontheair.org**.

Jon Jones, NØJK / n0jk@hotmail.com

VHF/UHF Contesting!

The CQ VHF Contests

Most of the times that VHF contests are discussed in this column, they are the ARRL contests. This time, I will review the CQ VHF contests. They have some unique features that may interest VHF/UHF operators.

The CQ VHF contest is divided into an analog weekend and a digital weekend. This allows operators to compete in each category and focus on it. In 2025, over 500 log entries were received for the analog portion, so analog modes are "alive and well!" The contest bands include only 6 and 2 meters. It starts at 1200 UTC on Saturday and ends 1200 UTC on Sunday.

The CQ VHF contest also has a different scoring for QSO points: One (1) point per QSO on 50 MHz and two (2) points per QSO on 144 MHz. Work stations once per band. Multiply total QSO points times total number of grid locators (GL) worked.

Rovers: For each new grid locator visited, contacts and grid locators count as new. Final Rover score is the sum of contact points made from each grid locator times the sum of all grid locators worked from all grids visited.

Example 1. K1GX works stations as follows:

50 QSOs (50 x 1 = 50) and 25 GLs (25 multipliers) on 50 MHz

35 QSOs (35 x 2 = 70) and 8 GLs (8 multipliers) on 144 MHz

K1GX has 120 QSO points (50 + 70 = 120) x 33 multipliers (25 + 8 = 33)

120 x 33 = 3,960 total points.

Example 2. ACØRA/R works stations as follows:

From EN52: 50 QSOs (50 x 1 = 50) and 25 GLs (25 multipliers) on 50 MHz

From EN52: 40 QSOs (40 x 2 = 80) and 10 GLs (10 multipliers) on 144 MHz

From EN51: 60 QSOs (60 x 1 = 60) and 30 GLs (30 multipliers) on 50 MHz

From EN51: 20 QSOs (20 x 2 = 40) and 5 GLs (5 multipliers) on 144 MHz

ACØRA/R has 230 QSO points (50 + 80 + 60 + 40) x 70 multipliers (25 + 10 + 30 + 5)

230 x 70 = 16,100 total points.

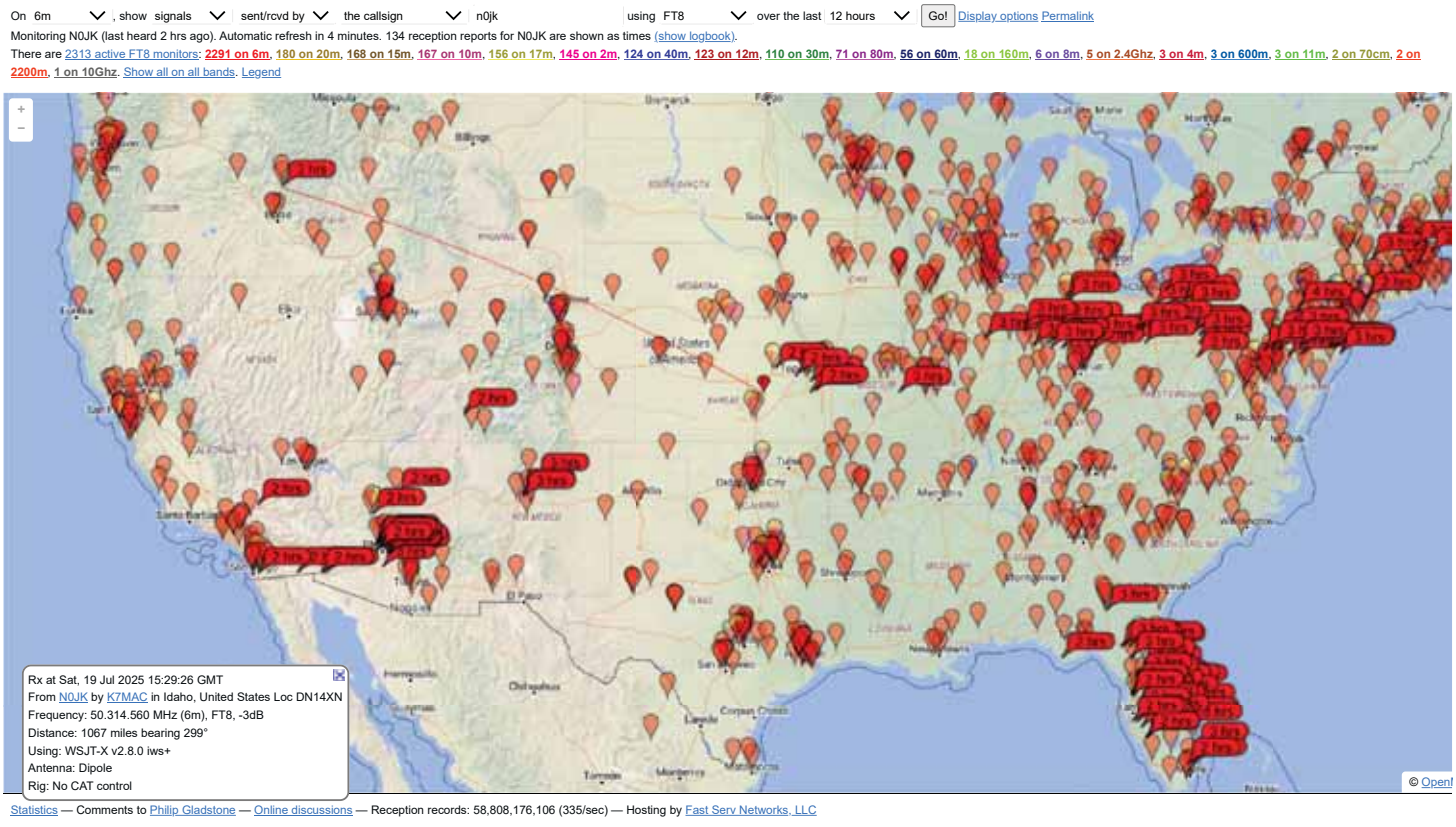

Figure 1. NØJK PSK Reporter flags in the Hilltopper category July 19 in the CQ VHF Contest.

The bottom line is that 2-meter contacts are worth twice those on 6 meters — incentive to be on 2 meters.

There are also some unique categories to enter.

For all categories (except Rover): Transmitters and receivers must be located within a 500-meter diameter circle. Antennas must be physically connected by RF transmission lines to the transmitters and receivers. Stations in any category, except Rover, shall operate from a single location, home or portable.

1) **Single Operator:** Only one signal allowed at any one time; the operator may change bands at any time.
2) **High Power** (All Band or Single Band): Total output power must not exceed 1500 watts.
3) **Low Power** (All Band or Single Band): Total output power must not exceed 100 watts.
4) **QRP** (All Band or Single Band): Total output power must not exceed 10 watts.
5) **Hilltopper:** This is a single-op portable category for an all-band entry limited in time to a maximum of 6 continuous hours. Backpackers and portables who do not want to devote resources and time to the full contest period are encouraged to participate, especially to activate rare grids. Any power source is acceptable. Total output power must not exceed 100 watts.
6) **Rover:** A Rover station is one manned by no more than two operators, travels to more than one grid location, and signs "Rover" or "/R" with no more than one call sign.
7) **Multi-Op**: A multi-op station is one with two or more operators and may operate 6 and 2 meters simultaneously with only one signal per band.

My favorite is the "Hilltopper" category. If you only have a limited time to get on, it is a category to consider. The power limit used to be 10 watts; note it is now 100 watts.

I operated in the digital portion of the CQ VHF Contest this year in the Hilltopper category from EM18 on 6 meters. I ran about 40 watts to a 1/4-wave mag mount vertical on the car. There was sporadic-E on 6 meters. I was able to log over 40 stations on FT8 from coast to coast Saturday morning. There were a number of rare grids on in the contest, including AL1VE from DN05, NA6MG/P DM14, NØLL/P EN02, AAØMZ EN20, and me from EM18. It was a fun morning (see Figure 1). I suggest you consider entering the 2026 CQ VHF contests.

Low Noise Receive Preamplifiers for 6 Meters?

There has been considerable discussion on the VHF reflectors about inexpensive LNA receive amplifiers from China. They are available for around $15 on eBay and other venues. Do they work? Tests of the preamps show a noise figure around 0.9 dB on 6 meters. Paul, W1GHZ, sells a comparable 6-meter LNA pre-amp with a noise figure of 0.8 dB. Do you need one on 6 meters? That depends on where your station is located. In an urban or suburban location, probably not, as your receive noise from external sources will be higher. In a quiet rural location or portable location, yes, you will receive better. Using an LNA will require appropriate relays and sequencing devices so you don't transmit into it and damage the unit.

John Thompson, MD (ret.), K3MD / k3md009@gmail.com

NCJ Book Review
The radiotoday Guide to the Icom IC-7610

This work by Andrew Barron, ZL3DW, is one of a series of "how-to" books covering a large number of transceivers. Since the IC-7610 is my main rig, I will cover this work first.

The IC-7610 has a very nice ergonomic layout familiar to all Icom users. Currently, it is number 23 on the NCØB receiver performance chart. Personally, the last time I heard a significant change in my ability to run stations was years ago, when I got the IC-7800. The change from transceivers like the IC-740 was beyond words.

Barron systematically goes through every operating feature of the IC-7610, carefully explaining all soft and hard keys. No matter how long you have been using this rig, you will learn a lot. Barron compares the DNR of this rig to Elecraft and Yaesu. The many mysteries of setting up the Silicon Labs COM ports and the like are discussed. The optimum baud rate for the CI-V is given. I was afraid for years to use CI-V faster than 4800 baud, but I have tried Barron's recommended numbers with good results. Optimum setting of the confusing parameters on the connectors menu is discussed in a manner that even an IT-compromised person (like me) can understand.

Optimizing the setting of the voice compressor and the Icom bandwidth controls are covered. Barron is not a dedicated CW operator, but he quotes experienced ops in recommending the best settings for CW.

The age-old debate over whether to use FSK or AFSK for RTTY is not settled, but Barron gives the answers on how to do either. Barron recommends use of the twin-peak filter for RTTY, which is at odds with WØYK's recommendations at Contest University. To each his own, YMMV, etc.

How to record macros for the DVK, as well as how to record an entire contest (required by some contests for certain entry categories to detect cheating), are explained in an understandable manner.

How to efficiently and effectively use a mouse and an external video monitor are discussed. Barron is not a fan of the relatively low-resolution DVI-D monitor function. On this transceiver, the ideal use of the mouse would be in the unassisted category. The mouse allows for rapid clicks and QSYs to various displayed stations, making the search-and-pounce function in the unassisted class easier.

The troubleshooting chapter is a very useful portion of this work. It allows the user, new or experienced, to solve a number of common display and other problems. On the IC-7610, proper configuration of the data mode can be confusing, but Barron explains how to avoid the issues. I personally use upper sideband and an Easy Digi sound card interface, with receive audio coming in over the USB and VOX transmit control through the microphone jack. This follows the electrical engineering dictum, "keep

it simple, stupid," frequently violated by recent generations of designers.

Use of the built-in RTTY and PSK decoders is discussed in detail. For a contester, this discussion is largely moot, since nearly everybody uses MMTTY or a similar program combined with their favorite contesting program for RTTY. The discussion of direct RTTY keying vs. audio keying in the lower sideband position is beyond the scope of this review. I do not think the controversy of which is better will ever be resolved.

For the price, you will not find a better value for your money, and you will be much more conversant with the radio's features if you purchase this work. *The radiotoday Guide to the Icom IC-7610* is published by the Radio Society of Great Britain and is available in the US from major ham retailers and booksellers.

Mark Aaker, K6UFO / rttynaqpmgr@ncjweb.com

Results: North American QSO Party, RTTY — July 2025

Challenges were overcome in our summer NAQP RTTY contest!

We had thunderstorms from Washington state to the Great Lakes region, and even down to North Carolina. Most operators cease operations and disconnect their antennas when a storm is too close, leading to some unplanned "off time." Since single-operators need 2 hours off, it's often just a "change in schedule" rather than a "showstopper." Dave, NW3L, reported, "Much fun was had, until I had to disconnect for lightning."

Hot summer weather sent several ops outside to a park or on an expedition — such as WO4O in Florida, AE1P to Arizona, K2NV to Ontario, and KT4Q to Alaska. If you stayed home and didn't have air conditioning, you'll agree with Alan, WA3EKL: "I am glad NAQP is only 100 watts, so no amp, and much cooler in the radio room!"

The Solar Flux Index was only 153, far down from the 200s we saw in February and March. Ten meters was spotty for most. Ray, WQ5L, and Bill, AA4LR, both noted, "On 10m the only stations I worked were in Hawaii!" Rick, N1RM, reported that "10m was a non-starter, but there were fresh fish elsewhere." The poor 10-meter conditions quickly sent people to 15 and 20, where the bands were active, bordering on crowded. Fifteen meters was good until late afternoon for most operators, and 20 was a big "money band" as usual for RTTY. The East Coast went to 40 and 80 meters at their sunset and posted some great scores. The long summer days shorten the time of darkness for 80 meters, so operators on the West Coast run into the problem noted by Ed, AJ6V: "80m just starting to open up when I timed out."

Figure 1. KTØW using the WØSD station in 2BSIQ. [Nicholas Hauser, KTØW, photo]

The "suffering middle" of the country was there whenever you got some short skip. Reid, NØRC, in Kansas reported his highest QSO counts from CA, IL, MD, and VA. He also found the most popular names were JIM and MIKE. Several ops used the name TRIPP in honor of Silent Key N4NTO.

Results

In the Single-Operator category, Nick, KTØW, used the WØSD station in "rare" South Dakota to take the lead. Nick sent a nice photo of his 2BSIQ setup (Figure 1). In second place was Steve, N9CK, in Wisconsin. In third place, Rick, WB8JUI, used the WP3C station to put NP4DX on the air. Rick reports, "Al, WP3C set me up for 2BSIQ and said, 'Not to worry.' It worked well for many additional QSOs."

In Single-Operator QRP, Don, K6GHA, made 222 QSOs to nab the top spot. Don said, "I planned a part-time effort on QRP. And just like potato chips, I couldn't stop at one." Close behind was David, N9KT, in Indiana.

In Single-Operator Assisted, Ty, K3MM, in Maryland took top spot, using Maryland's better 40- and 80-meter conditions to hold off Chris, N6WM, in California. Close behind were familiar calls NØXR, K9CT, and N4ZZ. You'll see these calls again in the top team scores!

In Single-Operator Assisted QRP, the top spot was taken by Ron, WQ6X, remotely using the KN6NBT station for 145 QSOs. Ron publishes a nice blog of his remote operations at **https://WQ6X.blogspot.com/**.

In Multi-Two, the repeat winner was Ace, NJ4P, in Tennessee, with an all-star team of operators who overcame thunderstorms and computer problems to claim over 1,000 QSOs! They

enjoy the competition and motivation of the online scoreboard. Operator Ron, WV4P, reported, "I always look forward to the NAQPs. You never know what propagation you will get and the LP really makes it interesting." In second place was a historic call sign, W4KFC, from the N3QE station in Maryland.

In Team competition, it was very close, but SWACC #1 held on, with four of their five operators finishing in their categories' Top Ten. In second place was an NCCC team named Silicon Samurai, which did a good job from the West Coast. SMC Model 19 and Deep Dixie CC Team Elvis also put in great totals. Thirty-three teams showed up for our RTTY picnic. Roberto, K6KM, was on the Silicon Samurai team and sent a photo of his operator point for using the remote W6SRR station (Figure 2). You can tell from Rob's smile that he was having a good time. Don't be fooled by the CW paddles on his shirt or desktop — that is MMTTY software for RTTY on the computer screen.

Some of the DX available included KP2B, YN2RP, HI6M, HK3W, HA3MGA, HQ9HC, 6Y5PW, ZV8H, and of course, the Hawaiians, Alaskans, VE7s, and VYØERC, who are challenged being so far west or north. Thank you for providing a multiplier.

Figure 2. K6KM using the remote W6SRR station in NAQP RTTY. [Roberto Sadkowski, K6KM, photo]

Certificates for NAQP entrants are available online at the *NCJ* website, **www.ncjweb.com**. Thank you to N6TR and WA7BNM for preparing our scores, and to Icom America for sponsoring our awards. Our next NAQP RTTY will be Saturday, February 28, 2026.

Selected Soapbox comments from 3830scores.com (Thank you to Bruce, WA7BNM):

It took a while to get my diddle back. — *VA3PC*

A portable vertical for 40-10m and rain gutter for 80 — I live in an HOA! — *K3LT*

Hmmmm...things to figure out still before the next one. — *VA6RCN*

Enjoyed making some RTTY QSOs after a fine Tennessee Contest Group gathering. — *K4RO*

The dueling dipoles worked pretty well on 40 and 80m. — *AA4LR*

I heard the tones in my head after the contest was over. — *WN6A*

Single Op Top Ten Breakdowns

Call	*Score*	*QSOs*	*Mults*	*80*	*40*	*20*	*15*	*10*	*Team*
WØSD (KTØW)	117,902	706	167	92/39	225/47	264/47	125/34	0/0	
N9CK	102,880	643	160	141/43	260/52	199/47	39/15	4/3	SMC Model 19
NP4DX (WB8JUI)	89,498	613	146	38/19	196/42	234/48	145/37	0/0	
K4ZW	85,164	604	141	127/38	253/47	158/37	60/14	6/5	SWACC #1
AJ6V	83,805	555	151	23/12	110/38	203/48	200/44	19/9	Sierra Bytes
K6KM (@W6SRR)	80,938	566	143	17/8	125/41	233/43	184/45	7/6	Silicon Samurai
AIØY	80,303	613	131	27/15	237/46	309/49	40/21	0/0	
W6EU	71,340	492	145	40/18	113/33	198/46	136/43	5/5	RTTY to Eaters
AD5XD	65,736	498	132	23/17	173/39	233/46	69/30	0/0	
K7SV	65,000	500	130	101/33	229/47	131/33	37/15	2/2	PVRC K4 RTTY Mark and Space Cadets

Single Op QRP Top Five Breakdowns

Call	Score	QSOs	Mults	80	40	20	15	10	Team
K6GHA	20,646	222	93	15/7	27/10	113/44	65/30	2/2	Sierra Bytes
N9KT	16,353	207	79	28/17	145/42	34/20	0/0	0/0	
WC8L	3,264	96	34	0/0	6/5	90/29	0/0	0/0	
VE3KJQ	3,198	78	41	0/0	46/22	29/16	3/3	0/0	
N7JI	1,711	59	29	13/6	30/11	16/12	0/0	0/0	

Single Op Youth (25 years old or younger) Breakdowns

Call	Score	QSOs	Mults	160	80	40	20	15	10	Team
KJ7AGQ	1,550	50	31	0/0	0/0	0/0	35/23	14/7	1/1	

Single Op Assisted Top Ten Breakdowns

Call	Score	QSOs	Mults	80	40	20	15	10	Team
K3MM	130,860	727	180	142/41	268/52	207/53	99/28	11/6	SWACC #1
N6WM	111,284	647	172	32/17	140/44	212/50	241/49	22/12	Silicon Samurai
NØXR (@NØNI)	107,152	592	181	109/40	202/50	196/53	72/29	13/9	SWACC #1
K9CT	106,088	596	178	106/41	205/54	201/51	67/21	17/11	SMC Model 19
N4ZZ	88,655	595	149	121/42	232/51	201/42	41/14	0/0	SWACC #1
N6IE	88,290	545	162	27/15	144/47	225/54	141/43	8/3	Silicon Samurai
ABØS	84,669	507	167	51/28	197/54	189/49	56/27	14/9	Deep Dixie CC Team Elvis
KI1G	84,525	525	161	88/32	123/48	242/51	66/25	6/5	
WT9U	83,074	569	146	178/41	217/49	141/45	33/11	0/0	SMC Model 19
KD7ND	73,809	531	139	4/4	147/39	229/47	143/44	8/5	AOCC SHARPSHOOTERS

Single Op Assisted QRP Top Five Breakdowns

Call	Score	QSOs	Mults	80	40	20	15	10	Team
WQ6X	10,730	145	74	2/2	36/20	56/26	51/26	0/0	SCCC
KJ5T	143	13	11	0/0	0/0	10/8	3/3	0/0	

Single Op Assisted Youth (25 years old or younger) Breakdowns

Call	Score	QSOs	Mults	160	80	40	20	15	10	Team
WV4AM	2,546	67	38	0/0	0/0	46/22	18/14	3/2	0/0	TCG TEAM TWITTY

Multi-Two Breakdowns

Call	Score	QSOs	Mults	80	40	20	15	10	Team
NJ4P	190,427	997	191	211/46	381/57	291/48	109/35	5/5	
W4KFC (@N3QE)	114,471	711	161	189/46	312/56	171/44	36/13	3/2	
K3AJ	91,930	634	145	128/33	269/53	177/41	60/18	0/0	

Team Scores

1. SWACC #1

K3MM	130,860
NØXR	107,152
N4ZZ	88,655
K4ZW	85,164
WW4LL	144
Total	**411,975**

2. Silicon Samurai

N6WM	111,284
N6IE	88,290
K6KM	80,938
AF6SA	67,199
KA6BIM	61,984
Total	**409,695**

3. SMC Model 19

K9CT	106,088
N9CK	102,880
WT9U	83,074
KC9K	48,240
K9WX	43,240
Total	**383,522**

Team	Operators	*Total*
4. Deep Dixie CC Team Elvis	ABØS, KØWA, W5ACQ, KVØI, KA4HIM	257,354
5. AOCC SHARPSHOOTERS	KD7ND, K8IA, W7GES, K7WP, KC7V	211,206
6. Sierra Bytes	AJ6V, K6UFO, K6OK, NN6U, K6GHA	203,725
7. PVRC K4 RTTY Mark and Space Cadets	K7SV, N1RM, N3AM, NØYY, K3TN	162,953
8. SWACC #2	W4GKM, WQ5L, K7TQ	121,223
9. PVRC Part Timers	K4SO, NW3L, KB3Z, K3SV	100,155
10. RTTY to Eaters	W6EU, N6GEO, K6ST	99,612
11. SMC Model 28	N9EP, N9LQ, AB9YC, AI9T, KC9EOQ	99,022
12. Straight Bourbon	ND4Y, KM4FO, N4QS, WX4W	98,441
13. SMC Model 32	W9YK, W9RE, N9XX, WI9WI, N9MSG	86,019
14. Digi Owls	AH2O, K2RB, KS2G	74,826
15. SM Rockets	AA9L, N7XS, KG7VIZ	71,560
16. Ramblers	N9LAH, N2BJ, N9TK, WAØO	66,921
17. TCG TEAM TWITTY	AA4CS, AD4EB, WV4AM, KØEJ	64,590
18. TCG TEAM WAYLON	K4HWS, N4MCC	58,828
19. Niagara Frontier Radiosport	WA2QAU, K2QB, KN2M, KB2URI, W2DXE	48,265
20. Deli Decoders	W6SX, NW2P	40,475
21. RASCALS	W9ILY, K9GA	32,492
22. SMC Model 35	W9XT, KKØU	23,390
23. Shenandoah Valley Wireless	N5SMQ, AD4TJ	20,057
24. AOCC SCORPIONS	K7JQ, N1JM	19,420
25. NPARC RTTY SNITCHERS	K2AL, KC2WUF, K2UI, K2YG/1	16,482
26. FCG Orange Digi-Warriors	NF6P, W6ZD	15,114
27. SCCC	WQ6X, K6MUG	12,340
28. I-guana Go to the TTY Bar	K8ROX, K9NW, AJ9C	11,894
29. Rocky Mountain	WØZA, N7WY	10,897
30. SFCG Teletypists	KG4IGC, K7OM	8,810
31. Deep Dixie CC Team MAGNOLIA	AA5W, KT4Q/KL7	6,358
32. Texas-Roatan DXpedition 2025	HQ9HC	5,084
33. Team Montrose	K3YLW, KA2JAI	790

Single Operator Scores

* QRP

Call	*Score*	*QSOs*	*Mults*	*QTH*	*Team*
K1IMI (W4TMO)	31,411	311	101	ME	
K2RB	22,962	267	86	CT	Digi Owls
WA1LAD	10,400	160	65	RI	
W1DYJ	8,448	132	64	MA	
W1BOY	8,125	125	65	ME	
K1BZ	5,974	103	58	ME	
WA1ONB	2,640	66	40	MA	
N1NN	1,323	49	27	MA	
K2YG/1	972	36	27	MA	NPARC RTTY SNITCHERS
K1ECU	108	12	9	CT	
WA2QAU	23,616	246	96	NY	Niagara Frontier Radiosport
WK2W	20,461	259	79	NJ	
KS2G	15,840	198	80	NY	Digi Owls
WB2COY	10,268	151	68	NY	
AC2XC	9,177	161	57	NY	
KN2M	5,865	115	51	NY	Niagara Frontier Radiosport
AI2U	4,940	95	52	NY	
K4RUM	4,326	103	42	NY	
KA2D	3,367	91	37	NY	
W2DXE	3,015	67	45	NY	Niagara Frontier Radiosport
K2UI	1,140	38	30	NJ	NPARC RTTY SNITCHERS
WT2J	924	42	22	NY	
NK2Y	744	31	24	NY	
KD2KEH	693	33	21	NY	

Call	Score	QSOs	Mults	QTH	Team
N2EZY	364	28	13	NY	
W2KYM	120	15	8	NY	
KA2FIR	88	11	8	NJ	
WA3FAE	18,705	215	87	MD	
K3LT	8,220	137	60	DE	
WA2OTC	7,638	114	67	MD	
N1EK	7,598	131	58	MD	
KU4CG	4,312	88	49	MD	
N3RDV	4,263	87	49	PA	
KE3LA	4,150	83	50	PA	
K3AU	4,140	92	45	MD	
NN3EE	3,478	74	47	PA	
W3CHB	3,388	77	44	MD	
KF3EB	1,504	47	32	PA	
W3TAS	1,350	50	27	DE	
KE3ZT	1,296	48	27	PA	
K3YLW	690	30	23	MD	Team Montrose
N4IU	266	19	14	PA	
W3KN	192	16	12	MD	
KA2JAI	100	10	10	MD	Team Montrose
K4ZW	85,164	604	141	VA	SWACC #1
K7SV	65,000	500	130	VA	PVRC K4 RTTY Mark and Space Cadets
W4GKM	47,152	421	112	TN	SWACC #2
K4SO	38,760	340	114	VA	PVRC Part Timers
AA4LR	34,992	324	108	GA	
KK4PJ	20,010	230	87	FL	
KM4FO	17,111	241	71	KY	Straight Bourbon
WN7S	15,884	209	76	VA	
N4MMR	15,480	215	72	FL	
N4TB	15,075	201	75	FL	
N5SMQ	14,652	198	74	VA	Shenandoah Valley Wireless
NF6P	13,840	173	80	FL	FCG Orange Digi-Warriors
WX4W	11,324	149	76	KY	Straight Bourbon
N3CKI	10,560	165	64	NC	
AA2MA	10,074	146	69	AL	
K4XL	8,710	130	67	VA	
KW4J	8,448	128	66	AL	
KF6HDJ	7,930	122	65	FL	
W4BBT	7,242	142	51	NC	
W4BHJ	5,432	97	56	NC	
AD4TJ	5,405	115	47	VA	Shenandoah Valley Wireless
W4GO	5,130	114	45	VA	
K4BX	4,845	95	51	TN	
K7OM	4,400	88	50	SC	SFCG Teletypists
KE4CR	4,182	102	41	VA	
NZ4N	3,840	96	40	NC	
AF4T	3,550	71	50	TN	
WA8OJR	3,192	84	38	SC	
WB4UBK	2,788	68	41	FL	
W4GHV	2,508	66	38	NC	
K3YDX	1,944	54	36	NC	
W3TB	1,888	59	32	TN	
KG3V	1,830	61	30	VA	
W2GSP	1,674	54	31	VA	
N4QI	1,612	52	31	SC	
NN4SS	1,458	54	27	SC	
KØEJ	1,350	50	27	TN	TCG TEAM TWITTY
W6ZD	1,274	49	26	FL	FCG Orange Digi-Warriors
KF5MU	1,260	45	28	KY	
KC4EZN	1,240	40	31	NC	
KO4BWN	1,204	43	28	GA	
N3KN	945	45	21	VA	
KS4X	891	33	27	TN	
AI4DB	651	31	21	TN	
KW4LU	600	30	20	TN	
W4ZGR	456	24	19	FL	
NØOEP	416	26	16	VA	
KI4EZC	399	21	19	TN	
N5HOT	375	25	15	TN	
*KI4MZC	225	15	15	GA	
*N4PWG	216	18	12	TN	
W2CG	160	16	10	NC	
WW4LL	144	12	12	GA	SWACC #1
KJ4YLR	99	11	9	KY	
W9ARO	16	4	4	FL	
AD5XD	65,736	498	132	TX	
W5ACQ (WA5POK)	55,040	430	128	TX	Deep Dixie CC Team Elvis
WQ5L	44,486	377	118	MS	SWACC #2
AD5LU	18,648	222	84	TX	
WB5BHS	18,375	245	75	AR	
K5TXM	17,319	251	69	TX	
WE6EZ	16,214	242	67	TX	
N5RN	13,875	185	75	AR	
W5JAY	13,800	184	75	AR	
N5AF	10,660	164	65	TX	

Call	Score	QSOs	Mults	QTH	Team
WA5LFD	9,522	138	69	TX	
KD5ILA	8,120	116	70	AR	
KD5J	7,326	111	66	AR	
N5KWN	6,493	151	43	TX	
AA5W	6,072	132	46	TX	Deep Dixie CC Team MAGNOLIA
K5NZ	5,875	125	47	TX	
WA9JBR	4,400	88	50	LA	
W5LA	4,089	87	47	LA	
AA5UN	3,990	95	42	TX	
*WC8L	3,264	96	34	TX	
NK5G	2,394	63	38	TX	
N5UM	195	15	13	OK	
*WE9N	140	14	10	TX	
KI5EWG	56	8	7	NM	
AJ6V	83,805	555	151	CA	Sierra Bytes
K6KM (@W6SRR)	80,938	566	143	CA	Silicon Samurai
W6EU	71,340	492	145	CA	RTTY to Eaters
KH6CJJ	43,435	365	119	KH6	
NN6U (@K6MTU)	29,146	247	118	CA	Sierra Bytes
KH6ZM	22,599	243	93	KH6	
KD6HOF	20,700	225	92	CA	
*K6GHA	20,646	222	93	CA	Sierra Bytes
KH6TU (AD6E)	18,109	199	91	KH6	
K6FA	17,760	185	96	CA	
K7ADB	15,879	201	79	CA	
WØYK	8,730	194	45	CA	
KN6TZK	8,442	126	67	CA	
WZ6ZZ	5,512	106	52	CA	
KC6ZTT	5,005	91	55	CA	
K6BIR	2,720	68	40	CA	
N6SPP	2,583	63	41	CA	
KK6TV	2,368	64	37	CA	
K6MUG	1,610	46	35	CA	SCCC
KE6SHL	1,488	48	31	CA	
W6JBR	1,457	47	31	CA	
N6AJ	1,316	47	28	CA	
K6ELE	1,302	42	31	CA	
KJ6JUS	1,240	40	31	CA	
KA6W	828	46	18	CA	
N2HC	638	29	22	CA	
KO6BFD	608	32	19	CA	
KJ7A	520	26	20	CA	
N6XI	480	24	20	CA	
KE6GLA	410	41	10	CA	
KN6DRN	247	19	13	CA	
AA6VX	84	12	7	CA	
NR7Z	56	8	7	CA	
AE1P	33,790	310	109	AZ	
KM9R	30,414	274	111	NV	
N7XS	28,200	282	100	WA	SM Rockets
K7RL	14,705	173	85	WA	
W1DGL	13,904	158	88	AZ	
K7JQ	13,370	191	70	AZ	AOCC SCORPIONS
WU7W	11,175	149	75	NV	
KJ9C	9,996	147	68	MT	
KK6L	9,600	160	60	ID	
W7GEZ	6,360	106	60	AZ	
N7WS	4,845	95	51	AZ	
KW7WP	4,784	104	46	OR	
KL7SB	4,738	103	46	KL7	
N7WY	3,298	97	34	WY	Rocky Mountain
N7OMS	2,520	63	40	WA	
N7VGO	2,255	55	41	WA	
N7VAZ	1,995	57	35	NV	
*N7JI	1,711	59	29	OR	
KJ7AGQ	1,550	50	31	WA	
WA7LNW	1,500	60	25	UT	
NG7M	1,305	45	29	UT	
*N6HI	950	38	25	AZ	
KØIP	888	37	24	ID	
W7MTL	840	40	21	OR	
WB7CYO	648	36	18	ID	
W9CF	391	23	17	AZ	
K6DGW	380	20	19	NV	
KR7D	270	18	15	WA	
K6ST	228	19	12	NV	RTTY to Eaters
K6DSA	110	11	10	AZ	
K7RCR	56	7	8	AZ	
K7ULS	20	5	4	UT	
K7BDB	0	-1	0	WA	
W8FSM	36,515	335	109	MI	
K3GP	27,528	296	93	OH	
K8RGI	16,320	204	80	OH	
N8ERL	11,147	157	71	MI	
K8ROX	9,928	146	68	OH	I-guana Go to the TTY Bar
K8GB	9,179	137	67	MI	
W3CRZ	2,480	62	40	OH	
W5KBW	1,764	49	36	OH	

Call	Score	QSOs	Mults	QTH	Team
WV7MS	980	35	28	WV	
N8TCP	506	22	23	OH	
AF8A	336	21	16	OH	
KE8HTV	276	23	12	OH	
KF8I	210	21	10	OH	
WV8MAT	180	15	12	WV	
W1MJC	144	12	12	MI	
N9CK	102,880	643	160	WI	SMC Model 19
K9WX	43,240	376	115	IN	SMC Model 19
AA9L	36,920	355	104	WI	SM Rockets
N9LAH	32,130	315	102	IL	Ramblers
K9CW	20,056	218	92	IL	
WB9HFK	19,776	206	96	IL	
W9RE	19,206	198	97	IN	SMC Model 32
*N9KT	16,353	207	79	IN	
WI9WI	15,840	220	72	WI	SMC Model 32
N9MSG	14,898	191	78	IL	SMC Model 32
NT9E	14,110	170	83	IL	
KØTQ	11,850	158	75	IN	
KB9S	6,380	116	55	WI	
NY1V	6,208	97	64	IN	
WU9D	5,568	96	58	IL	
N9WG	5,194	98	53	IN	
K9GA	5,060	92	55	IL	RASCALS
WA9LEY	4,536	81	56	IL	
KØVW	1,908	53	36	WI	
AJ9C	966	46	21	IN	I-guana Go to the TTY Bar
K9JPD	528	33	16	IN	
KD9MS	187	17	11	IL	
N9WKW	1	1	1	IN	
WØSD (KT0W)	117,902	706	167	SD	
AIØY	80,303	613	131	ND	
WDØT	49,266	414	119	SD	
KVØI	40,664	391	104	NE	Deep Dixie CC Team Elvis
NØAT	34,452	319	108	MN	
KEØUI	34,238	323	106	CO	
WØLSD	26,700	300	89	CO	
NØGN	19,313	217	89	NE	
AI6O	16,669	211	79	MO	

Call	Score	QSOs	Mults	QTH	Team
WBØN	11,664	144	81	MN	
WØIZ	8,448	192	44	CO	
WØZA	7,599	149	51	NE	Rocky Mountain
WAØLIF	5,035	95	53	MN	
ACØE	4,888	94	52	KS	
WØBR	4,455	81	55	KS	
NØLLH	3,870	86	45	KS	
KV5Y	3,663	99	37	CO	
KØGD	3,397	79	43	CO	
WØYJT	2,730	65	42	KS	
KEØTT	2,688	64	42	MN	
NØTXW	2,460	60	41	MN	
WØDC	1,850	50	37	MN	
KØRJK	1,770	59	30	CO	
WØUY	1,512	56	27	KS	
WDØBGZ	1,081	47	23	NE	
WAØEJX	690	30	23	CO	
KØCLW	273	21	13	KS	
KJØP	90	9	10	MN	
VE2CSM	28,764	306	94	QC	
VE3OZO	13,494	173	78	ON	
VE3FH	12,246	157	78	ON	
VE3NFN	8,750	125	70	ON	
VE3TM	8,322	146	57	ON	
VE7MHI	5,304	102	52	BC	
*VE3KJQ	3,198	78	41	ON	
VE3NE	1,230	41	30	ON	
K2NV/VE3	425	25	17	ON	
VA1XH	342	18	19	NS	
VE7BGP	154	14	11	BC	
VA6DM	108	12	9	AB	
*VE9AA	20	5	4	NB	
NP4DX (WB8JUI)	89,498	613	146	KP4	
YN2RP	2,457	63	39	YN	
NP3F	1,586	61	26	KP4	
HI6M	96	8	12	HI	
HK3W	12,996	171	76	DX	
HA3MGA	432	24	18	DX	
YV5IAL	156	12	13	DX	
JK1HIY	25	5	5	DX	

Single Operator Assisted Scores

* QRP

Call	Score	QSOs	Mults	QTH	Team
KI1G	84,525	525	161	RI	
K1DC	37,440	320	117	MA	
KB1W	26,900	269	100	MA	
WA1ZYX	13,869	201	69	NH	
K9JY	8,643	129	67	VT	
N1ERS	6,741	107	63	MA	
KX1X	3,995	85	47	MA	
KA2KON	350	25	14	NH	
AD1L	154	14	11	MA	
AH2O	36,024	316	114	NY	Digi Owls
WA2CP (KC2GOW)	29,766	242	123	NY	
KE2D	24,378	239	102	NJ	
AB2E	23,129	229	101	NJ	
WA2DNI	22,330	290	77	NY	
NW2P (N6EE)	15,124	199	76	NY	Deli Decoders
K2QB	12,675	169	75	NY	Niagara Frontier Radiosport
NM2K	8,906	146	61	NY	
K2AL	8,470	121	70	NJ	NPARC RTTY SNITCHERS
WB2PJH	7,056	112	63	NJ	
KC2WUF	5,900	118	50	NJ	NPARC RTTY SNITCHERS
AK2S	5,243	107	49	NJ	
KB2URI	3,094	91	34	NY	Niagara Frontier Radiosport
WB2WPM	2,294	62	37	NY	
KA2WIK	893	47	19	NY	
N2RC	550	25	22	NY	
WA3AFS	475	25	19	NY	
K3MM	130,860	727	180	MD	SWACC #1
W3KB	33,810	294	115	PA	
NW3L	28,260	314	90	MD	PVRC Part Timers
KB3Z	23,895	295	81	PA	PVRC Part Timers
N3AM	23,278	206	113	MD	PVRC K4 RTTY Mark and Space Cadets
W3FIZ	17,160	220	78	PA	
K3TN	7,656	116	66	MD	PVRC K4 RTTY Mark and Space Cadets
AC5XK	6,448	124	52	DC	

Call	Score	QSOs	Mults	QTH	Team
KC3SDJ	5,656	101	56	PA	
AC3U (W3UL)	5,616	104	54	MD	
W3RGA	2,268	63	36	PA	
AB3CV	1,298	59	22	MD	
N3DUE	840	35	24	MD	
N4ZZ	88,655	595	149	TN	SWACC #1
ND4Y	53,074	446	119	KY	Straight Bourbon
N1RM	52,200	435	120	VA	PVRC K4 RTTY Mark and Space Cadets
K4EA	45,724	322	142	GA	
W4NF	42,804	348	123	VA	
K4HWS	42,196	308	137	TN	TCG TEAM WAYLON
AA4CS	32,136	309	104	TN	TCG TEAM TWITTY
AD4EB	28,558	262	109	TN	TCG TEAM TWITTY
NA4DA	26,730	243	110	FL	
W1IE	26,578	274	97	VA	
WK9M	24,552	248	99	TN	
K5VIP	24,486	231	106	VA	
W4SDX	17,835	205	87	TN	
N9TF	17,617	223	79	TN	
N4QS	16,932	204	83	KY	Straight Bourbon
N4MCC	16,632	189	88	TN	TCG TEAM WAYLON
KEØL	16,080	201	80	TN	
NØYY	14,819	203	73	VA	PVRC K4 RTTY Mark and Space Cadets
K4MI	13,090	187	70	VA	
W4YVA	12,008	158	76	VA	
KA4HIM	11,573	163	71	NC	Deep Dixie CC Team Elvis
NS4X	11,316	164	69	TN	
N4CWZ	10,857	141	77	NC	
K3SV	9,240	132	70	FL	PVRC Part Timers
K2MK	8,757	139	63	FL	
K4GM	7,590	115	66	VA	
N2ESP	7,392	112	66	FL	
N3MN	6,555	115	57	VA	
NR4O	5,936	106	56	NC	
W4EE	5,712	119	48	FL	
AJ4RJ	5,304	104	51	GA	
K4FTO	4,900	100	49	VA	
WB4HRL	4,900	100	49	SC	

Call	Score	QSOs	Mults	QTH	Team
W4RN	4,700	100	47	VA	
WA4IPU	4,620	84	55	FL	
NN4RB	4,450	89	50	VA	
KG4IGC	4,410	90	49	SC	SFCG Teletypists
KA4RRU	4,365	97	45	VA	
N6DW	3,960	88	45	VA	
N1WR	3,440	80	43	VA	
N4IW	2,880	72	40	VA	
WV4AM	2,546	67	38	NC	TCG TEAM TWITTY
K3WA	1,600	50	32	NC	
KB6QPI	1,408	44	32	FL	
AA4CF	1,334	46	29	GA	
WO4O	460	23	20	FL	
KA5USN	420	21	20	FL	
KY4RQ	352	22	16	VA	
AB5SE	38,646	342	113	AR	
WB5SKM	23,940	252	95	MS	
K5LY	13,530	205	66	TX	
AE5JE	1,216	38	32	TX	
KN5S (K5WW)	1,150	46	25	TX	
W5SLG	754	29	26	TX	
WA5LXS	690	30	23	TX	
*KJ5T	143	13	11	TX	
W5GFI	112	14	8	OK	
N6WM	111,284	647	172	CA	Silicon Samurai
N6IE	88,290	545	162	CA	Silicon Samurai
AF6SA	67,199	451	149	CA	Silicon Samurai
W1RH	39,804	321	124	CA	
K6UFO (@K6MTU)	39,040	320	122	CA	Sierra Bytes
K6OK	31,088	268	116	CA	Sierra Bytes
K6RIM	30,324	266	114	CA	
N6GEO	28,044	246	114	CA	RTTY to Eaters
WD6T	25,620	244	105	CA	
W6SX	25,351	251	101	CA	Deli Decoders
KI6OY	19,392	202	96	CA	
*WQ6X	10,730	145	74	CA	SCCC
WN6A	9,204	156	59	CA	
K6TQ	6,604	127	52	CA	
W6IA	5,390	98	55	CA	
N6WT	3,536	68	52	CA	
K8IA	69,788	478	146	AZ	AOCC SHARP-SHOOTERS
K7QA	68,448	552	124	MT	
KA6BIM	61,984	416	149	OR	Silicon Samurai
K6EI	57,300	382	150	WA	
W7ZR	34,153	287	119	NV	
W7GES	33,320	340	98	AZ	AOCC SHARP-SHOOTERS
K7TQ	29,585	305	97	ID	SWACC #2
K7WP	20,200	200	101	AZ	AOCC SHARP-SHOOTERS
KC7V	14,089	193	73	AZ	AOCC SHARP-SHOOTERS
NN7O	10,368	144	72	OR	
KB7AZ	8,322	114	73	AZ	
WB6JJJ	7,686	126	61	OR	
KG7VIZ	6,440	115	56	WA	SM Rockets
N1JM	6,050	110	55	AZ	AOCC SCORPIONS
W7CO	4,606	94	49	OR	
W6TK	496	31	16	OR	
KT4Q/KL7	286	22	13	KL7	Deep Dixie CC Team MAGNOLIA
KI6DY	72,030	490	147	OH	
N8RGA	15,280	191	80	MI	
W8BI (KB8UEY)	1,100	44	25	OH	
K9NW	1,000	40	25	OH	I-guana Go to the TTY Bar
K9CT	106,088	596	178	IL	SMC Model 19
WT9U	83,074	569	146	IN	SMC Model 19
N7US	72,376	436	166	IL	
KC9K	48,240	360	134	IL	SMC Model 19
N9OK	40,626	366	111	IL	
WB8BZK	35,040	292	120	IL	
N9EP	34,560	320	108	IL	SMC Model 28
KY0Q	29,592	274	108	IL	
N9LQ	28,917	243	119	IL	SMC Model 28
W9FY	28,116	284	99	IL	
W9ILY	27,432	254	108	IL	RASCALS
W9YK	19,929	219	91	IL	SMC Model 32
N9SJ	19,504	212	92	IL	
W9XT	17,630	205	86	WI	SMC Model 35
N2BJ	17,301	237	73	IL	Ramblers
KC9EE	17,200	200	86	IL	
N9XX	16,146	207	78	WI	SMC Model 32
AB9YC	15,428	203	76	IL	SMC Model 28
K9YY	15,326	194	79	IL	
N9TK	14,550	194	75	IL	Ramblers
AC9S	13,720	196	70	IL	
AI9T	12,998	194	67	IL	SMC Model 28
KC9EOQ	7,119	113	63	IL	SMC Model 28
WO9B	5,015	85	59	WI	
W9FFA	1,860	62	30	IN	
KX3H	1,815	55	33	WI	
KW9U	1,386	42	33	IL	
WØRLD	88	11	8	IN	
N9VPV	9	3	3	IL	
NØXR (@NØNI)	107,152	592	181	IA	SWACC #1
ABØS	84,669	507	167	NE	Deep Dixie CC Team Elvis
KØWA	65,408	511	128	KS	Deep Dixie CC Team Elvis
NWØM	37,290	330	113	MO	
WØMB	29,815	335	89	MO	
KØTC	27,451	283	97	MN	
AD1C	21,056	224	94	CO	
AAØFO	18,190	214	85	KS	
W7II	16,072	164	98	IA	
NØRC	13,114	166	79	KS	
NØQM	11,160	186	60	MO	
K4IU	9,702	147	66	MN	
KKØU	5,760	96	60	MO	SMC Model 35
KCØUJC	5,488	112	49	IA	
WØIL	5,320	133	40	SD	
NØKQ	4,539	89	51	CO	
NFØT	4,005	89	45	IA	
WAØO	2,940	70	42	MO	Ramblers
KBØGT	2,242	59	38	MN	
WO7U	1,050	35	30	MO	
VE7BC	51,304	424	121	BC	
VA1CHP	50,061	407	123	NS	
VE6RST	44,352	352	126	AB	
VE3PJ	22,698	234	97	ON	
VE3MGY	16,530	190	87	ON	
VA6RCN	11,025	175	63	AB	
VA3PC	5,292	98	54	ON	
VA7VJ	1,316	47	28	BC	
VA3IK	600	30	20	ON	
VYØERC	266	19	14	NU	
KP2B (HK3YL)	20,880	232	90	KP2	
KP2RUM	6,431	109	59	KP2	
HQ9HC	5,084	124	41	HR	Texas-Roatan DXpedition 2025
6Y5PW	1,728	48	36	6Y	
KD7ND	73,809	531	139	DX	AOCC SHARP-SHOOTERS
ZV8H (PT8DX)	1,012	46	22	DX	

Multi-Two Scores

* QRP

Call Sign	*Score*	*QSOs*	*Mults*	*QTH*	*Operators*
NJ4P	190,427	997	191	TN	K6JO, NN5SS, NR4L, VE5MX, WV4P
W4KFC (@N3QE)	114,471	711	161	MD	N3QE, N3RTW, W2CDO
K3AJ	91,930	634	145	MD	K3AJ, K3WA, ND3D, WT3K
AG4TT	87,984	611	144	NC	N4CWZ, N4GU, NC4SW, NR4O
N4SS	74,620	533	140	KY	AC6ZM, KW4TN, W5MX
W4MLB	66,666	542	123	FL	AC1JU, K1ALC, K5LD, KK4ZWC, KO4JVE, KX4NM, NØJAM
NW6P	63,504	432	147	CA	NW6P, W6BG, WX5S
K3CCR	58,760	452	130	MD	N3UM, W5MPB
WA3EKL	40,625	326	125	MD	KØOO, KB3VQC, N3DPB, W3URL, WA3EKL, WV8BNM
W4TA	30,772	314	98	FL	K2BHS, KB8ESY, N4GRC, NY4I, W4TA, WF1B
K3ANI	14,616	252	58	MD	K3ANI, W3IDT
K7VAP	12,351	179	69	WA	K7IPT, K7VAP
K8BF	8,479	139	61	OH	KB8TUY, N8QE, N8WCP, W8PT
W4CDA	665	35	19	KY	KF4FMQ, KJ4ND
N1SOH	551	29	19	MA	N1SOH, W1FM
LU1BJW	192	16	12	DX	LU1BJW, LU8EUT
ON1BEW	110	11	10	DX	ON1BEW, ON5RA, OT7Q

Check Logs

AB5XM, KØYQ, K5XH, K6NV, K8ARY, K9QJS, KC3KRZ, N4TL, VE2FK, WØXM, WB2NFL, WB4YDY, WR7T

Ed Muns, WØYK / ed@w0yk.com

Results: North American Sprint, RTTY — March 2025

The 51st North American RTTY Sprint had 73 logs with 44 multipliers and 97 participants. This is close to the average since October 2008, when duplicate QSOs were no longer allowed in the rules. However, as shown in Figure 1, it is far below the peak of 290 participants in March 2009. We are still searching for ways to increase participation, which makes the Sprint much more fun for everyone.

Dave, WD6T, eked out the win over Ty, K3MM, with 6 more QSOs to offset one less multiplier. Ron, WV4P, was the only Low Power entry in the Top Ten, finishing in 6th place. Tim, ABØS, and Dave, K6LL, were the only SO1R stations in the Top Ten, finishing 5th and 7th, respectively. The Top Ten stations were skewed to eastern North America, with only Dave, WD6T, in the Pacific time zone.

Although 44 multipliers appeared across the entire log set, only 3 stations managed to get 38 of them. There were 6 Golden Logs with no errors, led by KØVG with 72 QSOs. The complex exchange in the Sprint makes it more difficult than other contest formats to achieve a perfect log.

Figure 2 shows the activity per band throughout the 4-hour contest period. The low activity led to a decrease to half of the initial 10-minute QSO total at the end. Also, during the first half-hour, the SO2R participants were essentially SO1R (Classic) while 40-meter activity was slowly building. There were no QSOs on 80 meters for the first 90 minutes and none on 20 meters for the final hour. QSOs were distributed 35%, 44%, and 21% across 20, 40, and 80 meters.

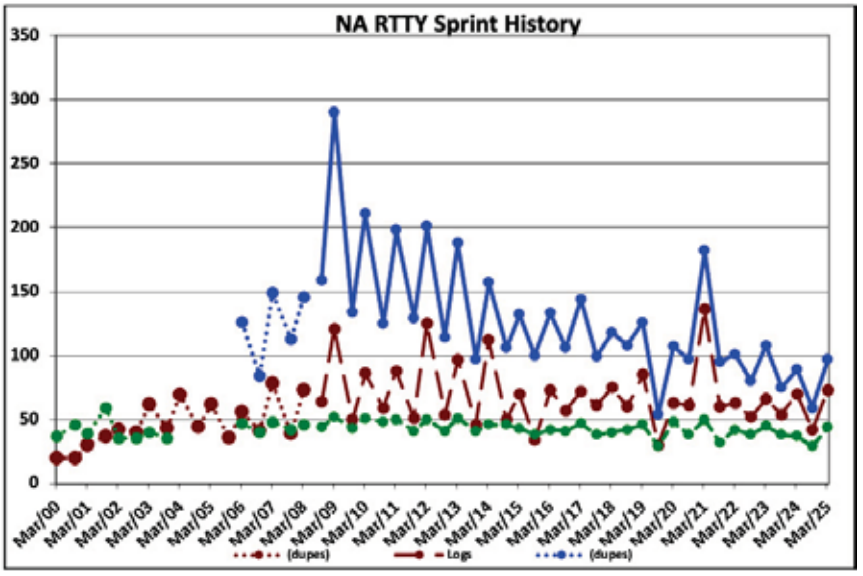

Figure 1. NA RTTY Sprint History

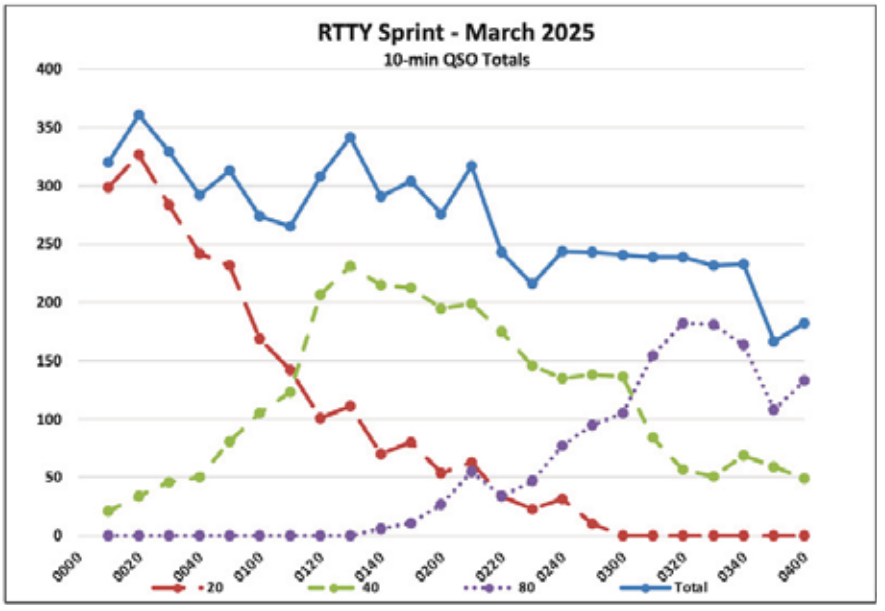

Figure 2. 10-minute QSO Totals

In team competition, SWACC #1 and SWACC #2 took the top two slots above third place NCCC #1. Team formation and competition is one way to raise activity. The future of this contest hinges on more activity, and more teams will help.

Your LCR (Log Check Report) is a valuable analysis of your log accuracy, which can lead to future improvement. Request yours from **ed@w0yk.com**. The next RTTY Sprint begins at 0000 UTC, Sunday, September 21, 2025, which is Saturday evening NA time.

Top Ten Scores

Call Sign	*Score*	*QSOs*	*Mults*	*Bnd Chgs*	*Qs Lost*	*00Z*	*01Z*	*02Z*	*03Z*
WD6T	6,156	171	36	83	5	53	45	37	36
K3MM	6,105	165	37	54	3	56	45	39	25
WT9U	5,940	165	36	75	7	62	42	37	24
NØXR	5,868	163	36	81	10	59	38	34	32
ABØS	5,852	154	38	9	5	40	49	26	39
WV4P	5,661	153	37	60	4	52	40	33	28
K6LL	5,460	156	35	6	1	48	38	31	39
N4ZZ	5,365	145	37	64	3	38	31	39	37
K4ZW	5,328	148	36	67	7	50	34	34	30
KI6DY	5,282	139	38	52	3	41	41	38	19

Top Ten High Power - Max 12 Band Changes

Call Sign	*Score*	*QSOs*	*Mults*	*Bnd Chgs*	*Qs Lost*	*00Z*	*01Z*	*02Z*	*03Z*
ABØS	5,852	154	38	9	5	40	49	26	39
K6LL	5,460	156	35	6	1	48	38	31	39
WQ5L	5,100	150	34	4	1	46	33	36	35
AJ6V	4,158	126	33	2	6	43	34	14	35
K5AM	3,640	130	28	4	2	38	36	17	39
NØTA	3,612	129	28	2	12	38	42	25	24
WX5S	3,240	108	30	3	8	24	37	24	23
W6EU	3,201	97	33	8	2	35	41	21	0
KVØI	3,100	100	31	8	9	36	29	27	8
K6NV	2,884	103	28	6	10	41	28	10	24

Top Ten Low Power

Call Sign	*Score*	*QSOs*	*Mults*	*Bnd Chgs*	*Qs Lost*	*00Z*	*01Z*	*02Z*	*03Z*
WV4P	5,661	153	37	60	4	52	40	33	28
WØCO	4,884	148	33	58	4	44	39	30	35
W4SDX	4,500	125	36	5	5	46	31	30	18
NZ1E	4,080	120	34	4	7	35	11	45	29
WK6I	3,990	114	35	55	4	4	38	41	31
AA4DD	3,074	106	29	2	5	33	27	23	23
KH7X	3,024	112	27	2	4	32	35	20	25
KM9R	2,688	96	28	4	7	31	23	20	22
N9MSG	2,240	80	28	5	8	11	37	22	10
W1UJ	2,106	81	26	34	1	36	38	7	0

Top Ten Low Power - Max 12 Band Changes

Call Sign	*Score*	*QSOs*	*Mults*	*Bnd Chgs*	*Qs Lost*	*00Z*	*01Z*	*02Z*	*03Z*
W4SDX	4,500	125	36	5	5	46	31	30	18
NZ1E	4,080	120	34	4	7	35	11	45	29
AA4DD	3,074	106	29	2	5	33	27	23	23
KH7X	3,024	112	27	2	4	32	35	20	25
KM9R	2,688	96	28	4	7	31	23	20	22
N9MSG	2,240	80	28	5	8	11	37	22	10
KØVG	2,016	72	28	2	0	16	13	23	20
K4HWS	1,771	77	23	2	3	15	7	32	23
W4YVA	1,755	65	27	11	2	4	24	26	11
VE3FH	1,752	73	24	4	4	18	22	14	19

Top Ten QRP

Call Sign	*Score*	*QSOs*	*Mults*	*Bnd Chgs*	*Qs Lost*	*00Z*	*01Z*	*02Z*	*03Z*
WQ6X	1,235	65	19	3	8	10	20	12	23

Top Ten QSO Totals

Call Sign	*QSOs*
WD6T	171
K3MM	165
WT9U	165
NØXR	163
K6LL	156
AB0S	154
WV4P	153
WQ5L	150
K4ZW	148
WØCO	148

Top Ten Multipliers

Call Sign	*Mults*
ABØS	38
KI6DY	38
WØYK	38
K3MM	37
N4ZZ	37
WV4P	37
K4ZW	36
NØXR	36
W4SDX	36
WD6T	36

Golden Logs

Call Sign	QSOs
KØVG	72
NØAT	66
NF6R	49
W6SX	26
K9QJS	21
VE2GT	2

Top Ten Number of Band Changes

Call Sign	*Bnd Chgs*
WD6T	83
NØXR	81
WØYK	80
WT9U	75
K4ZW	67
N4ZZ	64
WV4P	60
WØCO	58
N4IQ	57
WK6I	55

Team Scores

SWACC #1		*SWACC #2*		*NCCC #1*		*NCCC #2*	
K3MM	6,105	WV4P	5,661	WD6T	6,156	WX5S	3,240
NØXR	5,868	K4ZW	5,328	WØYK	5,130	W6EU	3,201
K6LL	5,460	WQ5L	5,100	WK6I	3,990	K6NV	2,884
N4ZZ	5,365	N4IQ	4,352	AF6SA	2,697	NF6R	931
N3QE	4,930	K5AM	3,640	KM9R	2,688	K6ST	260
Total	**27,728**	**Total**	**24,081**	**Total**	**20,661**	**Total**	**10,516**

Team	*Total*
5. GMCC Rockies (WØCO, NØTA)	8,496
6. NCCC #3 (AJ6V, NU6T, W6SX)	6,734

Single Operator Scores

*** Low Power, ** QRP**

Call	*Name*	*QTH*	*20*	*40*	*80*	*QSO*	*Mult*	*Score*	*Band Changes*	*Team*
NZ1E	*PAUL	NH	47	47	26	120	34	4,080	4	
K5ZD	RANDY	MA	30	39	16	85	28	2,380	5	
W1UJ	*JAY	MA	31	39	11	81	26	2,106	34	
KC2WUF	*DAVID	NJ	22	26	5	53	26	1,378	4	
K3MM	TY	MD	52	71	42	165	37	6,105	54	SWACC #1
N3QE	TIM	MD	49	60	36	145	34	4,930	28	SWACC #1
K3RWN	RICH	PA	26	47	27	100	28	2,800	53	
K3TN	JOHN	MD	30	27	0	57	26	1,482	3	
AJ3M	*MASA	MD	0	21	0	21	17	357	0	
K3AU	*DAN	MD	6	0	0	6	6	36	0	
WV4P	*RON	TN	46	65	42	153	37	5,661	60	SWACC #2
N4ZZ	DON	TN	44	62	39	145	37	5,365	64	SWACC #1
K4ZW	KEN	VA	51	60	37	148	36	5,328	67	SWACC #2
W4SDX	*MATT	TN	35	50	40	125	36	4,500	5	
N4IQ	BILL	SC	35	58	35	128	34	4,352	57	SWACC #2
AA4DD	*DAVE	TN	34	41	31	106	29	3,074	2	
K4HWS	*HOWARD	TN	19	29	29	77	23	1,771	2	
W4YVA	*JOE	VA	9	39	17	65	27	1,755	11	
KK4PJ	*KEITH	FL	39	11	12	62	26	1,612	2	
KO4NOL	*CARSON	TN	5	47	1	53	29	1,537	3	
AD4EB	*JIM	TN	16	9	0	25	16	400	1	
K9QJS	HOOP	TN	0	21	0	21	16	336	0	
W4TM	*ROY	GA	1	12	6	19	13	247	3	
W4BHJ	*DON	NC	0	10	0	10	7	70	0	
WN8Y	*KEN	TN	2	0	0	2	2	4	1	
WQ5L	RAY	MS	62	57	31	150	34	5,100	4	SWACC #2
K5AM	MARK	NM	42	52	36	130	28	3,640	4	SWACC #2
W5SLG	ELMER	TX	37	26	0	63	25	1,575	1	
N5RN	*GLENN	AR	8	7	0	15	8	120	1	
WD6T	DAVE	CA	55	71	45	171	36	6,156	83	NCCC #1
WØYK	ED	CA	46	62	27	135	38	5,130	80	NCCC #1
AJ6V	ED	CA	44	51	31	126	33	4,158	2	NCCC #3
WK6I	*JEFF	CA	37	47	30	114	35	3,990	55	NCCC #1
WX5S	MATT	CA	33	46	29	108	30	3,240	3	NCCC #2
W6EU	JIM	CA	39	48	10	97	33	3,201	8	NCCC #2
K6NV	BOB	CA	39	43	21	103	28	2,884	6	NCCC #2
AF6SA	STEFAN	CA	19	46	28	93	29	2,697	2	NCCC #1
NU6T	RICH	CA	28	37	15	80	27	2,160	4	NCCC #3
KH6CJJ	*KENT	HI	48	16	0	64	25	1,600	1	
WQ6X	**RON	CA	20	22	23	65	19	1,235	3	
NF6R	*BILL	CA	13	20	16	49	19	931	2	NCCC #2
W6SX	HANK	CA	9	12	5	26	16	416	2	NCCC #3
K6LL	DAVE	AZ	59	60	37	156	35	5,460	6	SWACC #1
KH7X	*MIKE	AZ	41	46	25	112	27	3,024	2	
KM9R	*MIKE	NV	37	43	16	96	28	2,688	4	NCCC #1
N7VGO	*VAL	WA	28	22	7	57	19	1,083	8	
KC7V	*MIKE	AZ	23	13	0	36	18	648	15	
K6ST	*BARRY	NV	5	15	0	20	13	260	1	NCCC #2
KI6DY	BOB	OH	38	64	37	139	38	5,282	52	
WX8S	*BARBIE	OH	0	43	0	43	25	1,075	0	
KF8KI	*STEVE	OH	15	12	15	42	22	924	2	
WT9U	JIM	IN	58	65	42	165	36	5,940	75	
N9LQ	JOEL	IL	43	46	10	99	33	3,267	30	
N9MSG	*JOHN	IL	18	41	21	80	28	2,240	5	
W9HHX	*ROSCOE	WI	19	27	0	46	24	1,104	1	
WU9D	*MIKE	IL	2	9	0	11	8	88	1	
NØXR	DEAN	IA	57	64	42	163	36	5,868	81	SWACC #1
ABØS	TIM	NE	49	66	39	154	38	5,852	9	

WDØT	TODD	SD	46	61	40	147	34	4,998	14	
WØCO	*BRAD	CO	52	61	35	148	33	4,884	58	GMCC Rockies
NØTA	JOHN	CO	43	48	38	129	28	3,612	2	GMCC Rockies
KVØI	BILL	NE	39	39	22	100	31	3,100	8	
N7WY	BOB	MO	39	37	2	78	29	2,262	2	
KØVG	*VERN	MN	20	38	14	72	28	2,016	2	
NØAT	*RON	MN	8	26	32	66	23	1,518	12	
KØYQ	JOHN	CO	24	28	0	52	24	1,248	1	
AEØDX	*ADAM	IA	30	21	0	51	24	1,224	1	
VE7BC	KEN	BC	32	36	29	97	25	2,425	3	
VE3FH	*JULIO	ON	18	38	17	73	24	1,752	4	
VE5MX	TODD	SK	28	31	2	61	28	1,708	36	
HH2AA	*ED	HH	27	0	0	27	22	594	0	
VE6RST	MAX	AB	14	4	0	18	10	180	1	
VE2GT	*PIERRE	QC	0	2	0	2	2	4	0	

Soapbox

K3CCR is the club station at the Collington continuing-care retirement community in Maryland, just east of DC. Mike, W5MPB, and I (N3UM) did parallel SOHP; Mike used his own call, I used K3CCR. We did the Sprint to check our RTTY setups, practice for CQ RTTY, and see what fun & effort came from the novel rules. The QSY rule & serial number added 2 steps per Q, so at first we made many errors. We had more fun and fewer errors on 20 and 80 meters; many exchanges were pre-filled. I logged 53 Qs but only 28 different calls, many top contesters. I thought maybe they liked the Sprint because the extra QSY rule and serial number steps were a stimulating challenge. — *K3CCR*

Low activity. Wanted to support the contest so operated all bands during 2 different periods. — *K5ZD*

FTDX-10 – 100 W into a 200 inch whip with a Wolf River SB-1000 platinum coil at the base — *N7WY*

I was trying to do RTTY using WriteLog for the first time. Thanks for everyone's patience as I fumbled with the wrong F-keys, etc. I also screwed up the sprint sequence at least once and missed part of an exchange, but I think all of my errors will just affect my score, not anyone else's. At least I know what I need to practice. — *NN6U*

I swear it was working Friday night! But I needed several restarts and power cycles to limp into action Saturday. Flex Radio had also screwed up remote access, which was its own set of changes. 20-meter band was noisy, or were my settings bad? I finally got started 5 minutes late, but not a problem as I worked out everyone by one hour, and then searched dupe to dupe until 1:20, when I said, "Enough!"

20m: 3 element Yagi at 72 feet, FLEX-6600 at 5 W, WriteLog, MMTTY, and 2Tone — *NN7SS (op K6UFO)*

Mark Aaker, K6UFO / rttynaqpmgr@ncjweb.com

Rules: 2026 North American QSO Party (CW/SSB/RTTY)

1. Eligibility: Any amateur radio licensee may enter.
2. Object: To work as many North American stations as possible during the contest period.
3. North American Station: Defined by the ARRL *DXCC List*, with the addition of Hawaii.
4. Contest calendar:

Mode	Times/Dates	Logs Due	Contest Weekend
CW	1800 UTC Jan 10 to 0559 UTC Jan 11	0600 UTC January 18	2nd full weekend January
	1800 UTC Aug 1 to 0559 UTC Aug 2	0600 UTC August 9	1st full weekend August
SSB	1800 UTC Jan 17 to 0559 UTC Jan 18	0600 UTC January 25	3rd full weekend January
	1800 UTC Aug 15 to 0559 UTC Aug 16	0600 UTC August 23	3rd full weekend August
RTTY	1800 UTC Feb 28 to 0559 UTC Mar 1	0600 UTC March 8	Starts last Saturday in February
	1800 UTC Jul 18 to 0559 UTC Jul 19	0600 UTC July 26	3rd full weekend July

Submit logs via **www.ncjweb.com/naqplogsubmit** — See Rule 16

5. Entry Classifications:

A) Single Operator (SO):
- i) One person performs all transmitting, receiving, and logging functions as well as equipment and antenna adjustments.
- ii) Access to spotting information obtained directly or indirectly from any source other than the station operator, such as from other stations or automated tools, spotting networks, skimmers, social media, watching participating stations live streaming, etc., is prohibited. Spotting other stations and self-spotting are prohibited.
- iii) Use of a CW decoder or wide-band multi-channel RTTY decoder (RTTY Skimmer) is prohibited.
- iv) Only one transmitted signal allowed at a time.
- v) May operate up to 10 out of the 12 hours of the contest. Off-times must be at least 30 minutes in length. To count as off-time, the difference between the times of consecutive contacts must be greater than or equal to 31 minutes (i.e., 30 intervening minutes, during which no contacts occur). The contest period ends at 05:59:59 UTC.

B) Single Operator Assisted (SOA):
- i) One person performs all transmitting, receiving, and logging functions as well as equipment and antenna adjustments.
- ii) May use spotting information obtained directly or indirectly from any source such as from other stations, automated tools, spotting networks, skimmers, social media, watching live streaming, etc. Soliciting contacts via social media is not allowed. Spotting other stations and self-spotting are allowed.
- iii) May use a CW decoder or wide-band multi-channel RTTY decoder (RTTY Skimmer).
- iv) Only one transmitted signal allowed at a time.
- v) May operate up to 10 out of the 12 hours of the contest. Off-times must be at least 30 minutes. To count as off time, the difference between the times of consecutive contacts must be greater than or equal to 31 minutes (i.e., 30 intervening minutes, during which no contacts occur). The contest period ends at 05:59:59 UTC.

C) Multioperator Two-Transmitter (M2):
- i) More than one person performs transmitting, receiving, and logging functions, etc.
- ii) May use assistance such as packet spotting networks, skimmers, social media, live streaming and the like. Soliciting contacts via social media is not allowed. Spotting other stations or self-spotting is allowed.
- iii) May use a CW decoder or wide-band multi-channel RTTY decoder (RTTY Skimmer).
- iv) A maximum of two transmitted signals at any given time, each on a different band. Both transmitters may work any and all stations.
- v) May operate for the entire 12 hours of the contest.
- vi) Starting when the first QSO on a band is logged, a station may not transmit on a different band until 10 full minutes have passed. Any QSOs made on a different band before 10 minutes have passed will not count for scoring. The other station will receive full credit for the QSO.
- vii) Multioperator entries are required to use only one name throughout the entire contest.

viii) Multioperator entries with only one operator may be reclassified to Single Operator Assisted (SOA).

6. Output Power: Maximum of 100 W from the output of the final amplifier. QRP (5 W or less) entries will be recognized in the results. Entries from stations choosing to use more than 100 W or entered as High Power will be classified as check logs. Entries found to use more power than claimed will be disqualified. Power categories are:
A) 5 W or less – QRP
B) 5 – 100 W – Low Power
C) Over 100 W – Check Log

7. Mode: CW only in CW parties. SSB only in phone parties. RTTY only in RTTY parties.

8. Bands: 160, 80, 40, 20, 15, and 10 meters only, except no 160 meters for the RTTY contest.

9. Station: All radio transmitters, receivers, and antennas used by an entrant must be associated with one station. A station may be operated remotely. Use of multiple stations during the contest using the same call sign, whether directly or remotely operated, is prohibited. Entrants must use only one call sign per station operated and may not work themselves.

10. Exchange: Operator name and station location (state, province, or country) for North American stations; operator name only for non-North American stations. Each entrant is required to use a single name throughout the entire contest period, including multi-operator entries.

11. Multipliers: Multipliers are all 50 US states, including Alaska and Hawaii, the District of Columbia (DC), the 13 Canadian provinces/territories (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland-Labrador, Yukon, Northwest Territories, and Nunavut) and other North American entities as defined by the ARRL *DXCC List*. For other North American entities, please use the standard DXCC prefix for the country in the received location field in your log. See multiplier list included with sample paper logs. Multipliers count again on each band. Non-North American countries, maritime mobiles, and aeronautical mobiles do not count as multipliers but may be worked for QSO credit; these should be entered as DX in the received location field.

12. Valid Contact: Stations may be worked once per band. Duplicate contacts on a band will not receive credit as a valid contact. A valid contact consists of a complete, correctly copied and logged two-way exchange between a North American station and any other station. Contacts with an incorrectly received exchange are removed with no additional penalty. Call sign errors (bust) or call signs not in the other log (NIL) are removed and receive a penalty of one QSO point value. Proper logging requires including the time in UTC and band for each contact.

13. Scoring: Multiply total valid contacts by the sum of the number of multipliers worked on each band.

14. Team Competition: You may wish to form a team with fellow NAQP participants. If so, your team must consist of two to five Single Operator and Single Operator Assisted stations whose individual scores are added together to produce a team score. Although clubs or other groups having more than five members may form multiple teams, there are no club membership, distance, or meeting requirements for a team entry. Teams must be registered prior to the start of the contest. Use one of the following online forms to register your team:
CW team registration: **www.ncjweb.com/cwnaqpteamreg**
SSB team registration: **www.ncjweb.com/ssbnaqpteamreg**
RTTY team registration: **www.ncjweb.com/rttynaqpteamreg**
These team registration forms automatically provide confirmation of team registration by return e-mail. Inclusion of team information in submitted Cabrillo logs is not required, as teams are determined ahead of time through the team registration system.

15. Log Formatting: All logs must be submitted electronically via web upload. The file format for electronic logs for *NCJ*-sponsored contests is Cabrillo; see **wwrof.org/cabrillo/** for details. For those participants logging on paper, please use the manual log entry Web-to-Cabrillo online forms available at the links below to submit your logs.

16. Log Submission: Entries must be received no later than 7 days after the end of the contest.
A) Cabrillo-formatted logs must be uploaded via web form (use for all modes): **www.ncjweb.com/naqplogsubmit**
B) To manually convert paper or non-Cabrillo log to Cabrillo log, consider using one of the following tools:
CW: **www.b4h.net/cabforms/naqpcw_cab.php**
SSB: **www.b4h.net/cabforms/naqpssb_cab.php**
RTTY: **www.b4h.net/cabforms/naqprtty_cab.php**

17. Disqualifications: Any entry may be disqualified for illegal operation, unethical operation, excessive score reduction, excessive error rates, or rules violation. Such disqualification is at the discretion of the contest manager.

18. More Information: Questions regarding the contests, including requests for Log Check Reports, may be addressed to the appropriate contest manager at the e-mail address listed below:
CW: Dave Mueller, N2NL, **cwnaqpmgr@ncjweb.com**
SSB: Bill Lippert, ACØW, **ssbnaqpmgr@ncjweb.com**

RTTY: Mark Aaker, K6UFO, **rttynaqpmgr@ncjweb.com**

19. Awards:

A) Plaques will be awarded for the high score in each of the categories given below, provided there are a minimum of five entries in the category. If a plaque is not sponsored, the winner may purchase it. Plaques will be awarded as follows:

Mode	Category	Sponsor
CW	Single Op, North America	Florida Contest Group
CW	Single Op QRP, North America	Grand Mesa Contesters of Colorado
CW	Single Op Assisted, North America	Arizona Outlaws Contest Club
CW	Multiop, North America	Minnesota Wireless Association in memory of Dave, KTØR
CW	Team	The CW Operators' Club
SSB	Single Op, North America	South East Contest Club
SSB	Single Op Assisted, North America	Grand Mesa Contesters of Colorado
SSB	Multiop, North America	Tennessee Contest Group
SSB	Team	No sponsor
Combined Score CW/SSB	Single-Op unassisted, North America	Southern California Contest Club
RTTY	Single Op, North America	Icom America, Inc.
RTTY	Single Op Assisted, North America	Icom America, Inc.
RTTY	Multiop, North America	Icom America, Inc.
RTTY	Team	Icom America, Inc.

i) Combined score plaque recognizes the single unassisted operator producing the highest total combined normalized score from the CW and SSB events separately by season (January/August). Scores are normalized to 500 points for the top scorer and added together.

B) Certificates of merit will be awarded to all participants with a final score greater than zero.

i) Single operator certificates will display the top 20 ranking by category; call area; and state, province, or North American country.

ii) Multi-operator certificates will display overall ranking for the top 10 multi-operator logs.

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